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R.A.F. NARRATIVE

THE ITALIAN CAMPAIGN

1943 TO 1945

VOLUME I

PLANNING AND INVASION TO THE FALL OF ROME

AIR HISTORICAL BRANCH(1)
AIR MINISTRY

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(FIRST DRAFT)

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PREFACE

Volume I of this narrative deals with the progress of air operations up to the fall of Rome and includes the period between the two world wars, the progress of the war against Italy, planning and strategy of the landings in Italy, the elimination of Italy from the war, the invasion of Italy and the capture of Sardinia and Corsica. Volume II will continue the narrative of air operations up to the victory in Lombardy, ~~and cover the entry into Southern France and Balkan operations in so far as they affected the Italian campaign.~~

Up to the fall of Rome, the Mediterranean was the major theatre of Anglo-American war operations; it was there and then that the offensive strategy laid down at the Washington conference was translated into terms of action, developing logically from the Allied successes in North Africa and Sicily. The local elements of Allied grand strategy ran their course in Italy while fresh plans were developed for the entry into N.W. Europe, which was made just after the fall of Rome, whereupon the Mediterranean became a secondary, albeit a still vital theatre.

After brief reference to operations culminating in the attack on Sicily, the complex situation confronting the Allied planners has been examined in detail and the magnitude of the task of invading one continent from another by sea and air, with forces only lately passed from the defensive to the offensive, presented. In the events preceding and following the surrender of the Italians, political and military factors were closely linked and our air forces were involved in both. The description of the elaborate deployment of the opposing air forces is followed by the cover of the several invasion operations and the establishment and consolidation of beachheads. Meticulous scrutiny of such periods changes later to a broader kind of emphasis as the full implications of the campaign become clearer. Here in the long periods of monotonous routine attacks, the results of which were frequently neutralised by spells of bad weather, a badly-balanced air force and the ingenuity of the enemy repair organisation, the treatment is of phases and tendencies.

The growth of the stalemates of the winter of 1943/44 and their temporary solutions by the landing at Anzio and the battles for Cassino, have called for concentrated theme treatment. The Zuckerman-Interdiction controversy is closely examined in theory and practice.

In the nature of things, the exploitation of air power in Italy was intimately linked with the ground battle. The historical development of close support in this formative period has been traced and the significance of successes following the late application of the correct formula of air/ground weight and timing of attack brought out. The sequence of ground and naval operations is given as often as is necessary to give meaning to the air operations.

The contribution of the United States Army Air Forces in this campaign began as a formidable one and became progressively predominant; yet Allied offensive and defensive air operations were so closely integrated at all levels that any separate treatment of events on a national basis would be academic and unprofitable. Most of the points wherein the two systems differed may be traced in the administrative histories of the various air forces and in the specialists' monographs, for in the administrative and some of the technical fields experience proved the wisdom of parallel function. Certain operations, such as the day and night bombing by the Strategic Air Force fell, on account of broad operational policy differences, into natural national groups: otherwise it could be said that, in every relevant sense of the word, the operational air forces in Italy were Allied and integrated. In the next volume the characteristics of the various national groups will be examined individually. The welding of these components into a single striking force was in itself a major achievement.

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Without the inclusion of evidence from enemy sources, the impression would be given of the Allied air forces fighting in a vacuum; no true measure could be taken of the precise import of operations. Considerable time has, therefore, been devoted to the examination of original and translated texts of captured enemy documents, as well as evidence from interrogations, intercepts and other sources. Although much of the captured material still awaits systematic exploitation from store in the United States, enough has been included to present a reasonably coherent picture of enemy strategy, methods, dispositions, operations and the extent of their appreciations of Allied intentions. In particular is this research justified when one is dealing with what is one of the most tantalizing problems in our field of study, namely the assessment of the results of Allied air attacks on the enemy system. In static warfare the day-to-day effects were progressively nullified by repair and almost all the direct evidence came from intermittent photography and visual observation. Only when the battle acquired momentum were Army counts possible. The inclusion of testimony from members of the German armed forces, committed to paper or communications, is therefore of great value and enables this narrative to be studied in adequate depth.

From time to time, the air campaign is shown both in relation to its global context and from an internal structural viewpoint, but most of the record is devoted to the actual air operations on the particular terrain, under the ruling conditions, at that time and with the men and material available. The facts relating to those operations form the substance of this narrative and are presented in a form intended to render the drawing of rational conclusions as simple as possible; for it is in the measure of its aid to the formation of such conclusions and their practical application to the problems of the present day that the ultimate value of the narrative must reside.

W. M. GOULD

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CHRONOLOGY

1943

15-23 January	Casablanca Symbol Conference
12-25 May	Washington Trident Conference
11 June	Capture of Pantelleria Island - Operation Corkscrew
13 June	Capture of Lampedusa and Linosa Islands
14 "	Capture of Lampione Island
10 July	Allied landing in Sicily - Operation Husky
19 "	Rome marshalling yards bombed
25 "	Resignation of Mussolini, Badoglio Prime Minister; King of Italy assumed supreme command of Italian Armed Forces.
26 "	Fascist Party dissolved
27 "	Prime Minister's statement in House on fall of Fascism.
28 "	President Roosevelt's broadcast on Allies' terms to Italy
29 "	General Eisenhower's broadcast to Italy, offering honourable peace terms
31 "	Algiers broadcast warning Italians of resumed Allied air offensive
1 August	General Giraud nominated C.-in-C. French Armed Forces Italian troops in Crete disarmed by Germans First large scale attack on Ploesti by U.S. Liberators from Cyrenaica
5 August	British troops entered Catania
7 August	Allies occupied Ustica Island
13-24 August	Quebec Quadrant Conference
13 August	Rome marshalling yards bombed again
14 "	Italian Government declared Rome an open city
N. 16/17 August	First dropping of Window by Luftwaffe (at Bizerta)
17 August	Lipari Islands capitulated to U.S. Naval forces Close of Sicilian Campaign
18 August - 2 Sept.	Allied air attacks on Italian bases, A/Fs and L.O.C.
19 August	Operation Avalanche first priority in Mediterranean theatre
26 August	French Committee of Liberation recognised by Allies
N.26/27 August	Allied Commando raid at Bova Marina
N.27/28 "	Allied Commando raids on Calabrian coast
28 August	Administrative control of D.A.F. passed to N.A.A.F.
2 September	President and Prime Minister continuing Quebec talks in Washington
3 "	Italian Armistice signed
4 "	Allied landing in Calabria - Operation Baytown Landing by 8th Army Elements at Bagnara - Operation Hooker
7 "	Both Allied forces in the Toe linked up.
8 "	8th Army took Bova Marina
9 "	Italian surrender announced by Allies and Italians Allies landed at Pizzo (Calabria) - Operation Ferdy Allies landed at Salerno - Operation Avalanche and at Taranto - Operation Slapstick Allies captured Ventotene Island Italian Fleet sailed from Spezia to surrender: Battle-ship <u>Roma</u> sunk by G.A.F. radio-controlled bombs
9 and N.9/10 September	A.A.F. bomb German airfields in Italy, Grosseto marshalling yards, Benevento.
10 September	Catanzaro and Brindisi occupied by 8th Army 5th Army took Salerno Town. Germans occupied Rome and N. Italian cities
11 "	Fighter landing strips in Naples Area serviceable
12 "	Germans counter-attacked at Salerno and retook Battipaglia. 8th Army captured Crotone. Germans liberated Mussolini.
	General Eisenhower's statement on Italian Armistice President Roosevelt's and Mr. Churchill's message to Badoglio and people of Italy

S E C R E T

/12-14

CHRONOLOGY

1943

12-14 September	Epic air support of Salerno Bridgehead
13-14 "	More fighter landing strips Naples area serviceable
N.13/14 "	Allied Airborne operations in VI Corps Sector
13 "	Heavy German counter attacks round Salerno: 5th Army losing ground
14 "	8th Army took Cosenza and Bari
	Heavy fighting at Salerno; N.A.A.F. made its most concentrated attack of the War, especially along Eboli road
	French commandos landed near Ajaccio, Corsica - Operation Firebrand
	Allies landed in Sardinia - Operation Brimstone
N.14/15 September	8th Army occupied Belvedere
	Allied airborne operations near Avellino and in VI Corps Sector (Giant Operations)
15 September	Germans at Salerno begun to go over to the defensive
	Mussolini resumed supreme direction of Fascism in Italy
	Allies took Procida and Ponza Islands and Scalea.
16 September	First Med. operation by B.25's with 75 m.m. cannon
	5th Army resumed offensive: 5th and 8th Armies linked at Vallo di Lucania: Allies occupied Ischia Island and Sapri
	Martial law proclaimed in N. Italy
16-20 September	Allied air attacks on G.A.F. A/F.'s resumed
16-28 "	Steady Allied gains
17 "	5th Army re-occupied Albanella: 8th Army patrols linked up with troops in Taranto area
18 "	5th Army occupied Altavilla and Battipaglia
19 "	Germans evacuated Sardinia
	8th Army occupied Gioja near Taranto
20 "	Monte Corvino A/F serviceable
	Allies bombed Venice
	French patriots and commandos fighting successfully in Corsica
21 "	8th Army captured Potenza; Allies raided Bastia, Leghorn. French forces now holding half of Corsica
21-30 "	Allied heavies attacked Germans evacuation Corsican battle area
	A.A.F. creating road blocks round German armies N. Naples
23 "	German wireless announced new Italian Fascist Government
24 "	5th Army opened offensive N. from Salerno
25 "	A.A.F. heavies attacked Bolzano, Verona, Bologna
26 "	French occupied Ghisonaccia A/F, (Corsica)
28 "	Allies captured Foggia air base
29 "	5th Army broke German defences and reached Pompeii.
	San Severino occupied
	Marshal Badoglio and General Eisenhower held military conference on board H.M.S. Nelson
30 "	5th Army took Avellino, Torre Annunziata
	Badoglio formed new Italian Government
1 October	Naples entered
	First raid on Germany (Wiener Neustadt) from Mediterranean
2 "	La Marsa Conference on Air Organisation
N.2/3 "	Benevento reached by 5th Army patrols
3 "	Assault landing at Termoli
	Termoli captured
	D.A.F. defence of bridgehead
4 "	End of Corsica Campaign. Germans prepared to evacuate Rome airfields
	First bombers operated from Italian airfields
	Cancello captured

/5 October

S E C R E T

CHRONOLOGY

1943

5 October		Caserta and Maddoloni occupied Liberators, Lightnings and Mitchells switched to Aegean operations C.A.F. Adriatic patrol commenced
6	"	Capua occupied. 5th Army massing on River Volturno.
7	"	Capua and Grazzanise airfields occupied. Bad weather prevented Direct Air Support and Strategic bombing
8	"	Bad weather continued. No P.R. Operations
9	"	Heavy rain and rising rivers delayed ground forces Naples railways ready to work. Guglionesi and Larino taken by 8th Army
10	"	Pontelandolfo captured
11	"	Operations on whole front restricted by bad weather
N.11/12	"	No bombing operations
12	"	No Strategical bombing operations. Many landing grounds unserviceable
		8th Army across Biferno River
N.12/13	"	5th Army attacked across Volturno River
13	"	Air and Naval bombardment of targets N. of Volturno First raid by N.A.A.F. on Albania Italy declared war on Germany, and assumed status of Co-belligerent.
	"	Carrato captured
14	"	Campobasso captured. Very bad weather
15	"	Vinchiaturmo captured. Further Volturno crossings N.A.C.A.F. assumed control of Malta air operations
15/22	"	Attacks on enemy airfields in Rome area
16	"	First operations by Italian Air Force co-operating with N.A.A.F.
17	"	Bad weather - no Strategic bombing. San Stefano taken by 8th Army - U.S. VI Corps crossed Volturno and Calore Rivers, Villa Volturno taken by 5th Army. Enemy resistance weakening.
N.17/18	"	Bad weather - no bombing operations
18	"	Discharge at Naples averaging 5,000 tons daily First N.A.A.F. attack on Yugoslavia
19-25	"	Allied air attacks on bridges and railways
N.18/19)		
N.29/20)	"	Bad weather - no bombing operations
20	"	Heavy attacks on Rome airfields and communications
21	"	Patrols reached Trigno River. Campochiaro occupied by Canadians
23	"	8th Army crossed Trigno River
		Ju. 88's bombed Naples
24	"	Frosolone, Spinete and Boiano captured by 8th Army. Germans flooding Pontine Marshes
N.25/26)		
N.26/27)		
27	"	Bad weather - no Strategic bombing operations
N.27/28)		
28	"	
N.28/29)		
30	"	Cantalupo taken by 8th Army. Mondragone clear of enemy. Liberator raid on Villar Perosa Ball Bearing Factory
31	"	Teano and Gloriano captured. German commando landings on Capraia Island B-17s attacked St. Antheor Viaduct in S. France

1 November Considerable T.A.F. activity, but bad weather hampered all air operations.

/Ventura

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CHRONOLOGY

1943

1 November	Ventura aircraft - first operations in M.T.O. (M.E.)
(Contd.)	Establishment of 15th U.S. Air Force (Strategic)
N.1/2 November	Naples bombed by enemy aircraft, River Trigno crossed by 8th Army
2 "	Increased Direct Support
	S.A.A.F. raid on Wiener Neustadt
N.2/3 "	Feint diversionary landing in Gulf of Gaeta
3 "	Strong air support for attack across R. Trigno
	San Salvo captured
	Italian Cant Z.501/506's co-operating with C.A.F.
4 "	Weather prevented T.B.F. operations
	X Corps reached Lower Garigliano
	Isernia occupied (8th Army)
N.4/5 "	Signs of enemy withdrawal to Winter Line
5-15 "	First battle of Monte Camino
5 "	Vasto (8th Army) and Venafro (5th Army) captured
N.5/6 "	Naples bombed by enemy aircraft, 'Window' prevented interception
6 "	Limited S.A.F. and T.B.F. bombing
N.6/7 "	Enemy air attack on convoy off Phillipeville
7 "	Air bombing of Sangro River defences
	8th Army firmly across Sinello River
8 "	Successful attack on Turin by B-17's
8-10 "	Little effective flying on 8th Army front
9 "	S.A.F. attack on Genoa Steel works and Villar Perosa Ball Bearing Works
N.9-10 "	Naples & Maddalena raided by enemy aircraft
10 "	Snow on 8th Army front
	Enemy air raids on shipping at Volturno and Naples
11 "	B-24 raid on Antheor Viaduct (S. France)
N.11/12 "	Enemy glider bomb attack on convoy west of Oran
12 "	German attack on Leros Island began
13 "	Atessa captured (8th Army). Air attacks on enemy forward landing grounds
15 "	Allied raids on Greek airfields in aid of Leros
16 "	Leros surrendered to enemy
	Istres and Salon airfields heavily bombed
N.17/18 "	River Trigno rose 7 feet
18 "	Perano captured (8th Army)
19 "	Wide-scale use of Rover Tentacles proposed by D.A.F.
	Birth of Forward Air Control Post
	Archi captured (8th Army)
20 "	8th Army patrolling north of Sangro River
20-21 "	President, Prime Minister and Marshal Chaing Kai-Shek arrived at Cairo
21 "	Improved conditions after long spell of bad weather
22-26 "	Sextant Conference at Mena House
22 "	Increased air support to strengthened Sangro bridgehead
23 "	8th Army crossed Sangro
24 "	Successful raid by B-17's on Toulon
N.24/25 "	Bad weather caused severe Wellington losses (Turin)
	Enemy air raid on Maddalena
25 "	S.A.F. day bombing abortive; nil at night
26 "	Marshal Stalin arrived at Teheran
	Intensive air support of 8th Army
	Castelnuovo occupied (5th Army)
N.26/27 "	Enemy bombers (including He.177's and F.W. 200's), & attacked convoy N.W. of Bougie, also Naples
27 "	Continued intensive air support of 8th Army
	President and Prime Minister flew to Teheran
N.27/28 "	8th Army attacked from Sangro bridgehead
28 "	Further Sangro crossings
28 Nov, 1 Dec.	Eureka Conference at Teheran
28-30 November	Full-scale air support of 8th Army
29 "	Main part of Foccesesi-Romagnoli Ridge (Winter Line) taken - (8th Army)

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CHRONOLOGY

1943

1	December	S.A.F. raid on Turin
1 - 2	"	High-scale air support by T.A.F. of 5th Army
2	"	President and P.M. returned to Cairo
		2 D.A.F. light bomber Wings lent to XII A.S.C. for one week
		Lanciano and Chieti captured (8th Army)
		S.A.F. raid on Marseilles
N.2/3	"	Successful enemy air raid on Bari
3	"	Casoli and San Vito captured (8th Army)
4-6	"	Cairo Conference with President of Turkey
5	"	First Thunderbolt (P-47) operations in Mediterranean
6	"	Air supplies dropped to isolated 5th Army Units
		Early Moro River crossings
7	"	Monte Porchia captured (5th Army)
8	"	D.A.F. fighter-bombers supported N.Z. attack towards Orsogna and Canadian attack towards Ortona
		8th Army crossed Moro River
		First mention of Italians in front line
N.8/9	"	French Division entered 5th Army front line
9-10	"	Intensive fighter-bomber support of 8th Army
10	"	North-West African Air Force renamed Med. Allied Air Forces
13	"	Unsuccessful enemy air raids on Bari
and N.13/14)	
N.15/16	Dec.	Intensive Allied air operations
16-31	"	Intensive S.A.F. attacks on Italian railways
16-17	"	Fighter-bomber support for 5th Army drive towards Cassino.
16	"	D.A.F. support for 8th Army advance
17	"	Ceravola occupied (5th Army)
18	"	Rocket Projectile Beaufighters' first operation (M.E.)
		San Pietro occupied. D.A.F. support for 8th Army advance
18-19	"	D.A.F. support for Canadian and Indian Divisions
18-31	"	Bad weather on all fronts
21	"	Enemy air attack on convoy S.E. of Malta
		Battle for Ortona opened
24	"	B.17/B.24 squadrons moved to Italy
25	"	Final decision to carry out operation Shingle
		Heavy S.A.F. attacks on Bolzano, Pisa, Vicenza
28	"	Capture of Ortona (8th Army)
		Heavy B.17/24 attacks on Rimini M/Y.
		Greatly increased air effort after long bad weather spell
N.29/30	"	Commando landing N. of Garigliano River
		First Wellington raid since N.2/3
30-31	"	Greatly increased air effort
31 Dec. -		Enemy air raids on Catania and Augusta
1 Jan.		

1944

1	January	Activation of XII A.F. Service Command
		General I. Eaker appointed Air C.-in-C., M.T.O.
		Sir H. Maitland Wilson appointed Allied C.-in-C., M.T.O.
		Sir A. Tedder appointed Deputy S.C.A.E.F.
		General D. Eisenhower appointed S.C.A.E.F.
1-2	"	Limited air operations
1-14	"	Preparatory Phase - Shingle air operations
2	"	Commencement of Shingle air operations
3	"	Increased air activity after bad weather spell
4-7	"	Limited air operations
7	"	Army support operations increased
		Air supplies dropped to 8th Army units

CHRONOLOGY

1944

N. 7/8	January	Wellingtons bombed Reggio Emilia aircraft factory
8	"	B-17's bombed Reggio Emilia
N. 8/9	"	Strong fighter-bomber support, Western Battle Area
	"	Wellingtons attacked Viterbo airfield
9	"	Enemy raid on Allied convoy off Appollonia
N. 10/11	"	B-17 raid on Pola naval base
	"	Enemy raid on Allied convoy off Oran
12	"	First night U.S. Marauder operations
	"	Air attacks on dams at S. Giovanni and S. of Isoletta
	"	Cervaro captured. Improved weather
13	"	French attack in central sector opened
	"	Air attacks on enemy airfields at Rome and Perugia
14	"	Tank repair shops at Loreto almost destroyed by Baltimores
15	"	French occupied Aquafondata
	"	B-17/24's bombed Florence railways
15-20	"	5th Army attacked Monte Trocchio positions
16	"	Limited air operations
17	"	5th Army forward elements reached Rapido River
17 Jan. - 29 Mar.		Railways Florence and Terni areas bombed
N. 17/28	January	Crossings of Garigliano River
19	"	5th Army forced crossing of Garigliano River
19-20	"	Monte Trocchio abandoned by enemy
19	"	Air attacks on Rome, Rieti and Viterbo airfields
	"	Successful raid on enemy air recce. base Perugia
20	"	All enemy rail communications N. Italy - Rome cut.
	"	E. - W. railway lines blocked
N. 20/21	"	U.S. units of 5th Army crossed Rapido River
	"	Wellingtons bombed Cecina M/Y.
21	"	B-25's bombed Pontecorvo bridge
	"	S.A.F. raid on Salon and Istres airfields
N. 21/22	"	Allied assault convoys escorted from Naples ports
22	"	Wellingtons bombed Fiume torpedo factory
	"	Allied landings at Anzio-Nettuno - Operation Shingle
	"	Air bombings concentrated on communications. Dummy landing Civitavecchia area
N. 22/23	"	Anzio captured 1400 hours. Unloading began 16.00 hrs.
23	"	S.A.F. support for Anzio landings
	"	German long range bomber force moved back to N. Italy: reinforcement of S. France anti-shipping units begun
N. 23/24	"	Communications again main targets. Weather deteriorating
23-26	"	Enemy air attacks on shipping at Anzio
N. 24/25	"	Limited air operations
	"	Enemy aircraft bombed Hospital Ships <u>St. David</u> and <u>Leinster</u>
25	"	Mussolini Canal bridges captured
27	"	S.A.F. raid on Salon and Istres airfields
	"	High-scale air activity: T.A.F. supporting bridgehead
	"	Americans again crossed Rapido
	"	Enemy resistance stiffening
28	"	Air offensive switched to railways N. Italy and N.E. of Rome
29	"	Strong air attacks against N. to S. railways and in direct support
30	"	Successful S.A.F. raid on Po Valley bomber airfields
	"	5th Army crossed Rapido River in strength - took Monte Cairo
N. 30/31 } and 31 }	"	Heavy S.A.F. raids on N. Italy airfields
N. 31 Jan./1 Feb.		Wellington raid on Trieste oil refinery

/N. 1/2 February

S E C R E T

CHRONOLOGY

1944

N.1/2	February	(First bombing operations by Venturas based M.E. and by R.P. Beaufighters
1-7	"	Limited air operations
3	"	First major German counter-attack at Anzio
		U.S. troops in outskirts of Cassino
4	"	B.17/24 raid on Toulon
4-5	"	Rival Greek forces agreed to cease fighting
5	"	Landing grounds in E. Italy unserviceable
		Winds at gale force over Anzio
7	"	No D.A.F. operations
		Strong enemy resistance at Cassino
8	"	Increased air activity
9	"	No operations by S.A.F. or D.A.F.
10	"	Entire air effort in support of bridgehead
		Allies lost Carroceto
11	"	First battle for Cassino ended in failure
		A few C.A.F. sorties only
12	"	Many abortive air missions
		Snow on 8th Army front
12-13	"	Strong air support for bridgehead
13	"	D.A.F. landing grounds unserviceable
		No Strategic bombing
N.13/14	"	Wellington support for bridgehead
14	"	Cameras frozen on Photographic Reconnaissance missions
14	"	Fighter-bombers attacked railway guns shelling Anzio
15	"	First bombing of Monte Cassino Monastery
		Day and night effort almost entirely Army Support
16	"	Second bombing of Monte Cassino Monastery
N.16/17)	"	Record bomb tonnage dropped to date by Allied aircraft
and 17)	"	in a single day in support of ground troops
16-20	"	Second major German counter-attack at Anzio
		Continuous Allied air support
N.16/17	"	Wellington support for bridgehead
17	"	Third bombing of Monte Cassino Monastery
		Strong enemy attacks in bridgehead
		Whole of intense air effort on Ground Support day and night
18	"	Allied withdrawals in bridgehead
N.18/19	"	Wellington support for bridgehead
19	"	Snow on Foggia airfield
		Enemy infiltrations at Anzio being cleared up
20	"	Whole T.A.F. and Liberator effort over bridgehead
20-21	"	No D.A.F. activity
21	"	Medium bombers attacked railways. Few other operations
N.21/22	"	Enemy air raids on Anzio
22	"	First air raid on Germany in conjunction with U.K.-based aircraft
N.24/25	"	First R.A.F. penetration into Austria
		First double attack on Greater Germany by R.A.F. from U.K. and Mediterransan
25	"	Regensburg raid: first combined attack by U.K. and Med. based forces on same target and largest force despatched by M.A.A.F. on a single target
26/28	"	Third major German counter-attack at Anzio

1	March	Tactical Bomber Force disbanded
		Strong day and night operations in support of bridgehead by S.A.F. and T.A.F.
2	"	First operations by D.A.F. Marauders and U.S. Havocs in battle areas.

/Third

S E C R E T

CHRONOLOGY

1944

2	March (Contd.)	Third major German counter-attack at Anzio repulsed Air attacks in preparation for Allied ground attack - Anzio
N.2/3	"	Enemy bomber raid on Anzio
3	"	Allied ground attack opened at Anzio Rome area M/Y's and A/F's bombed
3-6	"	Limited air operations
7	"	B-17 raid on Toulon Rome area M/Y's and A/F's and N. Italian M/Y's bombed
8	"	T.A.F. attacks on railways - Rome area
N.8/9	"	Successful fighter interception of enemy attack on convoy N. of Algiers
N.9/10	"	First Leigh Light aircraft operations off Ponza Island
10	"	Many landing grounds unserviceable. No D.A.F. operations Medium bombers bombed Rome M/Y's
N.10/11	"	Six Italian S.M.79's (T.B.) attacked Anzio shipping
11	"	First Allied air attack on Florence Raids on Toulon and Central Italian railways
N.11/12	"	Wellington/Liberator raid on Genoa
12	"	No offensive operations day or night
13-14	"	Tactical bombers attacked communications
N. 14/15	"	Enemy air raid on Naples. Allied fighters damaged at Capodichino
15-22	"	Third battle for Cassino
15	"	Massive air (Operation Ludlom) and artillery bombard- ment of Cassino, followed by ground attack
16-17	"	Enemy air attack on Anzio - no interception due excessive jamming
16-24	"	Continued Allied attack on Cassino with air support
17	"	First Allied air attack on Vienna (M.A.A.F.)
18	"	Rail interdiction first established as a principle Heavy S.A.F. raid on Udine airfields - record total of fragmentation bombs dropped Severe house-to-house fighting in Cassino
18-24	"	Air Supply-Dropping missions at Cassino
19	"	Official launching of Operation Strangle Intensified attacks on enemy communications
N.19/20	"	Deterioration of Allied situation at Cassino R.A.F. Bombers attacked Monfalcone shipyards
21	"	Ash from Vesuvius rendered Monte Corvino A/F unserviceable
22	"	Third battle for Cassino ended with only slight Allied gains S.A.F. attack on Verona M/Y
22/23	"	Limited T.A.F. operations
N.22/23)	"	R.A.F. raids on Padua M/Y
N.23/24)	"	
24	"	Indian troops withdrawn from Monte Cassino
25	"	Limited air operations
26	"	Chief T.A.F. objective bridges in Central Italy No operations by D.A.F. due weather S.A.F. attacks on Fiume, and on Rimini and Maniago A/F's Flying resumed from Monte Corvino A/F
N.26/27	"	Wellington/Liberator raid on Vicenza M/Y
27-28	"	Tactical bombers concentrated on bridges
28	"	S.A.F. dropped record load on Italian M/Y's at Verona and Mestre No D.A.F. operations
N.28/29	"	S.A.F. raid on Milan M/Y
29	"	Heavy B-17/24 attack on Turin/Bolzano/Milan M/Y's R.P. Hurricanes began operating
N.29/30	"	Low-level attack on Cesano and Fano Bridges
30	"	Attempted enemy air attack on convoy N. of Algiers Largest M.A.A.F. force of heavy bombers on single Strategic target to date (Sofia)
31	"	Tactical Effort on bridges Considerable D.A.F. effort: few missions in West

/N.31 Mar.

S E C R E T

CHRONOLOGY

1944

N.31	Mar./1	Apl.	Enemy air attack on convoy W. of Cherchell
2	April		Intensive air effort: attacks on bridges, Central Italy.
3	"		First M.A.A.F. attack on Hungary
			Bridges Central Italy again attacked
N.3/4	"		Follow-up R.A.F. raid on Hungary
5	"		M.A.S.A.F. began offensive against Ploesti oil
5-6	"		All tactical operations curtailed
7	"		Heavy raids on northern M/Y's, and bridges in Central Italy
8	"		First Wellington day raid in Med. (Hiksic-Jugoslavia)
N.8/9	"		First minelaying in Danube (by M.A.A.F.)
9	"		No heavy or medium bomber operations day or night
10	"		Medium bombers attacked bridges, Central Italy
N.10/11	"		West coast ports attacked
11	"		Tactical effort again against bridges
N.11/12	"		Enemy attack on convoy N. of Algiers
			R.A.F. bombed Varese aircraft factory, Monfalcone shipyards
12	"		Tactical effort on bridges - Central Italy, and railways
			N. of Rome
14	"		Strong Tactical effort against Viterbo airfield, and bridges,
			Central Italy
N.14/15	"		R.A.F. attacked Italian west coast ports
N.16/17	"		S.A.F. attacked Italian west coast ports
17	"		Air effort against lines of communications maintained
18	"		Successful fighter sweep, Udine airfields
			Low effort by D.A.F.
N.19/20	"		Italian west coast ports bombed
20	"		Heavy bombers on communications North Italy and Venice
			harbour
			Increased Tactical effort on communications
N.20/21	"		Enemy raids on convoys N.W. of Algiers and on Anzio
21	"		All medium bomber operations cancelled
N.21/22	"		Italian west coast ports bombed
22	"		Considerable Tactical effort against communications
N.23/24	"		R.A.F. bombed west coast ports
N.24/25	"		Enemy raid on Naples and Capodichino airfield
			No strategic operations
25	"		Turin aircraft factory and communications attacked
26-27	"		All bombing cancelled due weather
28	"		B-17/24's bombed Piombino/San Stefano/Orbetello
			Tactical attacks on railways and bridges in Central Italy
N.28/29	"		R.A.F. bombed Piombino/San Stefano/Genoa
			Enemy air raid on Anzio
29	"		Heavy raid on Toulon by B-17/24s
			(heaviest attack on single target to date))
			Intensive air effort on communications and dumps
N.29/30	"		R.A.F. bombed Genoa/Spezia/Leghorn
30	"		D.A.F. landing grounds unserviceable
			Effort against North Italian railways and central
			Italian bridges
N.30	Apl./1	May	R.A.F. bombed Genoa/Spezia/Leghorn/Monfalcone

S E C R E T

/1 -11 May

CHRONOLOGY

1944 •

1 - 11	May	Limited air effort due to bad weather
5	"	Pescara dam successfully bombed by Kittyhawks and Mustangs
N.11/12	"	Allied offensive renewed - Operation Diadem
11-15	"	Enemy raid on convoy off Dellys
12	"	13 Corps attack on Gustav Line
	"	Widespread raids on harbours, airfields, railways
	"	Direct support hampered by weather
N.12/13	"	Successful enemy raid on Alesani and Poretta (Corsica) airfields
13	"	Brenner Route blocked by B-17s
13-14	"	Air attacks on railway centres - North and Central Italy
	"	Tarquinius (enemy) airfield rendered unserviceable
	"	Ausonia captured
N.15/16	"	Pignataro captured
N.16/17	"	West coast ports bombed
17	"	Submarine sunk N.N.W. of Tenez by air/naval co-operation
	"	Cassino Monastery and Town captured
18	"	Operations against Hitler Line begun
19	"	S.A.F. attacks on west coast ports and railways N. Italy
	"	Allied attempt to rush Hitler Line
20-25	"	Breaching of the Hitler Line
22	"	S.A.F. and T.A.F. on Direct Support
23	"	Concerted attacks by bridgehead and main forces
	"	S.A.F. and T.A.F. on Direct Support
24	"	Enemy withdrew from remaining Hitler Line positions
	"	Considerable M/T destroyed by air attacks
	"	Terracina captured
24-25	"	Crossing of the River Melfa
N.24/25	"	Diversionsary dummy assault on Civitavecchia
25	"	Main and beachhead forces linked up
	"	Air destruction of M/T increasing
	"	Rail centres in S. France bombed
26	"	More heavy destruction of enemy M/T by air attack.
	"	S. France rail centres again bombed
	"	Roccasecca and Patena occupied
26 May - 3 June		Advance of X Corps
27	May	Airfields and rail centres S. France bombed
	"	Cisterna captured
28	"	Air attacks on railways Central and North Italy
	"	Atina captured
N.28/29	"	Wellington raid on Brenner Route
29	"	Record day for S.A.F.
N.30/31	"	Enemy raid on convoy E. of Algiers
31	"	Strong Tactical air support in battle areas
	"	Frosinone captured
1	June	Velletri and Ferentino occupied
2	"	Force of M.A.S.A.F. B.17s landed at Poltava, U.S.S.R.
4	"	Allies entered Rome

S E C R E T

CODE NAMES

Accolade	Proposed operations against Rhodes	
Achse	German plans for operations in case of an Italian surrender	
Anvil (later Dragoon)	Allied operations in the Mediterranean against S. France	15 Aug. 1944
Avalanche	Seaborne landings at Salerno	9 Sept. 1943
Backwater	Small post-Husky operations in Messina Straits by XIII Corps	Aug./Sept. 1943
Barbara Line	German defence line N. of R. Trigno	
Barraouda	.x. Proposed landings by small force - Naples area	
Baytown	Seaborne landings at Reggio by XIII Corps	3 Sept. 1943
Bernhard Line	German defence line N. of R. Sangro	
Bodyguard	Overall Allied strategic deception plan	1944
Bolero	Transfer of U.S. forces to U.K.	
Brassard	Seizure of Elba Island	17 June 1944
Brimstone	Invasion of Sardinia	Sept. 1943
Buttress	.x. Proposed full-scale landings at Reggio	
Campagna Line	Short German defence line between Albano and Rome	
Corkscrew	Air operations against Pantelleria Island	May/June 1943
Diadem	Allied offensive in Italy	11 May- 22 June 1944
Dragoon	Allied operations in the Mediterranean against S. France (see also Anvil)	Aug. 1944
Eureka	Conference at Teheran to discuss Allied strategy in 1944	Nov. 1943
Fanfare	Operations in Mediterranean	
Fantox	Tac HQ 15 Army Gp	
Ferdinand	Cover plan for Dragoon	
Firebrand	Operations against Corsica	
Freedom	Allied Force Headquarters	
Fuhrer Line	Fondi-Monte Cairo German switch line defences	
Gangway	.x. Initially build-up by sea of forces in Naples after capture; later proposed unopposed seaborne move into Naples	
Goblet	.x. Proposed seaborne assault on Crotona area	
Grapeshot	French raid on Pianosa Is.	May 1944
Gothic Line	German defence line from N. of Pisa to Pesaro (see also Apennine and Grun Lines)	
Grun (Green Line)	See Gothic Line	
Gustav Line	German defence line, Cassino Area - part of Fondi-Monte Cairo (or Senger Line)	
Gymnast	.x. Proposed Allied landings in N.W. Africa (see Torch)	
Hardihood	Allied aid to Turkey	
Hippo	Cover plan for VI Corps operations during Diadem	May 1944
Horridified	Sicily	
Husky	Operations against Sicily	July/Aug. 1943
Hitler Line	German defence line behind Cassino	
Imperator	Air raids to provoke air battles	
Juggler	Bombing of G.A.F. fighter factories	
Ludlom	Air attack on Cassino	15 Mar. 1944

/Musket

S E C R E T

CODE NAMES

Musket	.x. Proposed operations in the Heel of Italy	
Mustang	.x. Proposed overland operations to follow Buttress/Musket	
Neptune	Assault stage of Overlord	
Overlord	Entry into Allied invasion of N.W. Europe	6 June 1944
Pointblank	The progressive dislocation of the German military, industrial and economic system, the disruption of vital elements of lines of communication and the material reduction of the German air combat strength by the successful prosecution of the Combined Bomber Offensive from all bases	
Priceless	Post-Husky Mediterranean Operations	
Quadrant	Series of conferences held at Quebec to discuss plans for the defeat of the Axis in Europe	Aug. 1943
Round-Up	.x. Plan for invasion of Europe during 1943 by Anglo- American forces based in England, in conditions in which it was necessary to fight for a firm base in France before advancing (superseded by Overlord)	1943
Schwarz	German plan for seizure by the Army of key positions in case of Italian surrender	
Sextant	Conference at Cairo to discuss Allied strategy in 1944	Nov. 1943
Shingle	Seaborne landings at Anzio-Nettuno	22 Jan. 1944
Sickle	U.S. Air Force build-up (within Bolero for Overlord)	
Slapstick	Unopposed Allied landing at Taranto	Sept. 1943
Strangle	Air Interdiction of railways - Central Italy	March/May 1944
Symbol	Conference at Casablanca	Jan. 1943
Tidalwave	Bombing of Ploesti oilfields	
Torch	Seaborne landings in N.W. Africa	Nov. 1942
Trident	Conference at Washington	May 1943
Windsock	Italy	

.x. Plan not translated into operations

S E C R E T

ABBREVIATIONS

A.A.	Anti-aircraft
A.A.F.	Army Air Forces (U.S.)
A.A.I.	Allied Armies in Italy
A.A.S.C.	Army Air Support Control
Abt.	Abteilung - German administrative unit
A.C.M.T.	Air Command Mediterranean Theatre
A.C.V.	Escort Carrier (British)
A.E.A.F.	Allied Expeditionary Air Force
A.F.C.	Anglo-French conversations
A.F.H.Q.	Allied Force Headquarters
A.F.S.C.	Air Force Service Command
A.F.S.H.O.	Office of Air Force History (U.S.)
A.H.B.	Air Historical Branch - Air Ministry
A.L.G.	Advanced landing ground
A.L.O.	Air Liaison Officer (Army personnel)
A.M.	Air Ministry
A.O.C.	Air Officer Commanding
A.O.P.	Air Observation Post (artillery-spotting aircraft)
Appx	Appendix
A.S.C.	Air Support Command
A/S/R	Air/Sea Rescue
A.S.V.	Air to surface vessel
A.T.C.	Air Transport Command
A-20	Boston aircraft (U.S.)
A-36	Mustang 'Invader' aircraft (U.S.)
Br	British
B-17	Boeing Fortress aircraft (U.S.)
B-24	Liberator aircraft (U.S.)
B-25	Mitchell aircraft (U.S.)
B-26	Marauder aircraft (U.S.)
C.A.S.	Chief of Air Staff
C.C.S.	Combined Chiefs of Staff (in Washington)
C.G.	Commanding General (U.S.)
C.H.L.	Chain Home Low (British radar station)
C.I.D.	Committee of Imperial Defence
C.I.G.S.	Chief of the Imperial General Staff
C.-in-C.	Commander-in-Chief
C.M.	Central Mediterranean
C.M.F.	Central Mediterranean Force
C.O.	Commanding Officer
C.O.L.	Chain Home Low (for Overseas use) - see C.H.L.
C.O.S.	Chief of Staff
C Posn.	Caesar Position - German defence line, W. Italy
C.P.	Command Post
C.P.S.	Combined Planning Staff
C.S.D.I.C.	Combined Services Detailed Interrogation Centre
C.V.	Fleet Carrier (Br.)
(D)	(Day) - term applied to aircraft operations
D.A.F.	Desert Air Force
D Day	Date fixed for the commencement of an operation
D/F	Direction finding
Div	Division
Do.	Dornier - German aircraft type
D. of I.(O)	Director of Intelligence (Operations)
D/Wt	Dead weight
D.Z.	Dropping zone
E-boat	Enemy motor torpedo boat
Encl	Enclosure
E.T.O.	European theatre of operations

/F.A.F.

S E C R E T

F.A.F.	French Air Force
F.A.N.	Annotation for signals from C.C.S.
F.C.P.	Forward Control Post (A.A.S.C. organisation)
F.O.	Flag Officer
F.O.I.C.	Flag Officer-in-Charge
Fu-Ge	Funk Gerät - German radio apparatus
F.X.	Early type of German radio-controlled bomb
F-5A	Mosquito aircraft type
F.W.	Focke Wulf - German aircraft type
G.C.I.	Ground Control Interception
G.O.C.	General Officer Commanding
G.R.	General reconnaissance
G.S.	General Staff
H.E.	High explosive
He.	Heinkel - type of German aircraft
H.F.	High Frequency
H Hour	The hour fixed for the commencement of an attack
H.Q.	Headquarters
Hr.(s)	Hour(s)
H.2.S.	Radio navigational aid (Allied)
Hs.293	Henschel 293 - German glider bomb
I.A.F.	Italian Air Force
I.A.Z.	Inner artillery zone
I.F.F.	Identification friend or foe
Ind	Indian
Int	Intelligence
Int/Op	Intelligence/Operations
I.S.T.D.	Inter-Service Topographical Department
J.G.	<u>Jagd</u> - (Fighter) <u>Geschwader</u> - German Air Force Unit
J.P.S.	Joint Planning Staff (U.S.)
J.S.M.	Joint Staff Mission (in Washington)
Ju.	Junkers - type of German aircraft
<u>K.G.</u>	<u>Kampf</u> (Bomber) <u>Geschwader</u> - German Air Force Unit
L.C.A.	Landing Craft Assault
L.C.F.	" " Flak
L.C.G.	" " Gun
L.C.I.	" " Infantry
L.C.M.	" " Mechanised
L.C.N.	" " Navigation
L.C.R.	" " Rocket
L.C.S.	" " Support
L.C.T.	" " Tank
L.G.	Landing ground
<u>L.G.</u>	<u>Lehr Geschwader</u> - German Air Force experimental unit
L.S.C.	Landing Ship Carrier
L.S.I.	" " Infantry
L.S.P.	" " Personnel
L.S.T.	" " Tank
MA	Macchi - type of Italian aircraft
M.A.A.F.	Mediterranean Allied Air Forces
M.A.C.	Mediterranean Air Command
M.E.	Middle East
Me.	Messerschmidt - type of German aircraft
Med	Mediterranean
M.E.W.	Ministry of Economic Warfare
M.L.	Motor launch
mm	Millimetres
M.O.R.U.	Mobile Operations Room Unit (for G.C.I.)
M.R.U.	Mobile Radio Unit
M/T	Motor Transport
M.T.B.	Motor Torpedo Boat

S E C R E T

Mtg.	Meeting
M.T.O.	Mediterranean theatre of operations
(N)	(Night) - term applied to aircraft operations
N.A.A.F.	Northwest African Air Force
N.A.C.A.F.	Northwest African Coastal Air Force
N.A.F.	Annotation for signals from A.F.H.Q.
N.A.C.A.F.	Northwest African Coastal Air Force
N.A.S.A.F.	" " Strategic Air Force
N.C.W.T.F.	Naval Commander Western Task Force
N.I.D.	Naval Intelligence Division
N.J.G.	Nacht Jagd (Night Fighter) Geschwader - German Air Force Unit
N.O.I.C.	Naval Officer-in-Charge
N.Z.	New Zealand
O.B.S.	C.-in-C. South (German)
O.B.SW.	" Southwest (German)
Opsum	Operations summary
O.R.B.	Operations Record Book (Form 540) (Br)
O.S.S.	Office of Strategic Services (U.S.)
P.I.U.	Photographic Interpretation Unit
P.M.	Prime Minister
Prov.	Provisional
P.R.U.	Photographic Reconnaissance Unit
P.R.W.	" " Wing
Ps/W	Prisoners-of-war
P-38	Lightning - type of U.S. aircraft
P-39	Airocobra - " " " "
P-40	Warhawk - " " " " (or Kittyhawk) (Br.)
P-47	Thunderbolt " " " "
P-51	Mustang - " " " "
R.A.A.F.	Royal Australian Air Force
RAFDEL	R.A.F. Delegation (in Washington)
R-boat	German minesweeper
R.C.A.F.	Royal Canadian Air Force
R.C.T.	Regimental Combat Team (U.S.)
Re.	Reggiani - type of Italian aircraft
R.H.A.F.	Royal Hellenic Air Force
R.N.	Royal Navy
R.P.	Rocket projectile
R/T	Radio telephony
S.A.A.F.	South African Air Force
S.A.S.O.	Senior Air Staff Officer (Br)
S-boat	German M.T.B.
S.K.G.	Schlacht Kampf (Ground Assault) Geschwader - German Air Force Unit
S.N.O.	Senior Naval Officer
Sqn	Squadron
T.A.C.	Tactical Air Command
Tac/R	Tactical reconnaissance
T.B.F.	Tactical Bomber Force
T.C.C.	Troop Carrier Command
T.F.	Task Force (U.S.)
T.G.	Task Group (U.S.)
U.S.N.	United States Navy
U.S.S.	United States Ship
V.H.F.	Very High Frequency (Signals)

/W.I.S.

S E C R E T

W.I.S.
W.N.T.F.
W/T

Weekly Intelligence Summary
Western Naval Task Force
Radio

Y.M.S.

'Y' Class Minesweeper (U.S.)

z.b.V
Z.G.

For special duties (German)
Zerstörer (twin-engined fighter) Geschwader - German
Air Force Unit

SECRET

- 1 -

CHAPTER I

THE PLAN

CHANGE IN BRITISH POLITICAL ATTITUDE TOWARDS ITALY

1918 to 1938

O.I.D. 296th.
Mtg.
3 July 1937

British and Italians lived through the last phase of World War 1 as comrades-in-arms on the Piave battlefields. Politically this relationship harmonised with British interests after the war, which were defined by the Chiefs of Staff for Cabinet guidance as implying a peaceful Mediterranean and friendly relations with Italy. The tradition of British friendship for Italy and the concern for her independence which had governed the measure of support for Garibaldi was so maintained and given practical expression in a decision by the Cabinet in November 1933 that no expenditure for defence against Italy was called for.

Cab.(30)37
Cmd.5.

In spite of the crisis which arose in August 1936 as a result of Italian preparations for war against Abyssinia, British Fleet moves from Malta to Alexandria and the later application by the League of Nations of sanctions against Italy, this decision remained unrevoked for nearly two years. In July 1937, however, the Prime Minister expressed the view that Italy, although unlikely ever to take aggressive action without the assurance of German support, could no longer be regarded as a reliable friend. The Committee of Imperial Defence recommended -- and the Cabinet approved -- limited expenditure to bring the defence of ports in the Mediterranean up-to-date.

The situation was continually under review thereafter and discussions became progressively more specific in character. The potential threat was carefully examined by the Air Ministry in March 1938 and forecasts of possible Italian air efforts in case of hostilities made, with Egypt as the most likely centre of gravity and the closing of the Sicilian Narrows figuring as important factors. A Joint Planning Staff was created and the Air Officer Commanding in Egypt's field of authority extended.

International Crisis in September 1938.

Ciano's Diary
25 Sept. 1938
(unpublished)

During the Munich crisis of September 1938, Mussolini declared that if a European war were begun by Germany, Italy's place would be at Germany's side, without giving any promise as to at exactly what time this would be translated into terms of military action. In any case, Italy would await Britain's entry into a war, so as to put her (Britain) in the wrong. Hitler gave verbal assurances that in any case German forces would be at Italy's disposition. General increases in armament followed the suspension of the crisis.

The 1939 Anglo-French Conversations

C.O.S.838
A.F.C.301
C.O.S.838 and
Cabinet 6(39)7

The British Cabinet authorised the opening of staff conversations with the French on strategic matters affecting the two countries. These conversations began on 29 March 1939 in London, and unanimity was soon reached on common action to

/be taken

SECRET

A.F.C.(J)28
Stage I

A.F.C.(J)29
Stage I
A.F.C.(J)15
Stage I

A.F.C.(J)29
Stage I

D.P.(P)45.

Ciano's Diary
13 May - 10 June
1940

be taken in case of an outbreak of war. One of the assumptions on which these conversations were based was that if Germany were to commence a war of aggression, Italy would align herself on her side. Three factors seemed to stand clearly enough on the debit side of Italy's account. In the moral category, the unstable temperament of the Italian people and their distaste for war; geographically, the vulnerability of Italy's coasts, although this was more than offset by her outstanding position astride the crossways of the Mediterranean, with the accompanying ability to strike radially at Allied communications. It was still considered that Italy might attack Egypt; therefore counter measures were considered and steps recommended to prepare for revolts in Abyssinia and Libya. Operations in Africa might give us early opportunities of success, without prejudicing our commitments in Europe, and should reduce the Italian will to fight. The latest information indicated that the standard of performance of the Italian Air Force was not up to date as far as attacks on warships were concerned and it was understood that they possessed no torpedo bomber aircraft in the Central Mediterranean, but numerically they were stronger than the R.A.F.

Allied strategy, based on the hypothesis of a long war, was outlined in three phases. The first would be essentially a defensive period, devoted to withstanding a German or German-Italian attack on the territorial integrity of the French and British Empires and homelands. The second would combine defence and attack. Germany's offensive was to be held while the Allies dealt decisively with Italy. It was gauged that if our efforts in Africa resulted in the capture of Italian Colonies in the North and East of that Continent, a corresponding loss of morale might provide a favourable background for Italy's elimination. Indeed, this event was a pre-requisite to the concluding phases of the war, when with accumulated resources we might turn, with relatively free hands - unless Japan had in the meantime joined the Axis - to the final object, the defeat of Germany. Measures undertaken towards the assurance of air preparedness may be studied in full in the R.A.F. Narrative on the Middle East Campaigns Volume I.

Entry of Italy into the War

German military successes in May and June 1940 provided a favourable background for Italian intervention. On 13 May 1940, Mussolini declared that the Italians were already sufficiently dishonoured and that within a month he would declare war and attack France and Great Britain. Such was the Italian political structure that although the idea was distasteful to almost the entire Italian people, nothing could prevent the declaration of war, which was made on 10 June 1940.

PROGRESS OF THE WAR AGAINST ITALY

The Defensive Phase of 1940

R.A.F. Narratives
- The M.E.
Campaigns
Vol. I and
The E.African
Campaigns

For the best part of the remainder of 1940, British forces in Africa were on the defensive. Using their strong geographical position to some effect, the Italian struck first in East Africa, where by early November they had conquered British Somaliland and were attacking our outposts in the Sudan and Kenya. In Libya, after preliminary trials of strength, Italian forces pushed us back well into Egypt, past Sidi Barrani.

/British

British Offensive in the Desert and East Africa
December 1940 - April 1941

On 8 December the British opened an offensive which developed well and resulted in the capture of Cyrenaica as far as Agheila. Large forces of Italian troops and a considerable number of air units were routed in this operation, the adverse balance of strength being thus partially adjusted by 8 February 1941. The British forces in East Africa achieved even more encouraging successes between December 1940 and April 1941, recapturing British Somaliland, conquering Eritrea and Italian Somaliland and smashing Italian resistance in Abyssinnia at Keren and Addis Abbaba.

Italy reinforced by Germany in the Western Desert

C.O.S. Committee
 Papers C.O.S.
 (41)16 para.4
 4 Jan. 1941.

No extravagant hopes were built on the temporary successes against Italy. Although she was already proving a serious economic strain on Germany, she would continue to enjoy the other's protection. So long as she remained in the Mediterranean in strength, Germany could not afford to see her overthrown. Intervention in Italian military affairs in the near future seemed a foregone conclusion. It was hard to see precisely what the pattern of intervention would be, but some form of occupation of Italy and air support of the Libyan campaign were foreshadowed.

All speculations were resolved by the arrival in March 1941 in Libya of Rommel's Afrika Korps and Luftwaffe units. The reinforced, reorganised Axis forces recaptured Agheila on 24 March and Benghazi on 3 April 1941. With the heavy commitments of the Greek campaign absorbing our Middle East strength, our forces, outnumbered and outfought, were forced back as far as Sollum.

Early Concept of the Capture of Sicily

C.O.S.(41)154(0)
 31 July 1941.

While British forces were liquidating the scattered units of the defeated Italian air and ground forces in Abyssinia, the general military situation had not materially improved. The Germans were deep in Russia, held Greece and Crete and had infused new fire into the Desert campaign. The problem of dealing decisively with Italy alone had grown more complicated. It was simple to see that the further we pushed the enemy back in North Africa - if we could - the better placed we should be to carry out operations by sea and air against targets in Italy. On the other hand, even if North Africa were one day clear of the enemy, he could still interfere with our shipping by means of his aircraft operating from Sicilian bases. This point led to the obvious conclusion that the day must come when enemy air forces in Sicily, Southern Italy and Tunisia must be debarred from using bases in those areas, and the only effective means of achieving that aim would be the occupation of Tunisia and the capture of Sicily. Meanwhile the best the forces available could achieve was small scale raids. Later, perhaps, seaborne raids on Italian territory might be possible.

The Crusader British Offensive November 1941 to January 1942

Operation Crusader opened on 18 November 1941 and after bitter fighting at Sidi Rezegh, Tobruk was relieved after a nine months' siege and Benghazi recaptured on 24 December. By 4 January 1942 the Germans and Italians were back in

/Agheila.

Agheila. Crusader virtually came to an end on 20 January 1942. Both German and Italian air forces had suffered serious losses in aircraft, both in air combat and on the ground.

Without allowing any breathing space, Rommel hit back and his counter-attack ran on as far as El Alamein in Egypt, where the British took up prepared positions on 6 July. The position remained uneasy, with both sides feeling for an advantage, until the night of 23/24 October 1942.

First and Eighth Army Campaigns, October 1942 - May 1943

The Eighth Army fought the Axis forces back across Libya, into Tripoli, while the First Army, which landed in North-west Africa on 8 November 1942, opened a new front in the West. The combined pressure of the two forces led to the victorious climax of 13 May 1942, when what was left of the Italian First Army and the Afrika Korps surrendered. Operations by Allied aircraft against the Axis supply lines by sea and air had proved one of the major factors in their defeat.⁽¹⁾

Effect of North African Operations on Italy

Before the operations just referred to, Italy and her islands, with Libya in her hands and Algeria and Tunisia neutralised, held a geographically dominating position in the Mediterranean. Thereafter, the United Nations controlled the Mediterranean from naval and air bases all along the North African shore, in addition to Malta, Gibraltar, Egypt and Cyprus. The Mediterranean route to Alexandria and the East was reopened, with an appreciable saving of shipping. Italy was denied all seaborne imports from North Africa and her coastwise shipping from other countries placed in continuous jeopardy. Italy, Sicily and Sardinia came within practicable distance for sustained heavy attack from the air. The entire 4,100 miles of the seaboard of Italy and her islands were exposed to naval bombardment and had to be manned. Multifarious defence problems henceforth placed a strain on the Fascist organisation that it seemed ill equipped to bear.

Capture of Pantelleria, Lampedusa, Linosa and Lampedusa Islands

The reduction of the small islands lying between Tunisia and Sicily was the next step. The air bombardment of Pantelleria, very heavily fortified and possessing an airfield, began in the last phase of the Tunisian campaign, the intention in the first place being to prevent evacuation of the Axis forces. Once the campaign was ended, the reduction of the island was left to the Air Force, which after continuous attacks, reduced it on 11 June.⁽²⁾ During the following two days Lampedusa, Linosa and Lampedusa Islands were also captured. From 12 May to 11 June, Pantelleria suffered one hundred and fifty-four air attacks. Perusal of the Italian records of the time, couched in unexpectedly laconic terms, leads one to the irresistible conclusion that the defence was conducted with great spirit. The heavily cemented aircraft shelters, partly below ground level, although frequently hit, survived relatively intact.

/3. The

(1) Full accounts of the Italian ground and air effort and the losses inflicted on the Italian Air Force will be found in the R.A.F. Narratives on the Middle East Campaigns and Operation Torch.

(2) Operation Corkscrew.

Air Ministry
Weekly
Intelligence
Summary No.190

Appreciation of
Allied Air
Tactics and
Strategy. H.Q.A.A.
Defence Italy
May - June 1943
Translation
No. VII/61
AHB 6/R.157

THE CASABLANCA CONFERENCE - JANUARY 1943Hopes of Eliminating Italy

When the Casablanca Conference (1) met in January 1943 at Anfa in French Morocco, the idea that Italy could be eliminated from the war before the other members of the Axis was vaguely ambient; but it acquired no concrete form during the meetings, and was never discussed except as a possible operational by-product. Nevertheless, considerable progress was made in the reconciliation of Allied differences in the field of grand strategy; and the embryo - if no more - of the renaissance of the pre-war concept of dealing decisively with Italy might be discerned.

O.C.S.
Paper 170/2
23 Jan. 1943

Plenary Mtg
(2nd)
18 Jan. 1943

The U.S. Chiefs of Staff were converted to the deferment of a large-scale attack on Europe from the West, appreciating that the shipping position precluded the build-up in 1943 of adequate forces in the United Kingdom and agreeing that the main Allied effort that year should be concentrated on clearing the enemy from the Mediterranean and then attacking the underbelly of the Axis in that quarter. It was foreseen, too, that the local use of large numbers of Allied troops in the North African Theatre would effect considerable economies in shipping; and that a successful campaign in Sicily might result in the elimination of Italy and the imposition of heavier commitments on Germany.

Decision to Invade Sicily

O.C.S. Mtg
19 Jan. 1943

Plenary
Mtg. (3rd)
23 Jan. 1943

The recommendations of the Combined Chiefs of Staff to occupy Sicily rather than Sardinia, with the objects of rendering the Allied hold on the Mediterranean more secure, of diverting German pressure from the sensitive Russian Front and of intensifying Allied pressure on Italy, whose morale was visibly falling, were accepted. At some time during the favourable moon periods of June, July or August, the hour should be favourable for the operation. (2) Thereafter, the Prime Minister conceived some kind of medium-scale attack on Europe in the Mediterranean area, a conception of which the very broad terms awaited the clarification which only time and events could develop.

Directive to Supreme Commander

Plenary
Mtg. (5th)
24 May 1943

It was decided that General Eisenhower be instructed to consider such operations in exploitation of Operation Husky as were, in his opinion, best calculated to eliminate Italy from the War and contain the maximum possible number of German divisions. After the close of the Sicilian Campaign the Combined Chiefs of Staff would consider the General's recommendations and decide the course of subsequent operations. The Allies were ready for action, but their realisation that a specific plan of operations against the Italian mainland must await the resolution of several unknown factors, is implicit in the President's admission that more time was needed for thought and for more realistic study in the actual battle area of problems involved. Therefore General Marshall, U.S. Army, should accompany the Prime Minister on his projected visit to the Supreme Commander.

/Commentary

(1) Code name; Symbol.

(2) Code name; Husky.

Commentary

The deliberations of the Casablanca Conference were tempered by sober optimism. The full implications of a successful outcome of the Tunisian Campaign were not, however, clear and a German attack through Spain was always a possibility. The Allies were agreed on the next step; but Axis reactions were to a great extent unpredictable while their war potential remained massive, flexible and relatively unimpaired, and their geographical position was so strong. Planning was therefore restricted. It will be seen how the march of events enhanced the significance of Italy and how the arguments in favour of her early elimination and occupation gradually assumed validity and urgency, in interplay with other vital projects.

DEVELOPMENT OF THE MEDITERRANEAN AS A VITAL THEATRE OF WAR. THE WASHINGTON CONFERENCE

Allied Progress after the Casablanca Conference

By the time the Washington Conference⁽¹⁾ opened on 12 May 1943, the Axis had been defeated in Africa; our Mediterranean lines of communication had been partially re-opened and something like local air superiority established. The plan to invade Sicily was maturing; but Allied moves following a successful outcome of that plan depended on numerous imponderables, in an international situation of increasing complexity. Nevertheless, some hint of the general feeling that decisive action was the natural solvent of doubt is reflected in the clear opening alignment of the British and American teams.

British Views

Plenary Mtg. (1st)
12 May 1943

JP(43) Paper 99
3 May Para. 43.

In general terms, the British viewpoint was that the first major objective in the Mediterranean was to eliminate Italy from the war, since this would immediately bring several desirable aims within easier reach. Prepared for an early Italian collapse, they favoured exploiting the confusion and denying the Germans time to re-group. Bases, airfields and ports in the Heel and Toe of Italy should be seized, they advocated, concurrently with landings in Albania and possibly the Dodecanese. In addition to Sicily, Corsica and key points in Sardinia should be taken and held. Airfields in the Rome and Naples areas should be occupied, and troops landed in Central Italy, with the object of advancing northwards to seize the airfields in the Milan-Turin area should the Germans withdraw to Northern Italy. With these airfields in our hands, a force of five hundred bombers could reach the Ploesti oil complex and other previously inaccessible targets of paramount importance.

American Views

Plenary Mtg. (1st)
12 May 1943
CCS (83rd Mtg.)
13 May 1943
CCS (84th Mtg.)
14 May 1943
CCS (88th Mtg.)
19 May 1943.

The Americans, apprehensive of Japanese diffusion over the Eastern Hemisphere, held that this must be brought to a sharp end and foresaw the need for massive reinforcements. Any large-scale undertaking in the Mediterranean must, of necessity, they claimed, both create a vacuum absorbent of manpower needed for operations in both the West and Far East, and prove, should the Germans decide to garrison Italy, exhaustive and of long duration.

/Fusion

(1) Code Name - Trident.

Fusion of Views. Decisions

Overshadowing the national stand-points exhibited at the Conference was the fact that the British, convinced of the necessity of sea power and conscious of their Imperial possessions, had for centuries favoured the 'Indirect Approach' in strategy, whereas the Americans, with less experience though not necessarily less awareness, advocated the 'Direct Approach' to Europe, that is, through Western France to Germany by the shortest route.

Paper CCS 234
para.18, taken at
CCS (18th Mtg.)
19 May 1943.

The factors which perhaps contributed most to the fusion of the parallel viewpoints were, firstly, the general appreciation of the need to exploit the immediate situation with appropriate strategy and to attack on the crest of the momentum acquired, with the exaltation and prestige of a battle-hardened and victorious navy, army and air force: and, secondly, the compromise agreement that whatever Mediterranean operations were mounted would be with men and equipment available in the area at the time, that is to say, that there was no question of reinforcing the theatre. This agreement is to be carefully noted, for later departure from its terms was to lead to a crisis in Allied military circles during a critical period.

Commentary

G.O.S(88th Mtg.)
19 May 1943.

It is interesting to consider at this point the mixed nature of the assumptions on which discussions of the attack on Italy proceeded. Neither the British Joint Planners nor any other group nor individual concerned appears to have allowed at this stage for the full depth of the German will-to-war, or to have forecast the German decision to contest every inch of ground in Italy, as well as in the Balkans and the Aegean, and to maintain over a long period a relatively permanent battle front with negligible air cover. It is true that the American General Marshall pointed out that a German decision to support Italy might make any intended operation extremely difficult and time-consuming. Later events proved this to have been a sound assumption, but the general tacit assent to the main tenor of the British Joint Planner's basic considerations is noteworthy.

Paper
JP(43)99
3 May 1943
Para. 44.

The British Joint Planners, after consultation with the U.S. Joint Planners, thought it probable that the Germans would withdraw from all Italian territory, except possibly Venetia and the S. Tyrol; that if they considered standing on a line Ravenna-Pisa, the risks involved would make this course unacceptable; and that they would concentrate everything on the defence of the Balkans.

PROGRESS OF PLANNING IN NORTHWEST AFRICAAlternative Plans of Operation

Acting on the decisions of the Washington Conference, the Supreme Commander directed, on 5 June 1943, the G.O.C.-in-C. of Force 141 (later to become 15th Army Group) and the C.-in-C., Mediterranean to prepare plans for the invasion of Italy. In addition, he directed the Commanding General of the Fifth U.S. Army to prepare plans

/for the

Allied Strategy
British
Historical Sect/
OM AHB/II.J11/58/1.
Ibid.

for the invasion of Sardinia, in collaboration with the Naval and Air C's-in-C.; and on 15 June called on General Giraud to plan the invasion of Corsica, as a French operation.

The plan for the invasion of Italy, which was at that stage to take the form of an initial lodgement in Calabria, (the province covering the Toe of Italy,), was an alternative to the attacks on Sardinia and Corsica. All three operations would eventually be necessary, but it was not yet clear where the blow should fall first. One of the essentials, in any case, would be an increase in the long range fighter forces, which was asked for.

N.A.F. 250
30 June 1943

The planning for a large-scale amphibious assault across the Straits of Messina visualised first ~~as~~ a landing by the Eighth Army on the Gioia beaches in the Toe. (1) That part of Operation Buttress to be carried out by X Corps was named Operation Baytown. Operations were to be exploited to the northwards by X Corps, which was charged with the clearance in the early stages of the coastal area between the ports of Reggio and San Giovanni. Should the advance of the Buttress-Baytown forces be seriously delayed, then an amphibious assault on the Crotona Area, (2) in the Ball of the Foot, was to come into play thirty days after the landings in the Toe.

The second major plan, designed to meet a more favourable situation in which enemy resistance in the south disintegrated speedily, was for Operation Buttress (including Operation Baytown) to be pressed home and exploited inland, through to the Heel and on to Naples and Rome. With these two targets secured, our forces were to be reinforced by three divisions through Naples.

Ibid

To precede or follow either of the two alternative plans just outlined, there was the plan for an amphibious assault on the island of Sardinia - Operation Brimstone. Should the assault on Italy be cancelled or deferred until Sardinia and Corsica were occupied, then three British divisions were to augment the strength available. If it was practicable after the capture of Sardinia, an amphibious assault on Corsica was to be executed by French forces, aided by elements of the Fifth Army and Mediterranean Air Command. General Giraud detailed General Juin for the post of Commander.

Responsibilities for Maintenance and Mounting of Forces Involved

Allied Strategy (4)
AHB/II.J.11/58/1

It was a sine qua non that Middle East Forces, with their experience and resources, should participate with Allied Forces Headquarters in the responsibility for both the preliminary supply, maintenance and mounting of forces in North Africa for the initial attack, and the provision of ports and bases. Only operations by the units which were to follow up from Sicily were to be mounted by Force 141. For thirty days after the initial landings, Middle East H.Q. Force was to continue to maintain the H.Q. of X British Corps with all troops thereto attached, as well as the 7th British

/Armoured

- (1) Code Name - Operation Buttress.
- (2) Code Name - Operation Goblet.
- (3) Code Name - Operation Firebrand.
- (4) Section of Conquest of Southern Italy-a record compiled by British Historical Section Central Mediterranean.

Armoured Division and the 56th British Infantry Division. Thereafter, supply demands for all forces involved were to be handled by Force 141, who was to submit them to Allied Force Headquarters for transmission to War Office and Air Ministry. The responsibilities for the supply, maintenance and mounting of the Fifth U.S. Army was the province of S.O.S. N.A.T.O.U.S.A. The French General Staff was to carry out these functions for the French Expeditionary Force, earmarked for Corsica. Air problems would be especially involved, since the units required to cover the assault or assaults would be engaged in Sicilian operations up to a late hour. Their chief hopes were for the earliest possible decision as to the final plan and the longest feasible interval between the close of the Sicilian Campaign and the landings in Italy.

British Chiefs of Staff consider a Landing on the West Coast of Italy

F.A.N. 165
17 July 1943

On 17 July, the Combined Chiefs of Staff accepted the strategic concepts embodied in the three major plans outlined by General Eisenhower. The British Chiefs of Staff had been examining the possibilities of a landing on the west coast of Italy; Naples was mentioned as a likely point of assault.

The Birth of Avalanche

J.P. (43)
253 (Final)
15 July, 1943

The birth of the plan for the landing at Salerno⁽¹⁾ is to be found in an appreciation dated 15 July 1943, prepared for the British Chiefs of Staff by the Joint Planning Staff. In favour of the operation it was pointed out that there was adequate naval cover and that the enemy was already feeling the pinch in Sardinia, thanks to our continuous air bombardment. In Sicily there were virtually no enemy aircraft and there was no point, therefore, in awaiting the close of Sicilian operations before striking the next blow, although its delivery must depend on the air situation.

At this date, reduced single-engined fighter cover only could be provided as far as a line Cetraro-Crotone; and full single-engined fighter cover, only as far as Vibo Valentia in Calabria.⁽²⁾ Twin-engined fighters could operate on an arc as far as Capua (near Naples) - Taranto. The enemy air forces must be harassed on the ground and brought to battle in the air without respite, from now on, so that if Avalanche were to take place some time during the following five to seven weeks, i.e. between 19 August and 3 September, it would be as ineffectively opposed by enemy close-support units as were the Sicilian landings; furthermore carrier-borne aircraft might be brought into play if the enemy air forces could be reduced in the second half of August.

Time Again Handicapping the Allied Planners

J.P. (43) 253
Revised
19 July 1943

It was admitted that this new plan, superimposed on a crowded programme of alternatives, would be complicated. Time would again be insufficient for detailed planning. On 19 July, the point was again emphasised that planning and preparations for Operation Avalanche would be very hurried.

/The Joint

(1) Code name - Operation Avalanche.

(2) No long range fuel tanks had yet been made available.

The Joint Planners in Washington were not now quite so sure that Avalanche was feasible. Everything depended on continuous heavy-scale bombing of Italy: if this succeeded in seriously sapping the enemy's resistance, then a short-lived opportunity might well occur for a thrust at the Naples area, but more carrier-borne aircraft would be needed than the navy was able to offer.

NAF. 265
18 July 1943

FAN. 169
20 July 1943

FAN. 175
26 July 1943

General Eisenhower stated that the idea of landing reinforcements in Naples, immediately after its seizure by the armies exploiting northwards from the Toe, was already in his mind and that he would now examine in detail the chances of a direct assault on the Naples Area. His outlined suggestions were submitted without delay and on 20 July the Combined Chiefs of Staff in Washington agreed that Italy was to be invaded immediately Sicily had been captured and amphibious operations extended to the North, as far as the limits of effective shore-based fighter cover. Six days later followed their instructions to mount the operation at the earliest possible date, with all resources available.

Change of Plans

Allied Strategy
Brit. Hist. Sect.
O Med.

In Sicily, a promising start had been made from the date of the landings - 10 July. It was too early to predict the extent of the casualties on both sides, or what sort of shape the Allied landing craft would be in when we had captured Sicily. The Germans would probably endeavour to conserve as many men and aircraft and as much material as possible; but in which direction would they withdraw? Would they make their stand to northwards on the Pisa-Rimini line, as expected by the British Joint Planners, or before Naples, or Rome? Or would they concentrate everything on an all-out effort to drive the forces landing in the Toe back into the sea? These and kindred questions were debated at General Eisenhower's Conference of all Commanders on 18 July. It seemed to them, on the evidence of intelligence from all sources and from study of the nature of the varying terrains, that it was a fair enough assumption that the Germans would not substantially reinforce the South of Italy. If they did, their forces would be precariously placed in the case of an Allied landing in force on the beaches near Naples.

It was, therefore, decided to go ahead with the planning of a full-scale attack on Calabria, as well as a small-scale plan for an amphibious assault in the Heel or Ball. The Italian coast defences were known to be weak and Italian morale lower than ever before. It was now possible to retain landing craft, due to be returned to the U.K., in sufficient numbers to relieve the acutest fears of shortage.

PLANNING ORGANISATION

Combined Planning Staffs in N. Africa

Allied Strategy
Brit. Hist. Sect.
O. Med.

In order to present a clear picture of the planning organisation for the Italian Campaign, and the extent to which it represented an advance on previous structures, it is necessary to review briefly its evolution. Up to the assault on Sicily, high level planning had been carried out at A.F.H.Q. by the Combined Anglo-American Joint Planning Staff, with its working party - the Executive Planning Section - sitting daily at

/Bouzarea

Bouzarea near Algiers. Representatives from the Air Plans and Admin. Plans Sections of M.A.C.(1) Army and Navy sat on both these bodies. H.Q. Middle East, H.Q. Malta, and Ministries in London and Washington were also involved in high level planning for Operation Husky.

Forces 141, 343 and 545

Ibid

The responsibility for planning Sicilian operations at the next level was vested in Force 141 (to become later 15th Army Group), Force 343 at Seventh Army H.Q. at Oran and Force 545 at Eighth Army H.Q. at Cairo. Planning Staffs from Air, Army and Navy H.Qs sat as combined Anglo-American teams under these three Forces and produced the broad Outline Plan for Sicily for the Supreme Allied Commander, who submitted it to the C.C.S.(2) for approval. On the completion of the Tunisian Campaign, General Alexander, set up his H.Q. near Algiers.

Air Planning for Invasion of Sicily

Ibid and
N.A.T.A.F.
O.R.B.

The Outline Plan was issued to Northwest African Air Force (through Mediterranean Air Command), to R.A.F. Malta and R.A.F. Middle East as well as to the Air Ministry for elaboration. In N.W. Africa, work was passed from Northwest African Air Force to Northwest African Tactical Air Force for implementation; the latter in turn passed it to Desert Air Force, the Tactical Bomber Force and XII Air Support Command (U.S.), the air forces which were to execute the plan, for ultimate detail work.

General Planning Organisation for the Invasion of Italy

Interview with
S.A.S.O.
N.A.T.A.F.

Organisations in Middle East and Malta as well as Forces 343 and 545 were omitted from the planning machinery. The Joint Planning Staff (G - 3) and the Executive Planning Staff (G - 3) continued to function at A.F.H.Q., but as time passed, they concentrated increasingly on occupation problems, which would be their field, as the Allied Control Commission for Italy, after the landings.

Admiralty Battle
Summary of
Salerno Landings.

Although on paper drastic simplification was achieved in the echelonning of the planning, in actual practice the very diffuse locations of the elements involved, added to the dangerously short time available for planning, created a situation calling for the most strenuous teamwork. As an example of how signally the Allies failed to co-ordinate their staffs, in the month of August, General Eisenhower was in Algiers, Admiral Cunningham at Malta, General Alexander and Air Marshal Tedder together at Tunis (until General Alexander left for Malta), Vice Admiral Hewitt in turn in Sicily, Malta and Algiers; General Mark Clark at Mostaganem, General Montgomery in Sicily. The dispersal of subordinate elements involved was even wider.

Western Task
Force (U.S.)
Action Report
on the Salerno
Landings.

The slightest amendment to the plans - these were many and frequent - involved unprecedented repetition of signals to everyone involved, thus most seriously taxing communications and transport systems already overloaded. It must be
/remembered

(1) Mediterranean Air Command controlled N.A.A.F., R.A.F. M.E. and R.A.F. Malta.

(2) Combined Chiefs of Staff

remembered, too, that many unconfirmed assumptions, as in all military campaigns, had to be made, so that Naval H.Q.s were arranging the embarkation of troops from quays not yet in our possession just as Air planners had to estimate the capacities of airfields on which no Allied aircraft had ever landed. On the whole, Air Intelligence was well organised. The fine pitch of performance to which the Air Photographic Reconnaissance units had been raised as well as the efficiency of their interpretation and distribution machinery, made it possible to provide up to date maps of the terrain. These became available in increasing detail, thanks to an especially timely and successful sortie on 27 June; at the time of the assault on Italy, mosaics were being distributed down to company level.

Detailed Air Planning for the Invasion of Italy

S.O.O.R.U.
Signal 0534
Air Command Post
to H.Q. R.A.F.,
M.E.
14 August 1946.
Interview with
S.A.S.O.
N.A.T.A.F.
Ibid.

Air Outline Plans of the highest level were then produced by Mediterranean Air Command Plans and Northwest African Air Force Plans, working in close conjunction. Responsibility for detailed air planning was vested in the lower formations actually implementing the plans, viz. Tactical Air Force for Operation Avalanche and Desert Air Force for Operations Buttress and Baytown. There was the closest liaison between Tactical, Coastal and Strategic Air Forces, and Naval H.Q. The contacts between Tactical Air Force, Desert Air Force and XII Air Support Command were naturally continuous and complex. Indeed it was found temporarily desirable to reinforce Desert Air Force and XII Air Support Command Planning Staffs with officers from Tactical Air Force Planning Staff. The vital aspect of air force - army co-operation was covered by very close liaison between the planning staff officers from Northwest African Tactical and Desert Air Forces and XII Air Support Command with the Army staffs implementing the plans, viz. 15th Army Group, Eighth Army (Br.) and Fifth Army (U.S.). Further realistic simplification was effected by a decentralising of responsibilities, whereby Tactical Air Force, in direct consultation with Strategic and Coastal Air Forces and C.-in-C., Mediterranean could produce completed plans and recommendations for presentation for final approval or advice to Mediterranean Air Command direct.

Air Planning Staff Problems

J.P.S. Report
by AFHQ/G.3.
Ref: P.86
3 June 1943.

The Air planning machinery worked under severe handicaps. First, there was a general shortage of trained planning staff in the Mediterranean Theatre. The Italian Campaign was, in a sense, only a tactical extension of Sicilian operations and brought no break in the continuity of the attack, but only redeployment. Officers whose collaboration would have been invaluable at the planning tables were engaged on Sicilian operations and not available for any appreciable period between the fall of Sicily and the assault on the mainland. Planning staffs had therefore often to be strengthened by officers not actually implementing operations; a degree of improvisation was inevitable.

Notes on the
History of
M.A.T.A.F.
1943/45 -
H.Q. M.A.T.A.F.

The course of battle brought about a certain stretching of Air Command communications. For example on 31 July 1943 H.Q. Northwest African Tactical Air Force moved to Cassibile, near Syracuse. Desert Air Force was within reasonable reach at Lentini, but Air Command Post was still at La Marsa, near Tunis, R.A.F. Middle East in Cairo and Mediterranean Air Command in

/Algiers.

Algiers. The physical background against which so much constructive and fruitful work was produced ^{was} often crude; formations such as H.Q. Tactical Air Force, living and working in tents in all weathers, often found their hard-pressed staff still further reduced during critical periods by a high incidence of jaundice and other maladies.

EFFECT OF POLITICAL CHANGES IN ITALY ON PLANS

Implications of the Fall of the Fascist Regime

Allied Strategy
Br. Hist. Sect.
O. Med.

While these plans were evolving, political events inside Metropolitan Italy drew to a climax; and on 25 July the announcement was made to a surprised world that the Fascist Regime had fallen, that Mussolini had disappeared, that the King had called on Marshal Badoglio to form a representative government and the war was to go on. The implications of these changes were not lost on Allied strategists. The Italians were tottering. The loss of their African Colonies, of huge numbers of casualties, prisoners and material, the gradual shrinking of their old huge perimeter to the threshold of the mainland, with increasing punishment from the air and sea had, as had been hoped in 1939, markedly affected the Italian will to war; their political change of heart held vast possibilities of profit to ourselves. The Prime Minister foresaw that the Italians might shortly surrender. Were that to come about, he insisted, every possible military advantage arising therefrom would have to be sought for the destruction of Nazi Germany.

Further Change of Plans

One immediate reaction of the planning staffs was the realisation that it would be desirable to attack the Naples area earlier than previously visualised, while the state of flux persisted.

Sigs. Punch 48
22 July 1943 Air
Ministry to MAC
Punch AOMT. 50
23 July 1943 &
AOMT. 54
26 July 1943
MAC to A.M.

In Air circles the possibility of bringing forward the date of the attack on the Naples area was already being considered. Contributions were made by both the Air Ministry and Mediterranean Air Command. The latter were impressed with the greater possible effect on Italian morale of the occupation of about 700 miles of the mainland coastline, with resulting reduction of Italian resistance, than of the seizure of another island or two, as well as with the attendant result of containing far more German divisions. Furthermore, difficult as air operations against the mainland would prove to be, one of the results of a landing in Calabria might be to bring enemy air elements southwards, within easier striking distance of our own air forces.

Warnings against undue Optimism

Everything seemed to point to a realisation in the not too distant future of the Allies' plan to eliminate Italy from the war. It could hardly be foreseen how much of a mixed blessing this would prove to be, although the Air C.-in-C. Mediterranean took care to point out the danger of any tendency to over-estimate the military value to the Allies of an Italian collapse. Nevertheless it was necessary to plan on several assumptions and the possibilities of an unopposed landing in Naples, assuming an Italian collapse and that the

/Germans

Sig. ACMT/17
2 Sept. 1943
MAC to A.M.
Sig. ACMT/54
26 July 1943
MAC to A.M.

Germans discreetly withdrew North of that area, were examined and still another plan⁽¹⁾ prepared to meet that remote contingency.

Sardinia and Corsica

Allied Strategy
Br. Hist. Sect.,
C. Med.

Thanks to the progressive programme of air attacks on Sardinia, the air bases on that island were virtually untenable. Its capture, as well as that of Corsica, should follow, as a matter of course, our establishment of firm bridgeheads in Southern Italy and the Naples Area. Planning for Sardinia⁽²⁾ and Corsica⁽³⁾ was therefore left to General Giraud, for maturity early in October. The table now held the two alternative large-scale plans - Buttress and Avalanche, with Buttress holding priority. Both concepts, as well as that of an ad hoc crossing from Sicily to the Toe, now had the tacit approval of the Combined Chiefs of Staff.

OPERATIONAL AIR PLANNING PROBLEMS

Strategic Problems

Sig. ACOMT/54
26 July 1943
MAC to A.M.

If the toll being taken of the enemy air forces during July in Italy was heavy, it was at an appreciable cost to the Allied Air formations. For weeks, without respite, our crews had been operating to the limits of their capacity, and casualties and strain were inevitable. To the Air C.-in-C. it was apparent that in view of the slow rate of aircrew replacement, from which the enemy also fortunately suffered, nothing could prevent a statistical decline, in the near future, in our air effort. All the more reason, it was pointed out, for beginning forthwith a studied restriction of our strategic air effort, until the period immediately preceding the landings; heavy and medium bombers would then be needed to compel evacuation of enemy airfields and to destroy his installations and grounded aircraft. In spite of heavy losses in Sicily, there was evidence that the airfields in the Heel and Foggia Areas were being extensively developed. The enemy was visibly weakening, but not by any means disintegrating: with his usual flexibility he was re-organising and reinforcing his air forces in the South at the expense of the Western Front.

Sig. ACOMT/50
23 July 1943
MAC to AM
The Rise & Fall
of the German
Air Force Pt. III
Chap. II. A.M.

Operations calling for Maximum Air Forces

Sig. ACOMT/S. 501
16 July 1943
M.A.C. to A.M.

It was hoped that our medium bombers, provided with forward-based fighter escort, could clear the enemy from the Toe and, from the Crotone Area in the Ball: and, by deploying the heavies we might deny the enemy the use of airfields further North: these moves would lead up to, and merge with the pre-assault phase of air operations. Air preparation for the Sicily landings had entailed a ten days' counter-air offensive but the landing in Italy, being a pattern of operations far greater in scope and degree of hazard, called for at least three weeks of concentrated bomber attacks on enemy airfields.

Sig. ACOMT/54
26 July 1943
M.A.C. to A.M.

/To accomplish

- (1) Code Name - Barracuda.
- (2) Code Name - Brimstone.
- (3) Code Name - Firebrand.

To accomplish this, it would be essential that the three groups of Liberators lent for Husky should remain in the Mediterranean until the capture of Naples and that airborne operations of maximum scale, to effect the seizure of vital airfields, be mounted. This, in spite of the heavy casualties sustained by the airborne units in the Sicilian campaign, might still be the only means at our disposal of securing air bases in the earliest phases of the landings.

N.A.F. 303
28 July 1943

CCS (W) 742
30 July 1943
F.A.N. 18
2 August 1943

The Supreme Commander spoke in unequivocal terms. The bomber force was not only insufficient for the great task ahead - it should be doubled. He needed four groups of Fortresses from the U.K. and asked for them to reach his theatre between 10 August and 15 September. To this wholesale order, the reply of the Combined Chiefs of Staff was disapproval and blunt refusal. One of the objections raised to the idea was that the transfer of the necessary ground personnel and equipment would take a month to effect. (This would, it will be noted, still have rendered it possible to use the heavies in the early stages of the campaign).

Liberators and Wellingtons

N.A.F. 319
10 August 1943.
S.U. 101
14 August 1943

N.A.F. 332
19 August 1943

U.S. 673
26 August 1943

C.O.S. (W) 772
28 August 1943

The theme opened by the Air C.-in-C. with Air Ministry on 26 July, mentioned in two paragraphs above, was taken up by the Supreme Commander with the Combined Chiefs of Staff. His request to retain the three groups of Liberators lent him for Husky provoked a strong protest from General Devers, in charge of U.S. Military Forces in the United Kingdom. They could not stay in the Mediterranean; he demanded their immediate return, for use in the mounting bomber offensive against Europe. Nothing daunted, General Eisenhower came back to the charge on 19 August. In view of the impressive German build-up now evident in Italy, he felt he had insufficient aircraft. Many of the Allied squadrons were not fully effective and the apparent paper strength took insufficient account of a wastage rate which the current flow of replacements was not making good. In the event his forebodings proved unjustified. One of the Liberator squadrons was, at 26 August, at Port Lyautey in French Morocco, on the Atlantic Coast. The Supreme Commander announced his intention of moving it to North-West Africa. This evoked the indignation of the British Chiefs of Staff. Who would cover the anti-submarine operations in the Bay of Biscay at this vital juncture? What protection would remain for the convoys passing through those waters? No, the Liberators must stay where they were, but he could have a squadron of Wellingtons from the United Kingdom air forces.

N.A.F. 8708
30 August 1943

C.-in-C., Med. to
1st Sea Lord
29 August 1943

The Supreme Commander, with the invasion plan ripening for action, was equally apprehensive for different reasons and firmly insisted that they should carry out the more urgent of the two tasks; on which the Chiefs of Staff compromised and concurred in the move, but no more. Among the decisions of the Quebec Conference, which closed on 24 August, was one that Avalanche should be carried out with the forces then existent in the Mediterranean, less items promised to other theatres. The C.-in-C., Mediterranean expressed his anxiety over this decision to the Admiralty. Avalanche must succeed, for if it should fail then operation Overlord - the plan for the invasion of Europe from the U.K. - might be stillborn. He therefore protested against the denial of the use of the three groups of Liberators. The bargaining continued, up to the very eve of the assault, when, on 2 September, the findings /of the

A.M.
2 September 1943.

of the Chiefs of Staff were conveyed to the Mediterranean theatre that the Liberators would not be available for Avalanche, but the three squadrons of Wellingtons would, and could be retained until after 15 September.

Rival Claims to Bombers

While the signals about the Liberators were increasing, a further effort from London to reduce the Mediterranean Air strength served to increase the burden of the Avalanche planners. The Air Ministry, in a signal dated 25 August, called for the return, by 15 September, to the U.K., of Squadrons 420, 424 and 425 of the Royal Canadian Air Force. This was countered by a full-scale exposition of the general principles governing the projected campaign by the Air C.-in-C. Although the invasion of Italy was a more serious proposition than that of Sicily, he was being asked to carry out his commitments with a heavy bomber force only two-thirds of the weight of that which went into action in Operation Husky. The Wellingtons were required by 15 September: but this was surely likely to be the most critical point of the action. Army apprehension of the difficulties ahead was obviously increasing and the very birth of the operation itself trembled at that moment in a very delicate balance. Support was forthcoming from the Navy member of the A.F.H.Q. team. The C.-in-C. Mediterranean, in the signal mentioned above, added his serious apprehensions about this suggested withdrawal of Wellington Squadrons.

Influence of Bomber Command's Offensive on Mediterranean War

The Chiefs of Staff's reply to the signal from the Air C.-in-C. Med. of 26 August proceeded to set the problem against the broader background of overall strategy. The heavy bomber offensive from the U.K. against the German system, (which included the aircraft industry and fuel plants) was itself largely responsible for the air superiority enjoyed by Mediterranean Air Command, whose existing heavy bomber forces had proved themselves fully capable of combatting what fighter opposition the Luftwaffe could put up. It had been thought the Luftwaffe would build up against the next Allied blow, which must fall somewhere in the inland sea; but this build-up had failed to materialise.

The Mediterranean Forces' Point of View

There were other approaches to the question and the Air C.-in-C. put his finger on an undisputed fact when he reminded the Air Ministry of its own assessment, that German fighter wastage during July that year of the Mediterranean had reached the highest monthly total yet recorded - 75 per cent of the total German fighter production. There were several other considerations to be borne in mind. At such distances from our bases, it would be difficult to maintain supplies. Army problems were always to the fore. The heavy build-up of German divisions in Italy pointed to the need for the utmost help for the Allied armies, in particular for the task of delaying dangerous concentrations of German troops. There was, too, the question of heavy bomber bases, the possession of which would certainly be of importance in over-all strategy.

The true German fighter picture was then given by the Air Ministry. Only one sixth of the Jäger⁽¹⁾ were located in the Mediterranean, whereas two thirds of the total available faced our operations against the Western Front. The air reinforcement debate was only a part of the general struggle

/to effect

(1) Fighters.

AX.775 from
A.C.A.S.(P)/T
25 August 1943.

A.C.M.T.5
26 August 1943

C.-in-C., Med.
to
1st Sea Lord
29 August, 1943

Punch 52
31 August 1943.

Punch A.C.M.T./17
2 September 1943.

A.C.M.T.78
4 August 1943

Punch 53.
3 September 1943

to effect a compromise between the needs of the Western, Far Eastern and Mediterranean fronts: it also reflected a clash of national strategic outlooks.

Tactical Problems

Whatever form the attack on Italy would eventually take, there must be no halt in the seizure and forward construction of fighter airfields, or in the wearing-down of the enemy fighter and fighter-bomber forces. Above all, there loomed the problem of providing fighter cover for the amphibious expedition, on the way out and during the establishment of beachheads. Given the available forces and their known endurance, range itself would govern directly the extent of air cover. Hence the paramount need for advancing the fighter bases. The first target was the Gerbini complex in Eastern Sicily; the second was the terrain in the Messina area and the construction there of a number of fighter strips, a further stride forward of roughly 55 miles. Here the essential was a rapid advance of ground forces; the actual construction was only a matter of forty-eight hours work.

Enemy Air Situation

By that time, - late July - all that remained of the enemy air forces in Sicily were some eleven hundred destroyed or damaged aircraft, abandoned on the ground; of these approximately six hundred were German. Enemy fighters had been forced back into the Toe and the fighter-bomber force was now operating at almost ineffective range from the Naples Area. The negligible air intervention with our land operations was also in large part due to the enemy's intention to recover from his heavy losses, and build up. Reinforcements up to 40% of the total factory fighter output had been flowing to the Mediterranean front and the recent stiffening of the theatre command with experienced officers from Russia suggested that the present rout was by no means fatal. The swift occupation of Calabria would depend on the early seizure by the Allies of airfields such as Crotone, from whence their fighters could deal with air attacks of the FW(1) 190 fighter-bombers based on Naples and reduce their power of interference.

Fighter cover for the Landings in Italy

Once the Gerbinis and the Milazzo areas were securely in our hands, cover for a landing in the Toe was a solved problem: but to cover a landing at Salerno adequately was a very different proposition. As matters stood at the end of July, only the Lightnings of the North-West African Strategic Air Force, with their long-range belly tanks, could meet the requirements of the operation: but the Combined Chiefs of Staff had decided that N.A.A.F. must rest content with their present numbers.

The Offer of Long-Range Fuel Tanks

The Air Ministry estimated that these Lightnings, with the assistance of five aircraft carriers equipped with Seafires, could carry out four hundred and eighty sorties on D Day at Salerno; and suggested that Spitfires, both R.A.F. and U.S., if provided with ninety gallon tanks, would be able to maintain

/a daylight

(1) Focke Wulf.

Sig. ACMT/S.501
16 July 1943.
M.A.C. to A.M.

The Rise & Fall
of the German
Air Force
Pt. III. Chap. 11
A.M.

F.A.N. 169
21 July 1943
Pmch 48
22 July 1943
Air Ministry
to M.A.C.

a daylight cover over the beachhead of thirty to forty minutes. On the following day they gave substance to the idea by offering to send consignments of tanks in three convoys, carrying four hundred, nine hundred and five hundred tanks, in this order, an offer which was gratefully accepted. Even so, it would seem that we were committed to a wasteful and perhaps inadequate programme.

Problems of Range

N.A.A.F. A.P.O.
650 A 5/P.8.
(Final) 18 Aug.
1943.

The assault area was one hundred and seventy-five miles from the Messina area, one hundred and ninety miles from the Palermo fields and two hundred and twenty miles from Gerbini and Catania. A successful initial push in the Toe would bring us a windfall in the shape of Vibo Valentia airfield, only one hundred and fifty miles from Salerno; but even from that base, Spitfires would need extra fuel tanks to reach and patrol the beachhead area. The Palermo area was laid out to its full airfield capacity, but photographic reconnaissance revealed that there were seven sites in the Milazzo area suitable for strip airfields. Should these prove insufficient, the Spitfires would have to be staged forward from Gerbini, using the strips referred to as advanced landing grounds. The Seafires, - over a hundred of them in all probability - operating from five carriers, were to help to cover the gaps caused by combat and weather delays, but their bases, the carriers, could not remain static, owing to the threat from enemy torpedo-bombers and submarines. The Fleet carriers had duties in the way of providing fighter cover for the covering Naval Force: in any case their Martlets could not compete with German short-range shore-based fighters.

N.C.W.T.F.
Action Report
of Salerno
Landings.

Fighter Bases

Appendix P.98
(Final) to O.R.B.
Air Plans,
M.A.C.
24 July 1943.

In some quarters it was still held that a landing in the Naples area could only be effectively covered when our forces which had landed in the Toe had advanced far enough northwards to be able to operate fighters from three airfields and two landing grounds, - that is to say, as far as a line Amendolara-Castrovillari-Belvedere. Even if we stood on this line, and additional airfields were hurriedly constructed in the rear areas, fighter cover could only be provided as far as Salerno beaches. What stood out clearly was the desirability of capturing Monte Corvino airfield very early on, thus securing a base for four fighter squadrons when they would be most needed.

THE CHOICE OF GROUND, DATE AND TIME FOR OPERATION AVALANCHE

The Three available Points

Appendix P.98
(Final) to Form
540, Air Plans
M.A.C.
24 July 1943.

It is of importance and interest to consider on what grounds the choice for the points of assault was based. They were simple, mainly mathematical and topographical. The first impact must of necessity fall somewhere south of the latitude of Rome. Since at least one large port was essential for the landing and build-up of supplies, Naples was clearly marked as a target for early conquest. In any case there were no major ports further south on the West Coast. As a landing-point it was ruled out, as being too heavily defended for direct assault. In the Naples area, there were three available beaches on which to land and build up. These were Mondragone, Gaeta and Salerno.

/Respective

Respective Merits of Mondragone, Gaeta and Salerno

N. I. D. Handbook
on Italy.

C.-in-C Med.
Letter to
Admiralty
covering Report
of N.C.W.T.F.
on Salerno
Landing
8 March 1945.

N. I. D. Handbook
on Italy and
Appendix P.98
(Final) to O.R.B.
Air Plans M.A.C.
24 July 1943.

The Naples Plain is long, crescentic and surrounds the city. Backed by the Apennines, it extends along the coast from Castellamare di Stabia to Mondragone and includes Mt. Vesuvius. From seaward, the view presents a succession of open bays, whose beaches are sandy and marshy, with several small lagoons and lakes. Although much wooded, it presented no serious obstacles to surface movement until one reached the broad Volturno River, twenty miles to the north. Gaeta could offer an open plain as its immediate hinterland, but its beaches were indifferent; it was farthest from Naples and beyond Spitfire cover.

The Salerno Plain, south of Naples on the other side of the Sorrentina Peninsula is of extreme flatness and triangular, measuring twenty-one miles along the shore and eight miles deep at the middle: the whole plain, effectively ringed in by the steep slopes and cliffs of the Apennines, would afford admirable siting for a defence system generously equipped with artillery, and would limit all ingress to the interior to a few narrow valley roads. Near the shore the soil was marshy and sandy, with some clay, while further inland lime combined with clay to make heavy traffic difficult in bad weather. Like the Naples Plain it was fairly thickly wooded and there was the same extensive cultivation and irrigation.

The Salerno Plain could only boast of one mediocre stream - the Sele -. Movement of mechanised transport and tanks would be simple within the confines of the plain itself but to move northwards towards Naples one had to pass by the valley roads and climb through narrow defiles over the 4,000 ft. high passes, should the coast road be blocked. Once taken, the heights surrounding the plain offered the Allies themselves a precious defence system for the protection of the beachhead against inevitable counter-attacks. No such friendly terrain could be discerned in the relief surrounding the beach at Mondragone. At Salerno the beach gradients were the easiest for landing craft and, moreover, exits from the actual beach were easier than at Mondragone. The Sele River was easier to cross than the wider Volturno although, in view of the numerous small streams, and the general boggy terrain, armoured fighting vehicles were unlikely to enjoy the mobility their crews prayed for.

Decisive Reasons for Choice of Salerno

N. I. D. Handbook
on Italy
Vol. IV B.R. 517c

There was most to be said from an Army point of view for the Salerno beaches. When the Air Forces observed that the airfield of Monte Corvino was only three miles from the Salerno beaches, whereas Capua airfield was fifteen miles from Mondragone beaches, the scales were heavily weighted in favour of Salerno. The Navy, concerned with port capacity, could see in favour of Salerno a steady increase of space for landing and building-up stores, as our troops moved on to Naples through a string of small harbours, (Salerno, Castellamare, Torre Annunziata and Torre del Greco) which could absorb at least 3,500 tons daily between them; whereas if the forces landed at Mondragone and were held up before Naples, then Baia, Pozzuoli and Bagnoli could not offer anything like sufficient capacity; furthermore, Bagnoli was exposed to adverse winds.

/Each

Each of the small ports from Salerno to Naples was capable of maintaining supplies for up to two divisions, as well as the ground staff and air crews needed in the initial phases: but the long-term needs of a full-scale occupation and offensive campaign called for nothing less than a base with the massive possibilities of Naples, where large cargo ships could moor alongside the quays, and up to 8,000 tons a day could be handled. In addition, Salerno harbour, if normally dredged, offered generous anchorage for the larger type of vessel.

Communication and Defences

Appendix P/38

(Final) to O.R.B.

Air Plans

M.A.C.

24 July 1943.

Account had also to be taken of other considerations. First there was the question of railways. These were in a very low state of efficiency, and the power system and stocks of coal had both suffered from the attrition of war. No hopes were entertained, therefore, of using the railways system for a month after the assault. As for roads, there was one trans-Apenine road running into the Salerno system, and, when we reached Naples, four more roads crossing the mountains into the plain: all these could serve as links between our forces on both sides of the range. Assessing possible resistance, it was believed that the coastal defences in the Salerno area were less formidable than the fifty Dual Purpose guns reported as sited on the coastal plain above Naples.

Allied Need for Airfields

All considerations were based on an arbitrary division of operations into pre-assault, assault and post-assault phases. In actuality these phases would merge into one another. Study of the terrain only enhanced the need of capturing, at the earliest possible date, all the existing airfields in the region, including Pomigliana d'Arco, Capodichino, Maroianese, Cercola, Vesuvius, Pompeii (and the seaplane bases of Beverello, Cesario Console and Vigliena). We should need them all and many more, for the Axis held in the areas between Rome and the Alps a huge preponderance of airfields, some of them first-class, with almost limitless capacity for all types of aircraft.

Beach Intelligence

N.C.W.T.F. Action
Report Salerno
Landings
Pt.VI. Sect.1.

The various intelligence sources which fed the Planners with massive and continuous information on the beach situation, so vital to the Naval units involved, included office publications, prisoner-of-war interrogation reports, captured and acquired enemy charts and above all, aerial photographs. The vertical and low obliques furnished by the expanding and enterprising photographic reconnaissance units under the command of Colonel Elliott Roosevelt and interpreted by the highly specialised P.I.U.'s⁽¹⁾ of the Allied Air Forces were plotted and disseminated to all concerned. Mention must be made here of a very timely and valuable sortie carried out on 27 June over the assault area, results of which were made into a mosaic of the utmost service.

/Choice

(1) Photographic Interpretation Units.

Choice of Date for Operation Avalanche

Paper O.C.S. 328
taken at C.C.S.
(116th Mtg.)
24 August 1943.

W.N.T.F. Action
Report of the
Salerno Landings
U.S.N. File
A.163011
11 Jan. 1945.

Various considerations had now narrowed down the margin between the capture of Sicily and the invasion of Italy. If Avalanche should assume priority over Buttress, then General Clark, the General Commanding the Fifth Army, had received orders to plan for an assault at Salerno on 7 September, which, it was hoped, would give a ten days' breathing space. The threat of increasingly unfriendly weather was of the greatest concern to Vice Admiral H.K. Hewitt, the U.S. Naval Commander of the Western Naval Task Force, responsible for planning and executing the landings. He was anxious to land his charges in Italy and complete the maximum build-up ashore, before the onset of the stormy conditions of winter weather made beach maintenance difficult or out of the question. In the event, his foresight proved justified, for, although the reinforcement convoys enjoyed an especially benevolent run of fine weather, on D plus 19 Day a strong gale and high seas prevented all landings for two days and compelled him to beach more than sixty craft.

The Element of Surprise

Ibid.

There was, however, a conflict of root principle between the Army and Navy Chiefs, the outcome of which, favourable to the Army theorists, was, in turn modified in favour of an airborne operation, timed to precede the landing by an hour or two. The main contention centred round the element of surprise. This could be best achieved, the Army chiefs argued, by landing forces on a dark night, without preliminary naval bombardment. The Naval reply to this was that surprise was out of the question. The Germans, by a simple process of elimination, must be increasingly aware of the area of impact. All the evidence pointed to it. On this warrantable assumption, the obvious need was for a preliminary naval bombardment of selected strong points and a landing under most favourable cover of darkness for convoy assembly. The Army viewpoint prevailed, although on the date eventually chosen the Navy were not able, for reasons of moon margin, to afford the landing troops the most favourable cover.

Indecision of German Strategy in August 1943

Fuehrer
Conferences on
Naval Affairs
1943
Published by
H.M. Admiralty

The Allied landings in Sicily had not removed the Germans' suspicions that, sooner or later, an attack on Sardinia and the Balkans would be made: this division of interest, fostered by Allied moves, resulted in a certain confusion and indecision in high level deliberations. Of all the German plans formulated after the downfall of Mussolini against a possible Italian surrender, that for the rescue of Mussolini⁽¹⁾ still held first priority as late as 1 August. This state of affairs reflected the loyalty of Hitler to old comrades-in-arms, his personal predominance in strategic affairs and the fact that ultimate decisions on policy regarding Italy rested with him. Hitler and Mussolini had met at Verona on 19 July in an effort to prevent an Italian collapse. Once the Duce had lost office, his rescue and the following plans were formulated. Broad measures were

/laid

(1) Operation Eiche - (Oak).

laid down for the restoration of Fascism and the occupation of Rome,⁽¹⁾ for the capture or destruction of the Italian Fleet⁽²⁾ and for the seizure by the German Army of key positions in Italy.⁽³⁾

At the Fuehrer Naval Conference, held from 26 to 28 July, plans were drawn up for Army Group B, under Rommel, to enter Italy forthwith. Hitler felt it was essential to act at once, before the Anglo-Saxons stole a march on them by occupying the airports. Operation Student was to begin at once. Mussolini would be rescued. Until the execution of these two plans was well advanced, the final stages of the others would not develop. Every opportunity was to be taken of moving German troops into Italy. At this Conference no decision regarding Sicily was made. Doenitz and Rommel were in favour of hanging on, Kesselring of retreating up Italy to a more easily defensible position. Hitler was unable to decide on a course of action.

Italians playing for Time

Report on a Meeting of German and Italian political and Military representatives at Bologna 15 August 1943 Document found among Mussolini's private papers.

General Roatta, the Italian Chief of Staff, objected to the German plan to reinforce Central and South Italy on the grounds that the terrain was already adequately defended by Italian troops, but, being aware of the peace negotiations under way, did not press the point. The farther South the German formations were committed, the greater their ultimate difficulties were likely to be.

Hitler's Belief in a possible Attack on Sardinia

"German Strategy". Brit. Hist. Section Central Mediterr-anean - Appendix C.

German calculations had grown more realistic by the time a new Conference opened on 9 August. Admiral Doenitz thought the main line of the next Allied attack would be in Southern Italy and the Balkans. If they, the Germans, had to abandon Sicily, then Calabria and Apulia would be untenable, and the possibility of German forces being cut off by an Allied landing in Central Italy remained. General Jodl thought the danger of an attack in the Naples area a real one and argued in favour of a concentration of forces there. Hitler, reluctant to believe that Italy would desert him, in spite of his mistrust of Badoglio, and hoping to rescue and reinstate Mussolini, continued to talk of an Allied attack on Sardinia. During the second and third weeks of August, Luftwaffe stores and personnel moved from Sardinia to Corsica; demolition of Sardinian airfields proceeded, while construction increased in Corsica. There was one exception to the indications that Sardinia would be evacuated. The Germans were developing fighter airfields in the northern tip of the island; they warned two single-engined fighter Geschwader (60 aircraft) in the Naples area to stand by for transfer to Sardinia and a single-engined fighter unit moved to an advanced landing ground in the south of the island. The Fuehrer Conference continued over 11 August and it was then that the Rommel-Jodl plan for the defence of Italy acquired form. Great stress was laid on the northernmost and main defensive position on the southern slopes of the Apennines - later known as the Gothic Line - at this stage undeveloped and considered as a natural defensive unity only.

Fuehrer Naval Conferences.

/THE STRUGGLE

- (1) Operation Student.
- (2) Operation Achse - See Appendix 9.
- (3) Operation Schwarz - (Black).

THE STRUGGLE FOR REINFORCEMENTS FOR THE
MEDITERRANEAN

Opening Phase

The Supreme Commander, supported by his three Service chiefs, opened a campaign for sufficient forces to invade Italy. As time went on, the full scope of the invasion was seen more clearly, not only by the men on the spot but by London and Washington. The general import of signals from A.F.H.Q. was that not only was it essential that certain ships, landing craft, men and aircraft, due for return to the U.K. or for transit to India, be retained in the Mediterranean, but that reinforcements in all these categories were imperative. A series of requests, refusals, misunderstandings, renewed requests, compromises and imperious acts followed, right up to the days of assault and build-up.

The Bid for Troop Reinforcements

Message from
Supreme Commander
to Washington
(No copies
available at W.O.
or Admiralty)
about 17 July 1943
C.O.S.(W) 714
19 July 1943

General Eisenhower opened the tourney by asking for an additional sixty thousand troops. It is not clear for what purpose they were intended, but it may be assumed that he visualised their employment on coastal defence, for the construction of airfields, as prisoner of war guards and on administrative duties. The British Chiefs of Staff viewed this request with alarm and pointed out that, if agreed to, it would rob the U.S. Air Forces building up in the U.K. of twenty thousand air personnel at one stroke.(1)

The Bid for more Long Range Fighters and the Offer of Carriers

F.A.N. 169
21 July 1943
A.M. 16 July 1943

C.O.S.(W) 722
22 July 1943.

A.M. 25 July 1943

To the request for more long range fighters a plain negative was returned by the Combined Chiefs of Staffs. A welcome relief to the static state of affairs was the offer by the First Sea Lord of extra aircraft carriers, made on 15 July, and improved on a few days later by support from the British Chiefs of Staff, who felt that the very success of Avalanche depended on supplementary cover by the carrier Unicorn and four escort carriers mentioned in discussions. In a few days arrangements were made and the Admiralty signalled the C.-in-C., Mediterranean that the carriers Illustrious and Unicorn and the escort carriers Attacker, Battler, Hunter and Stalker were sailing for the Mediterranean. The escort carriers only would be able to assist in the assault, to the extent of keeping thirty-five fighters in the air continuously during daylight hours on D-Day, twenty-five on D + 1 and eighteen on D + 2. The Fleet Carrier Formidable was already in Mediterranean waters, but was not mentioned. The Admiralty also sent nine large troopships. All this assistance by the Navy was of the utmost help in the progressive build up through West and East Coast ports, which would, otherwise, have been slower and, no doubt, have gravely prejudiced the very existence of our forces in Italy.

C.-in-C., Med.
1 August 1943
M.012034/43
Report of F.O.
Force V. Appendix
2 para. 4.

The C.-in-C., Mediterranean reported that the Air C.-in-C., reckoned the carriers could only keep nine fighters on continuous daylight patrols on D-day. In the event the average patrol strength put up by the Seafires of Force V on

/D-Day

(1) Under the Bolero U.S. build-up plan in U.K., final allocations of personnel to the respective armed services were made in U.K.

J.P.(43) 253
(Revise)
19 July 1943.

D-Day was 20.5, a valuable contribution in view of the known qualities of the Seafire as an aircraft, with a performance at low altitudes only slightly inferior to that of the Spitfire.

Anglo-American Differences on Mediterranean Resources

C.O.S.(W) 717
21 July 1943
conveyed in
OZ. 2076.

The message to the Joint Staff Mission conveyed the agreement of the British Chiefs of Staff with the declaration of General Marshall that the moment was ripe for bold action and justifiable risks. They doubted if the postponement of the release of Mediterranean forces would seriously impair the build-up of forces in the West and recommended that the American Chiefs of Staff instruct General Eisenhower to proceed to plan Avalanche with the added encouragement of a stand-still of their own forces in the Mediterranean.

J.S.M. 1100
23 July 1943.

After talking over the whole matter with Admiral Leahy, General Marshall and Admiral King, and sounding official U.S. opinion generally, they were unable to report more than a unanimous antipathy to any increase in the resources already agreed upon at the Trident Conference. The American attitude of caution had changed to an anxious concern for future operations in the West and the Far East. The landings in Italy were a contract, the terms of which had been clearly read and understood by all concerned. One feature absent from all the American comments is any appreciation of what would happen if the resources should prove inadequate. No account was taken of changes effected by the passage of time, although, as this narrative makes plain, they were considerable right up to the days of the actual landings. Nor were the U.S. Chiefs impressed with the idea the British dangled before them of an Italian defeat at the cost of negligible delay to other ventures. American rigidity seemed to find its supreme concentration in the question of Admiral King. If General Eisenhower was prepared to attack Sardinia with the resources available, why not Naples? As for a stand-still, they could not agree. In any case, the U.S. ships scheduled to leave the Mediterranean were already West of Gibraltar.

OZ. 2127
24 July 1943

Keen disappointment at this misunderstanding was registered by the British Chiefs of Staff. They wished the point to be again emphasised that, the ends in view being vital to the prosecution of the whole war, means were a secondary consideration, a mere arithmetical adjustment. The Americans felt that the form into which the operations envisaged had crystallised was quite different from that prefigured at Trident. They had foreseen Avalanche as an adventure launched against calculated risks, whereas the British conception was a more conservative, more orthodox plan in which this element of weighed risk was not an ingredient. They spoke in anxious tones of delays in Burma and declined to turn back either those vessels now out in the Atlantic, or certain escorts due to sail. Their adamant mood was expressed in a signal to General Eisenhower promising aircraft carrier support, omitting any reference to the sixty thousand troops recently promised him, but making it quite plain that he was to plan the landings with present resources. British reactions seemed to express a certain resignation, but the stand-still order, as it affected British naval resources, was left in force until the Quebec Conference, due to open on 13 August.

J.S.M. 1104
26 July 1943

F.A.N. 175
26 July 1943

OZ. 2181
28 July 1943.

/THE CRITICAL

THE CRITICAL MONTH OF AUGUST 1943Military Progress after the Washington Conference

Aide Memoire
C.O.S.(Q) 3.
Revise.
6 August 1943.

By the time the President, the Prime Minister and their Service advisors had reached Quebec, where the Quadrant Conference opened on 13 August, substantial progress in several fields could be recorded. The invasion of Sicily and the ejection of the Axis from it, were drawing to a close. The Fascist regime had been overthrown and the chronic weakness in the Italian military machine was developing into something like moral and material collapse. The elimination of Italy from the War was no longer the mirage which had mocked the Allies standing at El Alamein, but a tangible possibility one could actually weigh and measure in terms of weakening resistance, terrain won and an air force sought out and destroyed in the air and on the ground.

A.F.H.Q.
W.6959
10 August 1943.

Since the Trident Conference, German divisions had moved into Italy, France and the Balkans. Reinforcement of one area must be at the expense of others. These troops came to a large extent from the Russian Front, where they could ill be spared. Once the Italians were out of the war, the Russian Front would have to be milked still further, and the Russian Front at this moment, where the Ukrainian Armies and Air Forces were showing unexpected spirit, was full of menace for the Germans. The numerous plans tabled had been fined down by two. Operation Barracuda - an amphibious assault on Naples - and Operation Goblet, an amphibious assault on the Cotrone area in the Ball of the Italian Foot, had both been cancelled.

Allied Plans draw to Conclusion

From 13 August, the conduct of affairs proceeded from two poles more or less simultaneously. The Combined Chiefs of Staff in Quebec were fed daily by signals from General Bedell Smith (the Supreme Commander's Chief of Staff), and there was an unrelenting exchange of signals going on between Service commanders, their ministries in London and Washington, and foreign missions and delegations. Great issues hung on the joint decisions to be made before the end of the month. For example, was Avalanche or Buttress to assume priority? Ships were being loaded and troops assembled for use in either operation, but clearly the day must soon come, when everyone knew where they stood. So a great effort was made to clear the air, to come to the point, and set down the final terms of the operation.

The Time, Place and Forces

A.F.H.Q.(W)
7323
14 August 1943

All problems reduced themselves to a triad of questions. What should be the place, the time and the forces? One seemed to depend on the other. Should the Allies cross the Straits on a small scale - (Operation Baytown) - and the Germans weaken perceptibly, we might exploit the opening, by moving in more of the Eighth Army. They would push on north and east, take over the Heel in their stride and eventually join up with our Avalanche forces at Naples. If we passed through Naples some time in December, six divisions could be fed and maintained through Naples, as well as the whole Tactical Air Force; or five divisions and the Tactical plus the Strategic Air Forces; These forces could be built up at

A.F.H.Q.(W)
7445
15 August 1943.

/the rate

the rate of one division per month. The Chief of Staff visualised the future as a build-up race with the Germans. His grasp of the situation may now appear prophetic, for he said that although we should be well placed once we had a grip on the Naples Area, it was at least probable that thereafter we might have to fight our way slowly and painfully up Italy. This refreshing departure from previous optimism was only a reflection of the increasing sobriety evident in some at any rate of the papers collated by the Combined Chiefs of Staff and their advisors.

Priority assumed by Avalanche

There are differences in the reports and signals as to what actually was decided and when; the divergences are minor ones and merely illustrate the kind of overlapping in communications and records that happen in such a complex net of command as then existed. A few days later, however, no such divergences could have existed without grave prejudice to the expeditions. General Eisenhower's Despatch records the final decision on 16 August to launch an ad hoc assault on the Toe followed by an all-out assault on Salerno on 9 September. But from a signal dated 17 August, that is a day later, from the Chief of Staff at A.F.H.Q., to General Whiteley at Quebec, it seems that the subject was still fluid in some quarters, for this message was that it was thought that Avalanche should be launched before the next moon-light period (the 1st Quarter period opened on the night 7/8 September) preceded, at the maximum possible interval, by Baytown (the ad hoc crossing) which it was hoped would take place before the end of August. The Admiralty Battle Summary gives 19 August as the date when Avalanche assumed priority over Buttress. The Operations Record Book of Signals Plans at H.Q., Rear N.A.A.F. A.5. records that on 17 August, the Officer in Charge A.5 had returned from Air Command Post with the news (perhaps announced the previous day) that Avalanche was now high priority, but that Buttress was not yet cancelled. Some of the headquarters carrying out the landings were unaware up to 5 September (three days before Avalanche and two days after Baytown) that it was Salerno they were loading for; for a signal dated 5 September to H.Q., R.A.F. Middle East (repeated Adv. Desert Air Force and A.O.A., N.A.A.F.) gave it as a piece of news that it was considered that Buttress was dead.

Supreme
Commander's
Despatch.

Admiralty Battle
Summary of
Salerno Landings
N.A.A.F./Signals
Plans/A.5
O.R.B.
F.A.491
5 September 1943
N.A.A.F. A.5 to
H.Q., R.A.F. M.E.
(R) ADV. D.A.F.
(R) A.O.A.
N.A.A.F. in
File MS/119242
Enc. 85A.

C.C.S. Paper 328
taken at C.C.S.
(116th Mtg.)
24 Aug. 1943.

Later on in the Quebec Conference, it was reported by the Chiefs of Staff that General Eisenhower had asked for a ten day gap between Baytown and Avalanche, in order to withdraw and condition landing craft used in the first, for the second. At their final meeting on 24 August, it was submitted to the Prime Minister and President that Baytown should be executed between 2 and 4 September. Avalanche could not happen before 7 September, nor for reasons of moon already expounded, between the 11 and 21 September, so that the probable date for its fruition should be between 9 and 11 September.

Estimate of German Reactions

A.F.H.Q.(W)7445
15 August 1943.

It was not expected that we should make any rapid progress in Calabria. The formidable array of flak which had made the air over Messina Straits almost untenable for our bombers and enabled the Germans to evacuate important numbers of seasoned troops and technicians, were probably neatly sited in our path. Yet we (correctly) perceived in

/the intelligence

the intelligence reports a clear pattern of German withdrawal, and build-up to the scale of some four divisions in the Naples-Salerno area. Together with others, known to be in the hills round Rome and elsewhere in the North, this gave an all-over German strength on the ground of some sixteen divisions; and, judging by the general trend of these movements, it was thought that the enemy's intention must be to deny us the Po Valley by holding a position on the line Pisa-Rimini.

Anxieties of General Eisenhower

C.C.S. Paper 328
24 August 1943

The Commanding General was not altogether certain that this withdrawal was a certainty and was anxious to be ready for the other kind of situation in which Germans moved south as many as six divisions to the sound of the guns; he used this possibility in elaborating his plea for adequate forces. It was fitting, too, that all aspects of the maintenance problem should be thoroughly aired. The Commanding General (previously Supreme Commander) recorded his main anxieties. In these supply, movement and maintenance, fundamentally 'logistic' problems (to use the American term) loomed large. The movement of Air Force personnel and equipment, the capture and conditioning of airfields and many ancillary services affecting them were bound up in the thought and work devoted to logistics.

Report by CCS
Planners.

Availability of Resources

Availability
of Resources to
meet requirements
of Critical
Strategy -
Quebec Conference.
Appendices.

The general position as regards forces was that there were troops enough to carry the beaches, ships enough to transport and land them and air superiority. The precise totals given for the Allied Air Forces at the Conference as likely to be available in the Mediterranean for all post-Sicily operations as at 1 October 1943 were thirty-nine Groups of the U.S.A.A.F. with about two thousand, three hundred aircraft, all operational types; and about one thousand, four hundred R.A.F. aircraft in eighty-three and one-half squadrons. Garrison requirements were to be met from these figures.

Paper CCS 303/3
17 August Report
to President and
P.M. and Final
agreed Summary
and Conclusions
reached by C.C.S.
Pt. IV para.14.
24 August 1943.

Final Decisions on Mediterranean Operations

The course of operations in Italy was visualised in three phases. The first was the elimination of Italy as a belligerent and the establishment of bases in the Rome Area and, if feasible, farther north. Then was to follow the seizure of Sardinia and Corsica. The third phase covered the widest field; while remitting pressure on German forces in Northern Italy continued, the conditions were to be created for the Overlord⁽¹⁾ plan and, as a rider, for the entry - the period was not named - of our forces and the French into Southern France. Strategic bombing operations against Italian and Central Mediterranean bases were to be the role of the bomber forces, who were later to carry out operations complementary to the general strategic air attack from the U.K. on the German system.⁽²⁾

/Italian

(1) The entry into Europe from the West.

(2) Pointblank.

Italian Peace Feelers. Close of Quebec Conference

The first phase of the strategic concepts just outlined - the elimination of Italy - came within the radius of objective possibility during the Conference. On 15 August, envoys from the Badoglio Government, including General Castellano, arrived in Madrid after a voyage by submarine and presented an offer to break with the rest of the Axis and co-operate with the Allies. General Eisenhower was instructed by the Combined Chiefs of Staff at Quebec to send two Staff Officers to discuss Armistice terms with General Castellano. The offer was accepted on the basis of unconditional surrender, subject to certain terms summarised in the next chapter, and involved certain airborne operations.

Politically, the Italian surrender would be highly desirable but the immediate concern of the Allies was with the military implications. Unless a term was set to the negotiations and announcement of the final agreement very finely timed, the precious element of surprise, so vital at a time when our preparations were painfully apparent to the Germans, would be squandered.

THE OUTLINE PLANS FOR THE INVASION OF ITALY

The Scope of Operations Baytown, Hooker, Ferdy, Slapstick and Avalanche

It was late in August 1943 that Outline Plans for the invasion of the Italian mainland assumed the form they were to retain, with minor adjustments, until the days of their execution; namely, first, a holding and diversionary thrust by Eighth Army elements across the Straits of Messina,⁽¹⁾ with small-scale harrying leap-frog landings up the north coast of Calabria,⁽²⁾ followed a few days later by an all-out lunge at the Salerno Area - Operation Avalanche - coinciding with a seaborne landing in the port of Taranto⁽³⁾ on the same day. Operation Baytown was originally planned as a holding move, with the limited object of seizing the port, airfield and environs of Reggio in Calabria, while Operation Buttress, a full-scale assault from North Africa, developed from the north coast of the Toe. When linked with Avalanche, Baytown lost much of its tactical immediacy, being no longer a feint closely co-ordinated with happenings on its left flank; it was now to pave the way for an occupation of the South by major elements of the Eighth Army, (as well as some Air Force units) whose mission was to join up with and support the Fifth Army in the Salerno area.

It is now intended to present the naval, army and air outline plans in that order. Valuable preliminary work was done by the Air Forces, but on the successful conveying and landing of the occupying forces by the Navy the whole future of air operations in the area would depend. The scope of the Outline Plans was sober and limited, except for a rider that our forces should be prepared to exploit as far as the Alps. The ideal of eliminating Italy had dwindled to a reasonable hope of eliminating only the Italian people. The other ideal, of destroying the German Army and Air Force, was still /in the

(1) Code Name - Operation Baytown.

(3) Code Name - Operation Slapstick (originally Gibbon).

(2) Of these only Operations Hooker and Ferdy were carried out.

Allied Strategy
Br. Hist. Sect/EM

Outline Air
Plan for
Operation
Avalanche

in the background; but in spite of paper forecasts, few if any of the participants who had the measure of the Germans believed, after the grim Desert and Tunisian campaigns, that this was going to be anything but a long and bloody process. Its opening was to be on the following lines.

Flag Officer
Sicily's Report
on Operations.

Admiralty
Mediterranean
War Diary.

Operation Baytown - Naval Plan

It was planned to land 13 Corps (Br.) an hour before first light on 3 September at three beaches just north of Reggio, christened How, George, and Fox Beaches, southing from How, one brigade on each beach. The troops were to be conveyed from Sicily in landing-craft, supported by Landing Craft Support, Landing Craft Flak, Landing Craft Gun, Rocket Craft and, if it should prove to be necessary, by cruisers, monitors and destroyers. There was to be preliminary bombardment by battleships, monitors, cruisers and destroyers.

Naval Command

Operations were under the general command of Rear Admiral R.R. McGrigor, R.N., Flag Officer Sicily. The two main formations had to be landed at How and George beaches just South of Gallio Marini, the rest at Fox beach. Officers commanding bore the title of Principal Beachmasters. An important function fell to the Officer Commanding Santa Teresa Ferry Service, whose task was not to close until nearly one hundred thousand men and over twenty thousand vehicles had been passed over.

Factors Affecting the Naval Plan

Ibid.

The Beaches, close together and backed by high ground, would be difficult to identify in poor light. Moreover, as the currents in the Straits were variable, it was not possible to give the slow landing-craft a perfectly reliable course; hence there were fixed transit lights along the Sicilian coastline, and batteries would fire tracer and 25-pounder smoke shells across the six mile interval of the Straits to guide them.

Loading and Assembly of Ships and Craft

Ibid.

Loading and staging ports would still be within range of enemy long range guns, so that any inter-port movements were to be made under cover of darkness. All L.C.M's were to be assembled at Santa Teresa, L.C.A's at Giardini, (the port of Taormina) L.C.T's and L.C.I.(L)'s at Catania, and L.S.T's at Augusta. This force was to enjoy the protection of L.C.F's. As H Hour approached, there were to be stagings and rendezvous from these ports, as well as from Mili Marini.

Army Outline Plan for Operation Baytown

General Scope and Flexibility

C.C.S. (116th Mtg)
Quebec
24 August 1943
also IZ,
3119 28 Aug. 1943
and M.A. 104
8 Sept. 1943.

By 24 August, the Combined Chiefs of Staff knew that the immediate objects were, very simply, to contain German divisions and to open the Straits of Messina to ships carrying cargoes to Naples for the Allies. On 28 August, the Supreme Commander explained to the War Office, after their second application for details of his plans, that

/Baytown

Baytown like Avalanche was designed to secure a firm lodgement in the south of Italy. The importance of Baytown to the future build-up of Allied forces on the mainland was stressed. This build-up would have to be the most extensive and rapid possible. In the light of developments out of the Italian peace-feelers, it was now possible to speculate on easy methods of attaining ends previously envisaged as only within reach of imposing expeditions. Should Italy surrender, and ports such as Taranto become available, then an Indian division from the Middle East could move through the area before long to reinforce the Eighth Army. Unless enemy resistance were stubborn enough to retard northward movement, the whole force was to move up to join the Fifth Army forces in the Salerno beach-head. Conversely, the impact of the Salerno force on enemy dispositions would react in the favour of our men operating in the Toe and Heel. By 31 August, there was hope of having two divisions, complete to light scale, ashore in Calabria by D plus 14. By 8 September, the Commanding General of 15th Army Group, General Sir Harold Alexander, had decided that the whole of the Eighth Army could be lifted by Messina Ferry. So problematic was the outcome of the proposed landing, that a number of subsidiary plans were prepared, dependent for their execution or rejection on the tempo of the Eighth Army's advance and the complex of events from day to day. Two only of these plans, namely those for the landings at Bagnara⁽¹⁾ and at Pizzo, near Vibo Valentia,⁽²⁾ proved to be possible.

M.A. 479
31 August 1943.

M.A. 104
8 Sept. 1943.

New Plan for Operations in the Heel

As negotiations with the Italian petitioners drew to a successful climax, the object of the old discarded Musket plan for an assault on the port of Taranto, (a port with the best repair facilities in the Mediterranean) again became feasible and at the same time less expensive of attainment; so that the day after the Reggio landings, General Alexander was able to inform the C.I.G.S. that he was mounting Operation Slapstick, a seaborne landing at Taranto. This could be described theoretically as an unopposed landing, since Italians had promised to co-operate and there were no German forces in the area of the port.

M.A. 523 4 Sept.
1943 and
N.A.F. 359
6 Sept. 1943.

The Forces engaged

C.C.S. (116 Mtg)
Quebec
24 August 1943.

The ground assault plan was to be executed by two divisions of No. 13 Corps (Br.) namely the 5th Br. and the 1st Canadian, with one division in reserve. One brigade was to be landed at a time on each beach. 231st Brigade and two Commando Units were to be held in readiness at Riposto for any emergency landings.

The Time and Place of Landing

Flag Officer
Sicily's Report,

It was planned by the end of August that Baytown should be launched some time between 2 and 4 September. Eventually D Day was fixed as 3 September and H Hour as one hour before first light. The three landing beaches lay in the area just north of Reggio de Calabria and south of the town of Catona. ~~Running from north to south, these bore the code names of How, George, and Fox. The 17th Brigade was to land at How, set~~

/the 13th

- (1) Code Name - Operation Hooker.
- (2) Code Name - Operation Ferdy.

Concrete 597
27 Aug. 1943
re C.G.S. Sig. of
26 Aug. to A.M.

Provisional Outline
Air Plan for
Operations Buttress
and Baytown
4 Aug. 1943.

the 13th Brigade at George and a brigade of the 1st Canadian Division at Fox Beach. It was emphasised that the commitment in respect of air equipment was very large and hoped that shipping would be available to lift a proportion of it, a hope not fulfilled in the event.

The Task of the Ground Forces.

Definitions of the primary task of the ground forces engaged in Baytown appear only in the joint outline plans, which were based on the idea of Baytown as a minor move in a large-scale assault. The task of a full-scale invasion of the Toe of Italy was to have been three-branched, namely, first, capturing all the area between Nicotera and Cittanova, then the port and airfield of Vibo Valentia; then, moving north towards Catanzaro, preparatory to dominating the Heel of Italy. Baytown, closely co-ordinated with it, was charged with the tasks of capturing the port and airfield of Reggio di Calabria on the shores of the Straits of Messina and of reaching the Catanzaro neck. Strictly speaking, this remained, in spite of changes, the immediate task: what ultimately developed from Baytown must be viewed in conjunction with the landings at Bagnara, Pizzo and Taranto.

Preliminary Ground Operations.

Reconnaissance before D Day was to be carried out at Bova Marina and other points by commandos conveyed in landing craft. In addition to air and sea bombardments of vital objectives, guns would fire across the Straits from Sicily, and immediately prior to the landings, guns would lay down a heavy barrage. Convoys would be guided by tracer and smoke shells across the narrow waters.

The Outline Air Plan for Operation Baytown

Provisional Outline
Air Plan for Operations
Buttress and Baytown
A.5/P.6 (Final)
4 August 1943.

Provisional Outline
Air Plan for Operation
Avalanche A.5/P.8
(Final) 18 August 1943.

N.A.T.A.F. Operation
Instruction No.136
Operations Baytown and
Avalanche. 31 Aug.1943.

O.R.B. N.A.T.A.F.
Aug.-Sept. 1943.

Enough contemporary background has already been given to make it clear why no individual Outline Plan on the highest level for Operation Baytown existed and why historically it must be coupled in thought with Operation Avalanche, that is, as a small but nevertheless important part of a more sweeping plan which embraced them both, involving a delicately synchronised deployment of air forces operating under one command. Only thus can a balanced grasp be held of the implications of the invasion of Italy as a whole. The planners suffered from lack of time; finesse had to be sacrificed to flexibility. Most of the records available are therefore of the detailed planning order on the second level.

The Task of the Air Forces

Ibid

Broadly speaking, this was, firstly, to neutralise the enemy air forces and to ensure that they could not interfere effectively with the assaults and following operations. Any movement of enemy troops into or out of the Toe had to be hindered and his communications into /the area

the area cut. There were, too, the local commitments of reducing the enemy defences of the vital point of Reggio, supporting the actual landings and following up the advance, should there be one.

The Air Situation

Ibid

To appreciate the number of variables to be reckoned with, it must be constantly borne in mind that the conclusion of the Sicilian Campaign did not come about until 17 August. Allowing for inevitable time-lags of all categories, this rendered the conditioning of airfields, strips and landing-grounds and the construction of new ones a matter of extreme urgency. Provided the ambitious schedule of work was carried out, there would be just sufficient fighter fields in the Messina Area, or the area between Catania and Messina, to ensure air superiority over the assault and initial advance. There was considerable doubt whether the work projected could be completed in time and it was understood that fighter forces might have to fall back on the Gerbini airfield complex. In any case, the enemy threat from bomber attack was not serious, since he was economising in the use of bombers and could only operate from bases far in the rear areas, perhaps using advanced fields for staging.

Airfields in the Toe Area on Italian Mainland

Ibid

The air programme was to deny the enemy the use of airfields at Reggio, Vibo Valentia and, if necessary, Crotone and Bottricello, with the result that his fighter effort over the Toe would be negligible. These four airfields at least had to be captured, if the forward movements of our troops were to be effectively supported. The likelihood thereafter was that, as we approached the Heel and the country leading up to Naples, fighter airfields would be at a premium, for the enemy held the majority and the best of them.

Reggio airfield was the only reasonably good airfield in the extreme Toe, with aircraft shelters capable of housing some sixty-eighty fighters. There were no other landing-grounds until one reached Vibo Valentia. Aerial photographs, however, had established that the ground in the neighbourhood of the town of Rosarno was favourable for new construction. Vibo Valentia itself, enclosed in a pocket of hills, was earmarked for the use of fifty to sixty fighters but was unlikely to be serviceable in bad weather. The only two feasible fields on or South of 39 degrees parallel were Bottricello landing ground and Crotone aerodrome, both improved and extensively used during Sicilian operations.

Ibid

Reduction of Defences, Reggio Area

The defences in the Reggio area were to be reduced by preliminary air bombing, in addition to the naval gun operations referred to above; but our bombing was not to be such as to betray the scope of the enterprise, or to prejudice whatever element of surprise could be achieved.

Responsibility for the Execution of the Air Plan

The Desert Air Force's Major Role

O.R.B.
N.A.A.F. Air 1.

The Tactical Air Force effort in the invasion of Italy was to be divided. The Desert Air Force was to support Operation Baytown, continuing their now traditional collaboration with the Eighth Army. Avalanche was to be
/supported

supported by the XII U.S. Air Support Command. The Tactical Bomber Force in Sicily was to assist both operations. Coastal Air Force was not directly involved in the Baytown landings.

Operation
Avalanche Outline
Plan of Air
Operations.
Part I.

The fighter and fighter-bomber units of the Tactical Air Force covering Baytown and whatever operations grew from it, were to be controlled by the A.O.C., Desert Air Force, under the direction of Tactical Air Force's A.O.C. A further responsibility of Desert Air Force was the air defence of the vital sector of north-eastern Sicily, the base for tactical cover of both major assaults. A line was drawn through Cape Orlando, Caltagirone and Cape St. Croce, north and east of which was the hunting ground of Desert Air Force, who were likewise bound to protect all convoys passing along the coast of Sicily within this area.

Air Defence of Eastern Sicily and the Toe Area

Ibid

It has been stated that Coastal Air Force was not directly implicated in Operation Baytown itself. This is true; and so long as Tactical Air Force operated from the bases in Eastern Sicily, (Messina, Gerbini, etc.) their brief was to include the defence of the region. Eventually, however, it would, with the progress of the land forces, move into Italy. The Outline Plan provided for a progressive assumption by Coastal Air Force of the role first assigned to Tactical Air Force. The pace of this change was governed largely by airfield accommodation and was not to be done piecemeal, or before a tangible Coastal organisation was actually established in situ and both parties were agreed on the appropriateness of the hour.

As for the air defence of the Toe, while Tactical Air Force were covering this commitment in the initial phases, Coastal Air Force would be, in principle, preparing progressively to move in to stations vacated by Tactical Air Force; they were then to take over the defence duties of Tactical Air Force operating up to an elastic line approximately 50 miles from the battle front. With the responsibility for air defence of N.E. Sicily was to pass the protection of convoys in that area.

Ibid

Air Protection for Baytown Convoys

As the assault was timed to be launched and executed during the hours of darkness, there is no mention in any outline plan of any air cover for the convoys. It was, however, the role of Tactical Air Force to provide a protective screen of night fighters between the Avalanche assault convoy and enemy airfields within range, as well as intruder flights.

Photographic Reconnaissance

Should the Army call for air photographs before a Photo Reconnaissance Unit could be established on the mainland, it was for the A.O.C., Tactical Air Force to improvise arrangements for this kind of sortie and the accompanying technical processing, interpretation and so forth.

/Air/Sea

Air/Sea Rescue Organisation

Ibid

This was an over-all Coastal Air Force Commitment, built up to maximum strength from the early stages of planning. As a matter of course, any derelict members of Baytown were to come within the scope of whatever arrangements were made, which it was hoped, were to include an Air/Sea Rescue Ship.

The Air Plan

The Pre-Assault Air Pattern

TAF/34/AIR
23 Aug. 1943

The broad pattern of the Allied Air effort during the month of August against the extreme south of Italy was directed, not only to immediate preparation for Baytown, but to retard the re-grouping of enemy forces, following their withdrawal from Sicily. In this work, all forces played a part. During this period the Northwest African Strategic Air Forces were concentrating attacks on communication centres throughout Italy, and neutralising the enemy's air Forces by attacks on his airfields. These attacks fulfilled the additional important purpose of impressing on the vacillating Italian public the strength of Allied air-power. Up to 18 August, their effort was directed in particular on the road/rail junctions and bridges. On 19 August, they switched to targets north of the latitude of Sapri, leaving the Ninth Air Force to operate in the Heel of Italy on such vital targets as Foggia, Benevento and Potenza. It was the intention that while both Desert Air Force and XII Air Support Command were engaged in this work, no boundary was to be laid down, although it was understood that, as far as was possible, XII A.S.C. was to keep to the west coast area and D.A.F. to the east coast area. The position was clarified when it was decided that Desert Air Force, assisted by elements of Tactical Bomber Force was to cover Baytown.

Proportionate Scale of Effort between Operations Baytown and Avalanche

TAF/34/AIR
29 Aug. 1943
Amplification of
Operational
Directive
No. 132

Co-ordinated programmes of targets were worked out and designed to cover both Avalanche and Baytown by a sliding allocation of bombing effort. The progressive day effort planned for the days D minus 3 to D for Baytown rose steeply from 10 per cent in direct support and 90 per cent on communications in the Toe and vital airfields, to 100 per cent in direct support; falling from 40 per cent in direct support and 60 per cent on communications and airfields on D plus 1 gradually to 10 per cent direct support and 90 per cent on other targets on D plus 9 Day. Rapid changes in the tactical situation were allowed for. In addition to communications and airfields targets, special attention was to be paid by Tactical Bomber Force to Radar objectives, of which five were known and five more suspected, all significant in both the landings in the Toe and at Salerno. The Air Officer Commanding Desert Air Force was to order such attacks, until the Tactical Bomber Force was placed under the operational control of XII A.S.C.

Movement of Air Forces into Italy

Concrete 597
27 Aug, 1943

The ultimate build-up of the air forces on the mainland was a matter of primary concern. Shipping conditions after Avalanche were problematical, but should there be space available, it was the intention to send as much as possible by the sea routes, not laboriously overland from Calabria.

/Complementary

Complementary Air CommitmentsAir Outline Plan

The extensive, growing operational background of the whole theatre must be visualised behind local events. This wider panorama of routine work was the basis without which all specific operations would enjoy but a brief life. North Africa, the Middle East, Malta and Sicily must all be defended against air attack. Allied shipping, now on the increase since the Tunisian victory, had to be protected, as well as shipments of troops and material into the Toe and the Salerno areas. Continuous anti-submarine patrols and frequent anti-submarine strikes and sweeps were another big air commitment, all too frequently overlooked because of its unspectacular character. Standing watch had to be kept and attacks carried out on the multifarious enemy shipping under way, continuously expanding in scope as the roads and railways were attacked from the air; air forces had to be found to strike at enemy warships. Photographs of the utmost strategical and tactical importance kept specialised Spitfire and Lightning units continually employed. Drawing close to the actual scene of the landings in the Toe, a local problem to be covered was the defence of the launching area, N.E. Sicily, where so many squadrons participating were based.

TAF/52/AIR
Memo on Air
Transport
during Operation
Avalanche and
Baytown.
2 Sept. 1943.

Air Transport

Any transport requirements before D Day Avalanche were to be met by No. 216 Group R.A.F., in command of all such aircraft for either air force or army use. Only the A.O.C., Desert Air Force could call them forward into operational zones. No. 216 Group was to establish its H.Q. at Catania, with strong liaison between it and Troop Carrier Command and with Catania Main as terminal base until after Avalanche was launched. As the flow of new transport aircraft expanded in volume, and as Catania approached saturation point, it was to be for D.A.F. to provide new bases. Until then, Catania was the hub of a system, whose spokes extended to Castel Benito, El Aouina, Mateur and Bone. Courier, passenger and freight services were also planned.

F.O. Sicily's
Report -
Operations.
Mediterranean
War Diary
(Naval)

The Outline Plan for Operation Hooker

Operation Hooker, although not included in the air plans and involving no specific air operations, must be included in the general narrative, as it was one of the opportunist landings rendered possible and advantageous by the course of events. After darkness on 4 September, landing craft from Sicily were to land a commando of two hundred and sixty men belonging to XIII Corps (Br.) at a point close to Bagnara, some 27 miles as the crow flies from Reggio, on the north coast of the Toe. The object was to reconnoitre, occupy local territory and key points and to join forces with the main body from Reggio. The light naval forces engaged were to be controlled by a Naval Force Commander.

The Outline Plans for Operation Ferdy

Coastal Force
Report on
Operation
Ferdy.

Role of the Navy

This was a more ambitious project than Hooker, with a high element of calculated risk, involving considerable naval and ground forces. Officially designed for a landing at

/Gioja

Admiralty
Mediterranean
War Diary.
Bombardment
Report by H.M.S.
Erebus.
F.O.Sicily's
Report

Gioja on 6 September, it was cancelled owing to inclement weather and adjusted to fit the pattern of the advance, the object being to cut off the enemy's retreat. The task of the Navy was to lift from Sicily a brigade of the Eighth Army and land it at Pizzo, near Vibo Valentia, some 25 miles behind what were believed to be the German lines. The expedition was to sail on the evening of 7 September, assembling at a point some 2 miles S.W. of Cape Peloro. H Hour was in the early hours of darkness on 8 September and again three beaches, Red, Green and Amber, were selected. Fifty landing craft were to be used and offshore and supporting naval forces were to co-operate.

The Assault Plan

Ibid

The 231st Brigade of XIII Corps (Br.) was charged with the task of advancing from Pizzo, seizing the town and airfield of Vibo Valentia, intercepting the German forces in course of withdrawal from the Toe, and linking up with the main Baytown forces. It is of interest to note that in the event, as will be related in the appropriate chapter, the landing coincided, owing to the rapidity of the XIII Corps advance from Reggio, with the passage through the area of the German forces: this occasioned violent opposition to the landing.

Air Support of the Assault

N.A.A.F. Opsum
A.V.585E.
10 Sept. 1943.

N.A.T.A.F.
Int/Opsum
No. 152
9 Sept. 1943.

As in the case of Operation Hooker, no high-level outline air plan existed for air support of the 'Vibo Valentia' operation, as it was styled by the Navy. This support was nevertheless planned and executed. Under the control of the A.O.C., Desert Air Force, it was arranged that following on the already-recorded programme of fighter-bomber attacks on communications in Toe, Ball and Heel, about ninety Kittyhawks were to attack enemy gun positions in the area of Vibo Valentia, as well as troops and M/T concentrations in the immediate rear of the German front line. Some seventy Warhawks were to carry out strafing missions and cover patrols. Two hundred and fifty Spitfires were detailed to maintain continuous daylight patrol over the beachhead from the time of the landing onward, as well as to escort bombers operating in the path of the German retreat, in the Avellino-Potenza area.

The Outline Plans for Operation Slapstick

Taranto

M.A.523
4 Sept. 1943.

Following the signing of the Armistice with Italy on 3 September, General Alexander signalled the Chief of the Imperial General Staff on 4 September that he was mounting Operation Slapstick and intended to build up V Corps (Br.) in the Taranto area. Taranto, the finest naval base in Italy, was a highly desirable prize: strategically and tactically its capture, owing to its geographical position, would be of the greatest value for the transit of men and materials of the three services into Europe. The Italians had promised to co-operate and still held the area firmly. It was assumed that the sequence of events would open with the move of 1st Airborne Division (Br.) and Naval force into Taranto in warships escorted by fighters, with limited supplies and equipment. Then, day fighter forces, relying initially on air transport lift, were to cross to take over the port's defences.

N.A.T.A.F.
Admin.
Instruction
No.4
8 Sept. 1943

/The Naval

Naval
Mediterranean
Summaries and
War Diary for
September 1943.

The Naval Outline Movement Plan

The navy was charged with the task of transporting and landing a strong naval force and elements of the 1st Airborne Division (Br.). The lift, as well as the reinforcement programme, was to be probably expedited by the use of surrendered Italian vessels.

Ibid

Naval Command and Forces

On 8 September, Vice-Admiral A.J. Power from Malta H.Q. was instructed to hoist his flag in the Howe as S.O. Force Z, which comprised, in addition to the Howe, H.M.S. King George V, the 12th Cruiser Squadron, the 14th Destroyer Flotilla, H.M.S. Abdiel, U.S.S. Boise, and the 17th Minesweeping Flotilla. Troops were to be carried by the cruisers and H.M.S. Abdiel, sailing from Bizerta on the evening of 8 September; the remainder of the naval force sailing from Malta, (including one Greek vessel) was to carry the port party mustered in Sousse, charged with the mission of opening up Taranto.

The Army Plan

Ibid

The initial landings were to be made by strong forces of the 1st (Br.) Airborne Division. Later arrangements would be made for the reception of 8th Indian Division from Middle East after the Airborne forces were established. The ground forces were to advance as rapidly as possible to the port of Bari on the east coast, linking up on their left flank with the Canadian forces from Reggio. At the end of July, it had been estimated that up to three German divisions might be standing in the Allies' path south of the Belvedere Marittimo - Amendolara area. Since then, as has been mentioned, a northward movement of enemy forces had been reported: indeed, when the Slapstick forces arrived in Taranto, the nearest German elements were 15 miles away and inconsiderable in numbers. The non-divisional Italian coastal troops in the Taranto area no longer counted, in view of the surrender of Italy.

A.F.H.Q. Memo
P/96 Outline
Plan for
Operation
Musket
24 July 1943.

The Air Plan for the Move into the Heel of Italy

Admin.
Instruction
No. 4 Operation
Slapstick
H.Q. T.A.F.
8 Sept. 1943.

The naval and army forces were to be accompanied into the Heel by two Kittyhawk Squadrons and one Spitfire Squadron (both of D.A.F.), also by one night Beaufighter Squadron (416th U.S.) from N.A.C.A.F. North Africa. The role of these forces was to be in the first place protective, opening to an offensive day and protective night commitment. Most of the essential personnel, vehicles and supplies were to be moved from Syracuse by sea, but No. 216 Group, acting for Desert Air Force, would work to the limit of its capacity to carry out the transfer by air; for with the growing competition of Avalanche's transport needs, available space was likely to be cut to the bone. There was a plan, too, to despatch certain R.A.F. personnel, vehicles and supplies from Tunis. As no Army dock-operating personnel were to be available for some days, the task of loading these elements was to devolve on R.A.F. units, supplemented by local native labour. Planning also provided for the transport of petrol, lubricating oil, ammunition and bombs by air, as little or none was likely to find its way to Taranto by sea in the early days.

/Maintenance

Maintenance was to be on austerity lines for some time to come, in view of a serious shortage of shipping space. The first consignment of tyres, tubes, spares and so forth were not due for shipment until 18 September, and even then there was no promise as to how much would arrive. Certainly at least one Servicing Commando would be invaluable. It was hoped to fly in the three Desert Air Force Squadrons by 14 September, which would entail arduous preparation of the ground beforehand; here again, seeing that little help could be expected from the Army, the Air Forces would have to do all the manhandling.

The Outline Plans for Operation Avalanche

The Naval Outline Plan

Task Organisation

The whole of the Task Force engaged, known as the Western Task Force, was, with the exception of Force H from Gibraltar, detached from the Mediterranean Fleet for the purposes of the Italian operations. The Western Task Force was organised into four separate Forces. First the Control Forces, consisting of Force Flagship (U.S.); the Picket Group (U.S.), the Demonstration Group (U.S.) and the Minelaying Group (U.S.). The second element was the Southern Attack Force (U.S.), with which the Force Flagship would operate. Then there was the Northern Attack Force (British) and lastly the British Carrier Force, (known as Force V) with one Fleet Carrier (C.V.) and four Escort Carriers (A.C.V.'s). The disposition of Western Task Force was so designed as to aid both the landings in the Toe and at Salerno. In addition to the Force deployed for the actual execution of the operations, a strong British naval force would cover the Allied assault from attack by enemy naval surface vessels.

Area of Operations

The area within whose limits the Task Force would operate was bounded on the northwest by a line from Cape Circeo, at the western tip of the Gulf of Gaeta, to Latitude $40^{\circ} 3'$ North by Longitude $12^{\circ} 30'$ East; on the southwest by a line from Latitude $40^{\circ} 30'$ North Longitude $12^{\circ} 30'$ East, to Latitude $39^{\circ} 30'$ North, Longitude 14° East. The southern limit was on Latitude $39^{\circ} 30'$ North and the land formed the limit to north-eastward.

Ports, Submarines

As and when captured, enemy ports were to be operated in the traditional way, each with its N.O.I.C., for joint use by both the American and British. British submarines assigned to the Task Force were to play the unusual role of beacons for the guidance of other craft. Protection against enemy submarine attack and fighter cover for the convoys was to be the task of the Air Forces, although the responsibility for fighter cover for the battleships and the escort carriers themselves devolved on the Fleet Air Arm fighter organisation.

Task

The mission of the Western Task Force was, primarily, to firmly establish the Fifth Army in position ashore in the Gulf of Salerno and to support its advance to capture the city of Naples and the adjacent airfields. With the Fifth

/Army

Outline Plan of
Air Operations.
Operation
Avalanche
Annexure B. and
Admiralty Battle
Summary of the
Salerno Landings.

Ibid

Ibid

Ibid

Army, many vital elements of the Air Forces and their equipment were also to be transported and landed, and benefit by supporting gunfire staged by Naval forces, and reinforcement by sea. The role of the Picket Group was to screen the Attack Forces from attack by any hostile surface forces; local diversion was to be provided by the Demonstration Group further up the coast. A system of mines was to be laid in routes likely to be used by the Italian Fleet, if it ventured out, or by German E- or R-boats. The assignments of the Southern and Northern Attack Forces were to establish Army Forces ashore on the beaches of Salerno at H Hour D Day and support the assault. The Southern Force was to land its American charges of the VI Corps on the south side of Fiume (River) Sele; the Northern Attack Force was to land its British charges of X Corps on the north side, the actual boundary between the two Corps being the north bank of the river. They were also there to silence shore batteries, destroy searchlights, and expedite in every possible way the unloading of ships and craft. The Carrier force was to operate its Seafires in support of the fighter cover programme; other Fleet Air Arm fighters were to cover the Naval Force itself. All these naval aircraft, be it noted, operated on High Frequency and were not fitted with V.H.F. (Very High Frequency).

Fighter Control, Ship Organisation

Ibid.

As in the Sicilian landings, local fighter operations were controlled by a linked pattern of control ships. Appendix 7 shows the lay-out and should be studied as a model of its kind for the period. Briefly, control would function from three leading ships, each covered in case of casualty by a stand-by ship. Responsibility was divided thus; U.S.S. Ancon was to be, (as in Operation Husky) the main H.Q. Ship, housing Army, Navy and Air Force Commanders, and a naval signal staff assisted by air elements, directing land-based aircraft operating first from Sicily, later from strips near Salerno. U.S.S. Ancon was to stand by for H.M.S. Ulster Queen, whose mission was the direction of the carrier-borne Seafires, and who was in turn covered by H.M.S. Royal Ulsterman. H.M.S. Hilary, (X Corps H.Q. Ship), was stand-by ship for U.S.S. Ancon for the control of land-based fighters, and was herself covered by U.S.S. Carrol. U.S.S. Biscayne and U.S.S. Chase were, with Ulster Queen and Carrol, secondary stand-by ships, all four being equipped for fighter control on a reduced scale.

The Army Outline Plan

The Task of the Army

Conquest of
Southern Italy
Br. Hist. Sect.
Central Med.

The tasks of the Army were, to seize Monte Corvino airfield and to exploit initial success, if it came, by capturing the city of Naples as well as the adjacent airfields. Then to build up the Fifth Army through Naples and join up with the forces launched across Messina Straits a few days before, preparatory to the conquest of the remainder of Italy.

Forces Engaged

Ibid

There were to be two main elements engaged. First, X Corps (Br.), which comprised the 46th and 56th Divs., No. 7 Armoured Div., a detachment of the 1st Airborne (Br.) /Div.,

Div., three U.S. Ranger Battalions and supporting troops. The other main element was the American VI Corps, comprising the 36th Infantry Div., 1 Motorised Tank Battalion and supporting troops.

The 1st British Airborne Div. was to be held initially in Army reserve, in preparation for a special mission in the Volturno area. At a late hour, these troops were earmarked for an operation named Giant in the Rome area, which failed to materialise; they were thus lost to Operation Avalanche. To distract attention as far as possible, a diversionary feint against beaches north of Naples was to be staged by a Commando group.

The Army Time-Table

Ibid

In addition to the Commandos' effort at deception, happenings in the early part of the night of the landings were to include a landing by Rangers, whose aim was to capture or silence, by the time the main forces landed, any hostile gun batteries which might interfere. The main assault had to take place at a minimum of two hours before first light on 9 September. The rest of the day was to be devoted to securing a footing and endeavouring to capture Monte Corvino airfield, believed to be a matter of prime importance to all concerned. This would at once relieve, it was thought, the sore problem of long distance fighter cover. Four days later, the men, tanks and M/T of the 7th Armoured Div. were to begin to disembark and at the end of the first week a special convoy with reinforcements was due to arrive. The build-up was to continue to develop for about a fortnight.

The Outline Air Plan for Operation Avalanche

Outline Air Plan
for Operation
Avalanche
NAAF A.5/P.8
(Final)

The Task of the Air Forces

General Outline

NAF 345
31 Aug. 1943

N.A.T.A.F.
Operation Instr-
uction No. 138
8 Sept. 1943.

M.A. 104
8 Sept. 1943.

The air contribution towards the early attainment of the objects set out above was to be considerable and strain our air superiority to its limits. Before, during and after the assault, the enemy air forces must be 'neutralised'. Then the convoys on their way to the beaches, the actual assaults and land fighting must be provided with air umbrellas. The airborne mission was allowed for and organisation accordingly planned for the lift and dropping of one reinforced Parachute Regimental Combat Team, with the task of destroying a vital bridge over the Volturno N.E. of Castelvoturno, and delaying in other ways any German movement southwards during the critical period. Shortly before the landings this plan was cancelled and another evolved on the basis of negotiations with the Italians; this was to fly in the 82nd Airborne division on the night 8/9 September to the airfields of Furbara and Cerveteri,⁽¹⁾ rescue the Rome Government and fly in fighter squadrons to assist in the defence of Rome and support the Salerno venture. This plan, in turn, was cancelled at a late hour. If all the needs of Avalanche were met, any spare elements were to be used to support the Baytown Operation in the South.

/Implicit

(1) On the northern outskirts of Rome.

T.A.F. Amendment
No. 1 to Operation

Instruction No. 133
29 Aug. 1943.

N.A.C.A.F. Opera-
tional Order

No. 3 3 Sept. 1943.

Implicit in the main tasks was the movement of Air Forces into the Salerno area by ferry from Milazzo in Sicily. While Avalanche was evolving into stability or otherwise, the air was to have a full list of responsibilities, including the defence of North Africa as far South as the Tripoli-Tunis border and of Sicily West of a line drawn across the island, roughly south-west from Cape Orlando; the planning and execution of all air operations for the protection of Mediterranean Allied shipping in the theatre of operations, all anti-submarine operations, in the same area; and attacks on enemy surface forces and sea communications within striking range of Africa. This was not all; the programme included all Air/Sea Rescue work, and operation of all Fighter Sectors outside the elastio line (already referred to), 50 miles from the battle front.

Factors affecting the Task of the Air Forces

Comparison of Air Strengths

Outline Air
Plan. Operation
Avalanche.

Ibid. Pt. I.
para. 4 & 4a.

App. A to
N.A.C.A.F.
Operation
Order No. 3.
3 Sept. 1943.

The calculation of the exact weight of the opposing air forces at any given moment was beset with difficulties and the figures accepted and recorded as a basis could never be anything but approximate. Signals were passing, even up to the very eve of the assaults, which made it impossible to say for example, how many allied heavy bombers, within a hundred or more, would in fact be available. As for estimates of German Air Force strength, it was appreciated how Corsica and Sardinia were becoming progressively denuded of aircraft and that heavy casualties had been inflicted during the Sicilian campaign: but, in view of the known flexibility and powers of improvisation of the German Air Force it was, to say the least, hard to predict the exact volume and disposition of the reception likely to await us. Nevertheless it is curious that a late copy of the Outline Air Plan dated 18 August quotes German Air Force strengths only valid for 1 July, before the opening of the Sicilian Campaign, figures which bear no relation to the truth depicted in Intelligence data which was certainly available. It is irrelevant to criticise now, since the changing situation soon made nonsense of any daily estimate. The point is that correct forecasts were not only available, but were used by the right people before the event. So although scrutiny of the plan reveals on a paper assumption that some three hundred and eighty German fighters and fighter bombers reinforced by another sixty from Sardinia might be thrown into the Salerno battle and a force of about two hundred and seventy German bombers plus a further one hundred and twenty from Sardinia threaten our shipping ports and other vital points, within a few days (low serviceability being taken for granted) it is clear that by the end of the month, a clearer grasp of the truth was held. Thus by 3 September the estimated disposition of Axis Air Forces in Italy and Sardinia as at 1 September was being circularised to Coastal Air Force as two hundred and twenty long range and torpedo and fifty reconnaissance bombers, with two hundred and sixty fighters and fighter-bombers, omitting aircraft based in the South of France. To arrive at the maximum figures likely to be brought to bear on any given day these figures would have to be halved, on account of their known extremely low serviceability ratio. This

/figure

A.C.A.S. (1)

Estimate of Enemy Opposition. This figure tallied fairly closely with the Air Ministry Intelligence forecast, which predicted a sum opposition, in serviceable aircraft of one hundred and five/ten fighters and N.A.F. 345 to C.O.S. fighter-bombers, likely to be reinforced up to one hundred and ten/fifteen and rearwards a force of some seventy long range bombers, inoreasable to one hundred and twenty on D Day or D plus 1 Day. (1)

Outline Air Plan Operation Avalanche.

As against these forces, the Allies believed themselves able to call for offensive action on three hundred and fifty heavy day bombers (this total included some ninety-five Liberators which in the event were not forthcoming) some six hundred and fifty medium and light bombers, and three hundred and twenty S.E. fighters with one hundred and ten Seafires operating from carriers. Fighter-bombers up to one hundred and sixty in number, a small night fighter force of thirty-two aircraft, some forty Tac/R and fighter reconnaissance, three hundred troop carrier aircraft and four hundred gliders were expected to be available.

Allied serviceability was very fair, considering the continuous wear and tear of non-stop operations; a figure of 75 per cent was adopted as a basis. The force was very varied in texture, including units from N.A.A.F., R.A.F. Middle East, Ninth U.S. Air Force and R.A.F. Malta. Incidentally, the figures given here for Allied aircraft take no account of forces held available for support of Operation Baytown, such as Tactical Air Force's Kittyhawks, Warhawks, Hurribombers and Tank Destroyer Hurricanes, or of numbers of Hurricanes and soforth flying in various defensive roles. A more detailed study of comparative air strengths is given in Chapter II.

Airfields in the Naples Area

Ibid

Having settled the problem of bringing the Salerno area within range of Allied aircraft, the next consideration was how precisely to render the same area out of range to enemy fighters and fighter-bombers. The answer was held to be, to deny them the use of eight important airfields within 110 miles range and three others just beyond this range. The first eight were Naples/Capodichino, Naples/Pomigliano d'Arco, Monte Corvino, Grazzanise, Capua, Aquino, Foggia and Scalea; the last three, on the perimeter, were Frosinore, Bari and Gioia delle Colle, yet if the entire series were rendered untenable, it would still be possible for the Luftwaffe to operate from hastily-constructed strips in the Naples area, where the terrain was favourable to this kind of enterprise.

Fighter Cover over the Assault Area

Ibid

No attempt was made to disguise the obstacles to adequate cover. This might be improved if Vibo Valentia were in our hands, when 30 gallon tanks would enable Spitfires to cover the 150 miles to Salerno and assist those operating with 90 gallon tanks from Sicily, as well as the Lightnings borrowed from the Strategic Air Force and the Seafires from escort carriers. At a late date, a new, helpful feature was introduced, in the form of a decision to employ a squadron of the Mustang 'Invader' aircraft, (2) fitted with long range tanks which had been mentioned at the Quebec Conference, but not allowed for in the Outline Plan. They were to function as low cover.

Quebec Conference C.C.S. (116th Mtg) 24 Aug. 1943.

/Considerable

(1) This amplification of the position has been given to prevent errors arising from the incorrect statistics quoted in the plan.

(2) A - 36s.

Outline Air Plan.
Operation
Avalanche.

Considerable space was devoted in the appendices to the Outline Plan to an exhaustive analysis, in terms of time, fuel, combat, range, the contents of tanks and so on, details leading to no conclusive fighter pattern, but only a weighing of alternatives. With three Groups of Lightnings, one Group of U.S. Spitfires and up to eighteen Squadrons of R.A.F. Spitfires, all flying two sorties each, an average of thirty-six aircraft could be maintained over the area on D Day; with the same aircraft flying one sortie each, then twenty-four to twenty-seven could cover the same field of work for several days. Enemy air opposition and weather were imponderables.

Ibid

All this illuminates the fluidity in the minds of the Commands as well as in events. A brief paragraph on the employment of the available fighters was, however, embodied in this patchwork plan and a provisional schedule drawn up for the employment of the Spitfires and Lightnings referred to in the first two days, but this omitted all reference to the Invaders, hence was not final. This schedule could not, it was emphasised, be maintained, hence the necessity of capturing or constructing, at the very least, one airfield within the first three days. Monte Corvino was the main target in mind, being the nearest within reach, although of no great permanent value. Construction of strips in the Messina - Milazzo area were a priority task and their rapid completion was essential before the Spitfires could participate to any effect. The single Light Fleet Carrier, S.S. Unicorn, with up to thirty Seafires, would be probably available, as well as the four Escort Carriers with up to eighty Seafires, to furnish fighter cover over the beaches. The estimate of a continuous Seafire patrol was twenty-two aircraft during D Day, eighteen during the morning and eleven aircraft after noon on D plus 1 Day.

Weather and State of Moon

Ibid

The general weather outlook for September was favourable as to visibility, and to lack of rain and high winds, but over 10,000 feet one might find icing conditions. October weather should be steady, but as winter approached, that is from early November onwards, the weather would deteriorate, until it improved again in the early Spring. A survey of the mountainous terrain which characterised most of the country foreshadowed difficulties in navigation unknown in desert warfare and only sampled by those who had flown across the North African Atlas range.

Inclement weather might prejudice operations in at least two vital areas, firstly, in Sicily at bases, secondly, over the beach-heads at Salerno. Thorough cover arrangements were therefore included, in case the five strips planned for the Milazzo or part of the Catania Plain became waterlogged, in which case more reliable bases, such as Gerbini Main and Catania Main, at the shortest radius from Salerno, were to be available for Spitfires and Night Fighters, and Comiso and Ponte Olivo for Lightnings. Such eventualities would, however, create a corresponding weakness in communications, hence the need for fool-proof briefing of crews. Then, should bad flying weather prevail over the Avalanche assault area while cover was being provided from Sicily, they were, without any reduction of the total cover, to be briefed by XII Air Support Command Rear H.Q. in Sicily, to operate in small formations in individual areas.

/General

General Air Tasks

Ibid

An important task of the Air Force was to prevent effective interference by enemy air forces and to this task, all other tasks were subordinated. Before the launching of Avalanche, the air forces were to concentrate for at least three weeks on a phased programme of attack on Luftwaffe airfields not only on the mainland, but in Sardinia, to which they were still tenaciously clinging. Then the convoys were to be escorted from their bases, to the offshore rendezvous, and both they and the troops fighting for a beachhead, be protected by fighters both by day by the Spitfires, Lightnings, Seafires and Invaders already spoken of, operating from Sicily (and, if Baytown went well, from the Toe), and by night, by Sicily-based aircraft.

Fly-in of Air Forces

Ibid

As in previous campaigns, certain vital periods, of which the early beachhead days were to form one, would resolve themselves into a minor campaign for airfields, now become a priority target wherever there was fighting. The schedule of build-up was founded on the optimistic surmise that Monte Corvino was likely to fall into our hands on D Day and be in working order the same, or the next day. As the neighbouring airfields fell into our hands and the ground round Paestum was laid out in strips, Spitfires, Mustangs and Beaufighters up to a total of two hundred and thirty might, by the end of the fourth day, be operating from Italian bases. Things might even go so well the first day, that fighters leaving Sicily on D Day might, at the end of the day's work land, rest, fuel and take off from Italian soil: the two hundred and twenty-five Warhawks and Mustang Invaders were to follow closely from the fourth day on.

Build-up of Air Forces

Ibid

The subsequent build-up was governed by the situation. The intention was to move in progressively by D plus 100, from bases in Sicily and North Africa, the whole of the Tactical and Strategic and a large part of the Coastal Air Forces, as well as up to two Wings of Troop Carrier Command, always assuming that all Italy south of Rome was, by then, in our hands. The operation amounted, in fact, to a full-scale invasion by the Allied Air Forces in the Central Mediterranean Theatre of a continent, of the mainland of Europe. The general pattern of build-up was to open with a first month fly-in of considerable forces of U.S. and R.A.F. single-engined fighters, fighter-bombers, light and medium bombers and a fairly strong representation of tactical and coastal reconnaissance, night fighter and other types of aircraft. Cautious allowance was made for time-lag in provisioning the medium bomber units, owing to the overall shortage of army troops for tasks normally allotted to them. After another month had elapsed, the entire Tactical Air Force was to be in Italy, with all the medium bombers and escort fighters of the Strategic Air Force and more Coastal squadrons. Thereafter, the air forces in Italy were to be reinforced by the hundredth day by the balance of the Strategic Air Force, more Coastal Squadrons and a considerable force of Transport Command, still assuming that progress had come up to the optimistic forecasts.

/Navigational

Navigational Aids and Air/Sea Rescue

Ibid and
N.A.C.A.F.
Operational
Order No. 3
3 Sept. 1943.

As it was a long flight from Sicily to Salerno and back, everything possible to aid the fighters was to be brought into play, such as homing facilities, radio and flashing beacons and searchlights. The Lipari Islands were to be made full use of by Coastal Air Force for these purposes, as they lay in the direct route of aircraft flying from the Palermo area and on the port side of those from the Messina area. The homing facilities were to be sited in the Milazzo-Catania area, fixer systems in the Milazzo area by day and night, and, as soon as practicable, in the Salerno area. Both visual and wireless aids were to be set up on Ustica Island, lying North by West of Palermo.

A strong, well-organised Air/Sea Rescue organisation, to operate from Sicily, the Lipari Islands and forward to the Naples area was a sine qua non. For the first four days, a depot ship, fully equipped with wireless facilities and launches, was to be stationed midway between Sicily and Salerno, and protected against submarine and air attack. The major part of the responsibility for setting up and maintaining this machinery fell on Coastal Air Force, but an area south of a line drawn from Cape Orlando on the north coast of Sicily to Cap Vaticano in Calabria at the northern tip of the Gulf of Gioia, was delegated to the A.O.C. No. 242 Group, controlling operations in this suburban area from two bases, one at Bizerta and the other at the Command Post. Later on, when Tactical Air Force was firmly established in the Salerno area it was arranged that they were to take over from Coastal Air Force all rescue within a sea radius of 40 miles off Salerno.

Phased Programme of Air Operations up to D Day

N.A.T.A.F.
Operational
Directive No.132
23 Aug. 1943.
Outline Air Plan

The general programme was in four phases which formed the framework of approach and assault. Attacks on enemy airfields in southern and central Italy were to continue, the object being to force the Luftwaffe northwards: then, up to the eve of D Day, an intensified attack on those airfields still occupied, in particular those within range of the assault area. The object of this second phase was not merely to squeeze the Germans out, but to ensure their continued vacation by putting them out of action for some time to come. The only exception was Monte Corvino, which was not to be too harshly dealt with, for obvious reasons.

N.A.T.A.F.
Operational
Directive No.132
23 Aug. 1943.

The night of D - 1 to D Day and, in fact, all the period up to the ultimate consolidation in the bridgehead, was to bring no slackening in the counter-airfield offensive, by the heavy and medium bomber forces. The Strategic Air Force, moreover, was provisionally briefed to devote some attention to targets in the Rome area and northern Italy, as well as in the Naples area. All the day before the landings, every available fighter was allocated to convoy escort duties, and, on the critical night, the convoys and landings were to be covered by night fighters. A screen of these aircraft, between the enemy and the convoys, was designed to prevent enemy night reconnaissance of the assembled ships. Night flying was to include intruder work over enemy airfields.

/When

When day broke, on Salerno beaches, a Lightning squadron, specially trained for night flying, was to be in the air. Soon Spitfires, more Lightnings, and Seafires from the carriers were to provide a continuous daylight patrol net over the assault area and the ships lying close in off the beaches, a patrol whereof continuity was to remain unbroken as Beaufighters took over from the day fighters. Any bombing which might assist the assault was to be carried out, if possible, and there might be aircraft to spare for freelance missions, for which work it was hoped to fit a squadron of Invaders with Kittyhawk long range tanks. No promise of close support, however, could be held out to the Army if not already pre-arranged.

Subsequent Operations

Ibid

Subsequent air operations depended on the development of the situation. It was made clear that the Sicily-based fighters and carrier-borne forces were to be in action until a sufficient fighter strength was built up at mainland bases, a programme which took no account of the fact that naval carriers could not remain sitting targets to enemy sea or air attack, and by the very nature of the tactical situation, as well as by an understanding already reached, could not stay in the vicinity more than three or four days. The first essential for any fly-in of units was to be that they could be protected on the ground, that is, that the anti-aircraft defences were firmly sited and manned, that there were sufficient combat troops in the vicinity, that the necessary accommodation for men, aircraft and equipment had been provided and that the maintenance machinery was in working order.

In reserve, and always liable to be employed in a tactical role, were the heavy bombers of the Strategic Air Forces. The light and medium bombers of the Tactical Bomber Force were already fully committed to both the Avalanche and Baytown expeditions. The capture of the port of Naples was to be the cue for a change-over of roles between Tactical and Coastal Air Forces, for, at that point, a combined Naval Air Force Operations Room was to be set up, for the control of over-sea reconnaissance and shipping strikes; and, furthermore, early in the campaign, Coastal Air Force was also to be ready to take over from Tactical Air Force the protection of convoys and the air defence of the Naples area.

Control and Command of Air Operations - General

Ibid and T.A.F.
Operational
Instruction
No. 133
26 Aug. 1943.

The system of control and command devised for the critical phases can be most clearly seen, if visualised in stages of the advance from base, across the sea, and on to the periods of assault and consolidation. The division of responsibility covered the defence of the rear bases, the convoys and essential coastal work, then Naples and the assault region and, finally, cover for the heavy bombers and for aircraft of the Tactical Bomber Force.

General Problems

Air Defence of Eastern Sicily, the Toe, Malta and the South Mediterranean Seaboard

Outline Air Plan
Operation
Avalanche.

In order to consider the areas of control, it will suffice to mention the more or less self-contained entities of Malta and Middle East Commands and to consider the

/distribution

N.A.C.A.F.
Operational
Order No. 3
3 Sept. 1943.

distribution outside the limit of their respective controls. In the case of Middle East Command, control ended where N.A.C.A.F.'s began, namely, along the Tripoli-Tunisia border. From just before, and at the commencement of, Operation Avalanche, the eastern boundary of N.A.C.A.F.'s operational area ran from this Tripoli border roughly Northeast, as far as 34° N. Latitude, then due north to the latitude of Licata (in southern Sicily), due east to the port of Licata itself, across the island to Cape Orlando on the north coast, due north to 40° North, then due west to meridian 14° and, finally, due north, to where it struck the Italian mainland northwest of Naples.

Coastal and Tactical Air Force Zones

Ibid

Generally speaking, Coastal Air Force was to provide air protection to the expedition and follow-up operations so long as they lay within the geographical limits true for the period. Their brief included the protection of all shipping in the Mediterranean within the zone of operations, air/sea rescues, reconnaissance and attacks on enemy surface forces and sea communications within striking range of North Africa, the two latter tasks being allotted to the A.O.C., No. 242 Group R.A.F. Responsibility for all other tasks was broken down into groups and sectors, whose commanding officers were to exercise a degree of autonomous authority. The ubiquitous anti-submarine watch, for example, was to be shared by two formations, one a Combined Operations Room at Algiers and the other the A.O.C., No. 242 Group, working west and east respectively of Cape Negro, on the north coast of Tunisia.

East of the line given above as the frontier of the Coastal Zone, for the purposes of Avalanche, the Tactical Air Force took over the responsibility for the protection of every kind of shipping, sub-dividing the work between XII Air Support Command, who was to operate on a sea radius of 40 miles from Salerno itself, and the Desert Air Force outside that radius to within 40 miles of the north coast of Sicily, always, of course, east of the Coastal border line.

N.A.T.A.F.
Operation
Instruction
No. 133
26 Aug. 1943.
and Outline
Air Plan
Operation
Avalanche.

Fighter Protection of Convoys and Assault Areas

Having dealt with the geographical division of control and command up to the event, it must now be considered how the plan provided for change-over, as the landing became imminent and took place. At last light on D - 1 Day, Coastal Air Force, which had till then protected the assault convoys, was to hand over this task to Tactical Air Force, keeping the Naval authorities concerned in the full picture and making sure there was no break in the continuity of cover. Whereas time was the key to the change-over in this case, geographical radius would apply to follow-up convoys; thus, in these cases, Coastal was to relinquish guard to Tactical Air Force at a point 40 miles from Naples. Arrivals of convoys were to be timed for daylight at this point; departures so that they were still in darkness when they reached a point 40 miles off the Italian coast. All this was liable to improvement, as soon as the Straits of Messina were useable.

/The Naples

The Naples Area

Ibid

All fighter and fighter bomber units of T.A.F. in the initial phase were to be controlled by the Commanding General XII A.S.C., under the direction of A.O.C., T.A.F., and in collaboration and co-ordination with the Naval Commander as far as carrier-borne fighter operations were involved. Should Seafires land on shore, they were to come automatically within the control of the C.G., XII A.S.C., until flown back to Sicily (or their parent carrier). As for the three Groups of Lightning fighters lent by Strategic Air Force for the occasion, they were to come, shortly before the operation, under the operational control of the C.G., XII A.S.C. Tactical Air Force was to control any operations by its own bombers. Headquarters XII A.S.C. were to become immediately mobile, bifurcating into firstly an Advanced Echelon, on board ship with the Assault Forces and destined to become Italy-based as soon as possible; and, secondly, a Rear Echelon of problematic life-span in Sicily.

Air Defence of the Naples Area

Ibid

Another responsibility falling first on T.A.F. and then on Coastal Air Force, was the air defence of the Naples area. As in the case of the Toe region, a rough line 50 miles behind the front line was the boundary, but final consolidation on Italian soil by Coastal Air Force depended largely on the mass forward movement of Tactical Air Force, itself governed by the speed of the army's advance.

Headquarters Ship Personnel

Ibid

It was for Tactical Air Force, again, to organise the highly important disposition and briefing of the small vital core of the Air Staff, functioning as controllers and so-forth, in their bases in the Headquarters and Standby ships; and to lay on special communication systems from ship to shore, as well as from ship to ship.

Control of Bomber Operations

In its capacity as directing cell, Tactical Air Force was to control the co-operative bombing effort by Strategic Air Force, R.A.F. Middle East and the Ninth U.S. Air Force and issue directives. Special arrangements were laid down for co-ordination of the Middle East effort by a staff at Air Command Post.

Control of Night Fighters and Intruders

Outline Air Plan
Operation
Avalanche and
T.A.F. Operation
Instruction 133
26 Aug. 1943.

Night protection and intrusion control was approached as a problem in two phases, firstly, the approach of the convoys to a point at last light on D - 1 Day, between 35 and 50 miles off the beaches and secondly, thereafter. Two forces at this point of intersection was to come into play. Roughly to seaward, south and west of a line from Carena Point on the island of Capri to Licosa Point - the two tips of the crescentic Gulf of Salerno - and thence due south, was the area in which Coastal Air Force would operate Beaufighters, fitted with Mark VIII A.I. T.A.F. was to provide a protective screen against enemy interference from mainland airfields, by operating Beaufighters, fitted with Mark IV A.I., north and east of the Carena-Licosa line. In both zones protection was to continue until first light.

/Control

Control was to be provided by a flexible system sited for the seaward zone in a specially-fitted L.S.T. and, for the landward zone, by other Seaborne G.C.I.'s.

After the eve of the landings, the night fighter chain of control was to tally with that for the day, with supplementary assistance by No. 242 Group of Coastal Air Force, in the form of a few extra Mark VIII A.I. Beaufighters for the landward air screen round the assault area; the exact measure and scope of the collaboration lay between the A.O.C., No. 242 Group and the Commanding General XII A.S.C. for decision. The whole pattern of night-flying control was to be improved soon after the first Forward Fighter Control was set up on shore, when aircraft could be 'handed' to G.C.I.'s afloat or ashore, as the case might be.

Troop Carrier and Air Transport Operations and their Defence

Ibid

Troop carrying was one of the rare cases of direct Air-Army collaboration before the event, responsibility for the joint task lying between the C.G., Troop Carrier Command and the Airborne Divisional Commander. This joint element was to have two important spokes; among others, one to the A.O.C., T.A.F., with whom fighter cover was to be arranged, and another to the Naval authorities, who were to advise on routing of Air convoys. To facilitate the call forward of transport aircraft and ease problems of fighter cover, the C.G. Troop Carrier Command was, with the A.O.C. No. 216 Group R.A.F. - flying Albemarle - to establish a joint Advanced Control Post alongside H.Q., XII A.S.C., on the same lines as those for Operation Husky.

Timing⁽¹⁾ of the Airborne Operation

Appendices
L/M to
N.A.C.A.F. Op.
Order No. 3.
3 Sept. 1943.

On 7 September the moon was attaining its First Quarter. The leading aircraft of the force of three hundred and ten C.47 Dakota transport aircraft with one hundred and thirty gliders, detailed to drop elements of the 82nd U.S. and 1st Br. Airborne Divisions near Capua airfield, were to pass the markers offshore between 2000 and 2125 hours. Some were to continue to pass over on four successive nights, fifteen minutes later each night. The moon rose during daylight and set at 0010 hours on the night 7/8th and roughly one hour later each successive night. Nautical twilight ended at 2024 hours on 7/8 September and a minute or two earlier night by night. Assuming that the air lift had been completed by 2200 hours, the troops would have a couple of hours of moonlight on the first night to begin grouping, and more as the full operation proceeded. Much as they might wish for longer light, the H Hour given them was a good compromise and could not have been improved on without gravely prejudicing the safety margin demanded by the Navy.

The Administrative Section of the Outline Air Plan for Operation Avalanche

Scope and Complexity

Outline Air Plan
Operation
Avalanche
Part II.

The air planning for the administrative and logistical work for Avalanche, although in some senses less involved than that for the landings in North Africa and Sicily, was /anything

(1) Local time was Time Zone - 2, i.e. two hours ahead of G.M.T. The bearing for astronomical data here given is position $40^{\circ}10'$ North, $14^{\circ}2'$ East.

anything but an easy exercise. Three main factors killed any hope of simplification. One was the fact that the three local bases in the theatre, namely Sicily, N.W. Africa and Middle East, furnishing men, equipment and vehicles for the Air Forces, were far apart and, in the first two cases, still in the last paroxysms of a campaign. The contribution of Middle East to the venture was considerable, as they were primarily responsible for the shipment from Tripoli of X Corps (Br.) for arrival on D Day, as well as a small but essential quota of officers, other ranks and vehicles of the Air Forces; but their responsibilities for build-up finished long before those of their two partners.

The distinctive and apparently unfuseable system of British and American administration constituted a second complication. Then, thirdly, came the influence of the last-hour switch from Operation Buttress to Avalanche. It had been decided to load certain ships as for Buttress with both men (X Corps was included) and vehicles, switching them to Avalanche if it should assume priority. Buttress was to have been essentially a British controlled operation from the Air standpoint, with Desert Air Force playing a prominent role, whereas Avalanche was to be predominantly American, with XII A.S.C. as controlling formations. All this constituted a situation containing all the ingredients of a Quartermaster's hell.

Build-up of Air Forces

To attain the roughly-sketched target of build-up from D Day onwards, involved the transportation of many ancillary units and large quantities of supplies, food, gear, petrol, and so on, from three main sources, namely, the Middle East ports of Tripoli and the Egyptian Delta, from Oran in Algeria and Bizerta in Tunisia, and from Milazzo in Sicily, (as well as from Malta). At a point somewhere in the region of Sicily - Tunisia the three main convoys were to become one, pass round the west and northwest coasts of Sicily and proceed direct to Salerno. Thereafter, by arrangement with O.G. Fifth Army, a ferry service of six Landing Ships Tank between Sicily and the Naples - Salerno area were to ply a non-stop supply service, in aid of the Air Force units. Should this service call for improvement, it was always possible for N.A.T.A.F. and 15th Army Group to bring this about. In the event, as will be related in detail later, the service broke down, causing a minor crisis on the beaches of Salerno.

Supplies

All during the Sicilian campaign, a plan for building up in Sicily and Malta was proceeding, and by the time Avalanche was launched, there were in Sicily sufficient supplies to maintain the entire Tactical Air Force over a minimum of fourteen days of intensive effort. Malta was to furnish items unobtainable in Sicily, such as oxygen in bulk. The next geographical stage was from Sicily to the mainland of Italy: here the target fixed for mainland operations was to provide by the end of the first week for seven days maximum and seven days intensive effort, in that order. Thereafter, intensive effort would be the basis of calculation, and for this a reserve of fourteen days' supplies, including aviation petrol, aviation oil, bombs, oxygen, small arms ammunition and pyrotechnics, was hoped for.

/Long

Ibid

N.A.T.A.F. Report
on Movement and
Supply Aspects
of Operation
Avalanche.
9 Oct. 1943.

Outline
Administrative
Plan.
Operation
Avalanche.

Long Range Tanks and Oxygen

Ibid

There would be no operation at all without the long range tank, to be fitted to Spitfires, Lightnings, Kittyhawks, Warhawks and Invaders. The action of the Air Ministry in sending out the 90-gallon tanks for the Spitfire was resulting in the accumulation of a substantial stock, although, as appeared in the event, none too many. The distribution of tanks was to follow closely the progress of the airfield engineers conditioning newly-captured airfields and opening up new strips in the Messina area. Tanks could only be concentrated in one place, - that is, the spot where they were to be used. Nine hundred Spitfire tanks were therefore collected, first at Gerbini. The Lightnings (then based in N.W. Africa) were covered by a stock of six hundred tanks at Gerbini, to which total they were to contribute by bringing each a couple of empty tanks across when they reported to their Avalanche station at Gerbini, thus lightening the burden on shipping. It was not settled before the Outline Plan was handed over to Tactical Air Force, for detailed planning late in August, exactly how many tanks would be needed at Palermo by Coastal Air Forces for the Kittyhawks and Warhawks, nor by Tactical Air Force for the Invaders now detailed to assault cover.

As for oxygen, after the first week's shipments totalling 29 D/Wt Long Tons, there was plenty of room for improvisation, for although Malta was steadily sending small quantities to Sicily by air, the existing stocks of transit cylinders in N.W. Africa were admittedly low. After the first critical week, Tactical Air Force faced two alternatives, either or both of which must function. Either full cylinders had to go by the Milazzo Ferry to Salerno or a mobile Oxygen Plant had to go by the same route very early in the proceedings.

British Technical Maintenance at Salerno

Ibid

Two Servicing Commandos, with their own 10-day pack-up and night flying equipment, were to land with the assault; each was to service four S.E.F.⁽¹⁾ (Spitfire) Squadrons $\frac{1}{2}$ Tac/R (Spitfire) and $\frac{1}{2}$ T.E.F.⁽²⁾ (N) (Beaufighter) Squadron. Each squadron destined to land in Italy in the initial phase, in two parties, was to carry seven days pack-up with each party. Between them, Servicing Commandos and Squadrons were to carry on until, at the closing days of a fortnight, the first elements of an Advanced Salvage Unit and an Air Stores Park, (the latter bearing a 30 day range of stores) arrived. The Main Air Stores Park would bring in a 30 day range of spares for its squadron charges.

Ibid
A.A.F. in
World War II

The American Air Forces' plan was more wholesale in scope and guaranteed the maximum possible technical supplies just when the need was most pressing, namely, in the early stages - evidence of a caution that paid big dividends in the event. The first Allied unit of appreciable dimension to be flown in was to be a Group - that is, three squadrons - of U.S. Spitfires, followed closely, as already related, /by U.S.

(1) Single-engined fighter.

(2) Twin-engined fighter.

by U.S. Reconnaissance Mustangs, a Group of U.S. Warhawks and two Groups of Invaders. With the combat echelon was to fly in the air echelon of each Group, carrying a 3 day level of technical supplies and accompanied by a few members of Group H.Q., About the same time, others would be moving in by sea, (probably with the assault), in advance of the main party and including the ground echelon of one Squadron, with a 10 day level of supplies, to be spread over the whole group. With this party was to sail the rest of H.Q. staff. By a later convoy - it was not specified which - the ground echelons of the balance of each Group were to relieve matters by bringing 10 more days Group supplies. The half Reconnaissance Squadrons due in Italy at an early stage, were to take half of their air echelons with them with 3 days supplies, and, at the same time, the other half was to land with the assault with a 10 day level. A series of Service Groups were to embark, each in three echelons, from Sicily under T.A.F.'s arrangements, each carrying a 30 day level of supplies. In addition, an entire Air Depot Group was to move in from N.W. Africa.

Movements of Personnel

Ibid

Air Force units converging on Salerno were to pass through three main conduits. Firstly, from Sicily, where a N.A.T.A.F. Ferry Control was to watch Air interests at Milazzo and fill the six L.S.T's provided by Fifth Army. Some hint of uneasy premonitions may be read between the lines of the Outline Plan, where allowance is made for future 'revelations', during the detailed planning, for the need for more shipping as well as for the function of the C.G. 15th Army Group as the addressee of any such demands. N.A.A.F. and R.A.F. H.Q., Middle East were to see to shipping requirements, the preparation and embarkation of units from their own areas.

Movements of Vehicles, Equipment and Supplies

Ibid

Each of the three major bases was to see that all vehicles due to arrive in Italy during the first 13 days were waterproof, a very necessary precaution taken on the basis of bitter experience in previous amphibious undertakings. Every available cubic inch of space in vehicles was to be taken up with petrol, either in the vehicles' own tanks or in returnable tanks. Systems of marking were sufficient in scope to suggest to those responsible for detailed planning, the need for easy recognition of the unit, the nationality (British or U.S.) and contents, without giving away their function or destination.

Ibid

Airfield Repair and Construction

It must be borne in mind that the limits of the British and American landing areas on Salerno beaches were 10 miles apart. Each national Corps, therefore, was to make its own arrangements for rendering standing airfields serviceable and laying any strips required. The elements of a British Aerodrome Construction Company were to go in with the assault and bring Monte Corvino into working condition as soon as it was captured. South of the Sele River, in the area of U.S. VI Corps, two companies of American Aviation Engineers were to go in with the assault and get to work with bulldozers and so forth, laying strips for fighters in the Paestum area, in the vicinity of the ancient Greek temple. It was possible that we might break the crust of the German resistance early

/on and

on and that our impetus might carry us up to the much-coveted airfields in the Naples area already named, in which case their consolidation might become a military strategic task bearing heavily on the whole situation and one of the highest priority.

Balloon Defences

Ibid

This arm of defence, steadily developing along its own lines through the campaigns of North Africa and Sicily, was to form an integral part of the Allied system, both in the process of consolidating the bridgehead, for which period it was planned for Beach Balloon Detachments to go in with the assault; and later, when Naples was in our hands and functioning, when a Port Balloon Detachment was to sail in to improve the defences of the port against air attack. The pattern of the formations was lifted bodily from the Husky Operations, which in turn had collected much valuable data from the pioneer work of these detachments during the North African campaigns.

Airfields Defence

Ibid

All defence of airfields against ground attack, as well as heavy and some light anti-aircraft defences was to be entrusted to the American and British Army forces, whereas the light class of anti-aircraft defence was to be handled by units of the R.A.F. Regiment. In details of armament this meant that on any given airfield in the Naples/Salerno area, two light A.A. Squadrons of the Regiment were to go in with the assault and set up 20 mm guns, which were to be supplemented by light calibre A.A. guns from American Army sources. Heavy and 40 mm A.A. guns were to be mounted and manned by British and U.S. Army Units. Co-ordination vertically between Fifth Army and X Corps (Br.) and horizontally by the two Corps working side by side on the beaches ensured smooth and speedy allocation of the A.A. units. Until A.A. guns were established in strength adequate for good defence, no aircraft were to be flown on to the airfields.

Administration during the initial Stages

Ibid

Under this heading some few of the arrangements were correlated with lessons learnt from Husky. Largely because of the lack of time available, it is by and large true that many lessons learnt were not codified by the various service commands in time for general dissemination. It is possible to point at any rate to one case of direct application by the Air Planners of conclusions rapidly made and acted on.

Report by G/Capt.
V.B. Bennett
H.M.S. Bulolo.
Notes on the
Landings at Acid
& Syracuse
10 - 17 July 1943
Dated
20 July 1943.

Outline Air Plan
Operation
Avalanche.

An R.A.F. Officer sailed on H.M.S. Bulolo, a H.Q. ship detached for the attacks on Acid Beach and Syracuse in Operation Husky. In his report he recommended the posting to H.Q. ships of a Senior G.D. Officer, among whose duties were to be those of supervising the unloading of R.A.F. personnel and equipment at the beaches and the ensuring of priorities due to them, the answering of questions of policy, generally advising the Army and Navy commanders on Air matters and lastly, ensuring that all the various Air Units ashore functioned properly, and bringing about Army and Navy co-operation, when called for. In principle this recommendation was accepted; the Outline Plan allowed for

/a N.A.T.A.F.

a N.A.T.A.F. Administrative Officer both aboard H.Q. ships and ashore. The traditional use of code names applied again now on an unparalleled scale. These were to be used in all communications connected with planning or mounting. Only in orders and instructions were places referred to in clear.

The Outline Air Signals Plan

The Importance of Radar

Outline Air
Signals Plan.
Operation
Avalanche

In view of the great material hazards confronting the planners, every available refinement of science were needed, not only to provide communications for controlling fighters and bombers, and for linking vital operational units, but to give Radar cover over convoys, beaches and assault troops ashore. Progress in Radar development had not been uniform in the three services, hence the awkward differences between the Very High Frequency Radio Telephones of the Air Forces based in Sicily and the High Frequency sets used by the Carrier Force. The effective range of Radar was fairly limited in those days, hence no V.H.F. link between Sicily and the sea-borne fighter control. A further limiting factor arose from the fact that Salerno Bay was surrounded on all sides by hills. Radar cover from landwards, from which direction enemy fighter attacks were certain to come, would not be good, although to seawards it should function well enough. The operation involved among other difficult tasks, the thankless one of destroying the Axis Radar installations on Ventotene Island and installing an Allied one later.

The Assault Phase

Ibid

The planners saw the problem of communications mapped in three phases of time, namely, periods of the assault, the occupation of landing grounds and consolidation. In the assault phase, Radar information was to be obtained from warships, sea-borne Ground Control Interception Units⁽¹⁾ and Track Broadcasts from Sicily. All Radar cover was to be by sea-borne G.C.I.'s and extensive plotting communications between warships and the H.Q. ship were essential. The gulf between Sicily and the H.Q. and fighter direction ships must be bridged by two low power W/T channels linking up the net in the gaps between the respective ranges of the sets at either end of the line.

Control off the beaches resembled the pattern adopted for Husky. One ship - U.S.S. Ancon - was to control shore-based fighters and another - H.M.S. Ulster Queen - carrier-borne fighters. Both had stand-bys. Of these two ships, Ancon was primary and co-ordinating, a function made feasible by personal liaison between her and Ulster Queen. A heavy load was placed on the Ancon, (which was later to be the subject matter of pointed criticism) inasmuch as it carried H.Q.s of service commands, (including the C.G. XII A.S.C.) all needing their personal system of communications. Track Broadcasts from Radar Units in Sicily on movements of enemy aircraft over the Tyrrhenian Sea had to be provided, to give early warnings to the controllers on shipboard. In addition, night fighter control from U.S.S. Ancon was to feed aircraft to seaborne G.C.I.'s for the final stages of interception. The normal Fleet Air Arm channels for control of Seafires were only High Frequency.

/The Landing

(1) Usually referred as G.C.I.'s.

The Landing Ground Occupation Phase

Ibid

A critical moment in early operations would come when aircraft began to operate from Italian land bases, a moment for which, if full advantage was to be reaped, machinery must be already shipped and in working order. The plan therefore provided for the progressive stages of a hand-over of cover control from sea to shore, by landing on D Day of sufficient Signals Units, to function on shore, as well as to complete the triangle whose two other points were to be the rear echelons in Sicily and the seaborne controls. These Units were destined to take over from U.S.S. Ancon, whose movements were also to be governed by Fleet movements and the general naval situation. So long as the seaborne G.C.I's were in action, the Air Controllers were to stand in the same relation to the Captain of the ship as owner to master. Sicily Radar Units were to begin their migration to Italy with a token advanced force; establishment of a headquarters communication system (essential to all concerned - in particular to C.G. XII A.S.C. Advance Post in Italy) - was to be followed by the assumption by these Units of the control functions so far performed by U.S.S. Ancon.

It was possible that the speed of the advance would leave the advanced Radar Unit anchored to the beaches. In that case, mobile Fighter Control Units were to push on with the squadrons. All these tasks were covered at key points, such as in the Air Force components of British and American Bricks, by Signals personnel. Telephone landlines, the linking of Radar Units, Stations and airfields, homing facilities and similar needs, were to be covered by the appointment to each airfield - British or American - of an Advanced Landing Ground Signals Unit.

The Phase of Consolidation

Ibid

This phase would be notable for the gradual landing and installing of a greater variety of equipment, including Chain Home Low Radar Stations (for Overseas use), Mobile Radio Units, Light Warning Sets and so forth. When Naples fell, Mobile Operations Room Units for G.C.I's and Mobile Air-raid Reporting Units to cover the defence of the port were to enter the field. While flexible enough to provide for rapid progress or setbacks, the system envisaged the maximum possible efficiency; and provision for very large quantities of equipment and staff was laid down, involving the assumption of control by larger and still larger units up to Signals Wing H.Q's.

the 1990s, the number of people in the United States who are 65 years of age or older is projected to increase from 20 million to 35 million, and the number of people 75 years of age or older is projected to increase from 10 million to 17 million (U.S. Census Bureau, 1996).

1. The first of these is the fact that the
2. Government has not been able to secure
3. the necessary funds to carry out its
4. policy of non-interference in the
5. internal affairs of the country.
6. The second is the fact that the
7. Government has not been able to secure
8. the necessary funds to carry out its
9. policy of non-interference in the
10. internal affairs of the country.

1. The first of these is the fact that the
2. Government has been unable to secure the
3. necessary funds to carry out its policy.
4. This is due to the fact that the
5. Government has been unable to secure the
6. necessary funds to carry out its policy.
7. This is due to the fact that the
8. Government has been unable to secure the
9. necessary funds to carry out its policy.
10. This is due to the fact that the
11. Government has been unable to secure the
12. necessary funds to carry out its policy.

1. The first part of the document is a letter from the President of the United States to the Congress, dated January 3, 1862. It is a very long letter, and it contains a great deal of information about the state of the country at that time. It is a very important document, and it is one of the most interesting documents in the collection.

SECRET

- 57 -

CHAPTER 2

THE SITUATION IN THE MEDITERRANEAN ON THE FALL
OF SICILY

THE ITALIAN ARMISTICE

Preliminaries

Minutes of
Quebec
Conference
Aug. 1943
J.P. (43)99
(Final)
War Cabinet
3 May 1943.

The Prelude to Surrender

It had been made clear by the attitude of the major part of the Italian forces in Sicily that their earlier aggressive attitude had changed to defeatism. The words used by the Joint Planners in May 1943 summed up the Italian attitude succinctly.

"In Italy the Army and the population will be sick of the war and only anxious to get back to normal conditions. They will generally be favourably disposed to us and bitterly resentful towards any Germans who may remain in the country."

The general feeling that a climax was approaching received confirmation when, on 25 July, Mussolini was forced to resign and, a day later, the Fascist Party was dissolved. President Roosevelt delivered a broadcast two days later, offering honourable terms to the Italians if they capitulated. This was followed by broadcasts from North-West Africa by the Supreme Commander, in the same tone. A sharp reminder from the same source on 31 July warned the Italians that heavier air bombardments were to follow if they dallied. The Germans meanwhile were losing no time. On 1 August they disarmed the Italian troops in Crete and, as time proceeded, took over many key points throughout the Axis zone of the Mediterranean theatre.

C.Z. 2314
5 Aug. 1943.

O.O.S. (43)296(0)
7 June 1943 and
D.C. (43)40
28 June 1943.

Although as late as 5 August a stage had not yet been reached when decisions could be taken regarding the strategy to be pursued if Italy collapsed, preparedness for her surrender had already reached a degree of maturity by 7 June, when a Draft of Surrender Terms for Italy and a Draft Declaration and Proclamation were prepared by the Chiefs of Staff Committee for consideration by the British Defence Committee. By the time the negotiations came to a head, discussion was proceeding on the basis of two documents, one a short instrument containing military terms only, the other a comprehensive document of surrender, containing military, political, financial and economic terms.

The Final Air Phase of the War against the Italians

Operations
Record Book
N.A.T.A.F.
Aug. 1943.

From the date of the fall of Sicily up to the end of August, the Allied Air Forces carried out an extensive programme in Southern Italy, aimed at isolating and softening-up the Toe and Heel, as well as driving back the enemy air force to the next possible group of air bases in the Salerno and Taranto areas. Thereafter, operations followed the plan laid down in preparation for the Salerno landings.

/Open

Open Cities

Welfare No.10
(N.O.C.O.P.)
8 Aug. 1943.

Extract of
Defence Comtte.
(Ops.)(7th Mtg.)
2 Aug. 1943.
113th Conclsn.
of War Cabinet
Mtg. 9 Aug. 1943.

J.S.M. 1117
2 Aug. 1943.

An agreement had been reached, at some date before 8 August, between the Prime Minister and the President, that they should discuss the question of open cities when an opportunity presented itself. Mr. Churchill's view was that the war, in concert with our American Allies, should be carried forward against Italy to the best of our ability; hence Bomber Command was to continue its programme of air raids against Northern Italian towns. There had always been one reservation, namely, that Vatican City and sacred monuments were to be safeguarded. When on the downfall of Mussolini the new Government announced that the War was to continue, this attitude persisted.

In the meantime the Vatican had approached the U.S. Government, (not the British Government) proposing that Rome should be declared an open city. General Marshall sent a message to General Eisenhower asking on what terms this could be arranged and instructing him to refrain from bombing Rome proper, although airfields in the vicinity might be attacked; the U.S. Chiefs of Staff and the Combined Chiefs of Staff had confirmed their agreement. The reaction by the Defence Committee (Operations) to this independent action by the Combined Chiefs of Staff without prior consultation was emphatic and in complete disagreement. Such a proposition would not be entertained, as it would be inconsistent with recent speeches by the heads of the British and U.S. Governments. General Eisenhower's previously conceived plan for bombing military targets in the vicinity of Rome should be carried out and General Marshall's instruction to General Eisenhower immediately rescinded. The Prime Minister supported this expression of his Government's attitude in a personal message to the President.

Rome declared an Open City

F.A.N. 191
14 Aug. 1943.

F.A.N. 194.
15 Aug. 1943.

Concrete 221.
15 Aug. 1943.

Welfare 306.
22 Aug. 1943.

The day following the second raid, that is on 14 August,⁽¹⁾ the Italians declared Rome an open city. The Combined Chiefs of Staff sitting at Quebec felt that time was needed for the submission of full reports on the attack and for clarification of the general tense situation. They therefore imposed the standstill on Rome raids, as well as on any statements as to Allied policy regarding the Italian Government's move. The following day, the standstill order was revoked and General Eisenhower was given a free hand, subject to existing limitations touching Vatican safety.

Even if the Allies should consider accepting Badoglio's unilateral declaration, complete demilitarisation of a zone within a radius of three miles from the Palazzo Venezia had to be a pre-requisite. Such action could never be effectively carried out by the Italians, so long as the Germans held the region; also, even if Rome were in our hands, would it not be an undue handicap on our own need for such a city, with all its facilities as a military base? Concerned as the U.S. Government had shown itself to be, it supported the attitude of the British Government and the

/Combined

(1) Details of the first two raids on the Rome marshalling yards are given in Chapter 3 Page No. 76.

Prisec 190.
25 Aug. 1943.

Combined Chiefs of Staff and refrained from assuming any commitment whatsoever beyond accepted decisions; nothing was to be done to prejudice the situation now developing.

The Italian Emissaries

Allied Strategy
Chap. I
Br. Hist. Sect.
Central Med.
AHB/II.J.11/58/1

While the Quebec Conference was in session, a message arrived that on 15 August a General Castellano had presented himself, with a companion, at the British Embassy in Madrid. Leaving Rome on a pretext and under an assumed name, he claimed before Sir Samuel Hoare, the British Ambassador to Spain, that as the official representative of Marshal Badoglio he wished to declare that when the Allies landed on the mainland of Italy, that country was prepared to join them in the fight against Germany. Should the Allies express agreement in principle with his proposal, unconditional surrender would be accepted as a basis for settlement but only so long as Italy could join the Allies. In any case she was powerless to act unless the Allies landed on the mainland. In addition he would immediately give detailed information on the German Order of Battle.

Reactions at Quebec

O.C.S. 311
17 Aug. and
F.A.N. 195
17 Aug. 1943.

This situation was reported to the Prime Minister and President. The O.C.S. signalled General Eisenhower, instructing him to send two Staff Officers, (General Bedell Smith, the C.O.S. at A.F.H.Q., and Brigadier Strong, Head of Intelligence) to meet the Italian emissaries at Lisbon. The Prime Minister was in favour of warning the Italians that they would be judged by their deeds alone in the succeeding days. We were prepared to call off our bombing if they would act promptly and to good effect. This bombing of North Italian cities grew between the nights of 7 to 16 August to a crescendo. The attacks on Milan and Turin were officially described as "devastating" by the Air Ministry, and local observers at the time commented in the neutral press on the appalling misery and tragic migrations resulting; others noted the cessation of democratic pro-Ally demonstrations.

O.C.S. (0)
13th Mtg.
15 Aug. 1943.

Concrete 378
19 Aug. 1943.

Quoted in
Strabolgi's
"The Conquest
of Italy."

O.C.S. (0)
13th Mtg.
Quebec,
16 Aug. 1943.

The Prime Minister considered it inadvisable to precipitate the fall of the Badoglio Government, for fear of chaos and anarchy in Italy and this consideration governed the Allies' strategy for some time to come. It may be that the Allied reading of the portent of the Anti-Fascist struggles of the newly-liberated democratic movement was incorrect; it is indeed hard to see what the Italian people could have done with the dead weight of the mixed Fascist-cum-Right Badoglio Ministries in control. One of the most distinguished and liberal-minded of the Italian exiles commented pointedly that "now when they show that twenty years' suffocation has not destroyed their souls, they are told, 'we must avoid chaos and anarchy'. They must make omelettes without breaking eggs". Undoubtedly the Allied attitude throughout all stages leading up to the signing of the Armistice had immediate and lasting effects on the actual quality of Italian co-operation.

Prof. Gaetano
Salvemini.

O.C.S. (0) 13th
Mtg. Quebec.
16 Aug. 1943.

The Chiefs of Staff at Quebec were less concerned with the political angle than the military one. They saw the advantages which the carefully-timed simultaneous announcement of an armistice offered in the way of surprise:
/they

Report by J.P.S.
after discussion
with Representa-
tives of A.F.H.Q.
Quebec.
16 Aug. 1943.

they saw, too, that the Italians could give us valuable data on German dispositions and important targets for air attack. They know already from General Castellano that contemporary German intentions were to fight on the Pisa-Ravenna line.

First Discussions with the Italian Emissaries

Meanwhile, time was short. The Italian emissaries had to leave Lisbon on the night of the 20th of that month; General Smith and Brigadier Strong took with them the Armistice Terms. Progress was made but no final decision reached in Lisbon. Castellano left by overland route, promising to present to his Government the Allied terms and emphasising both his country's intense fear and hatred of the Germans and their complete willingness to co-operate, if they had a reasonable assurance of protection and support. If Italy was not to be an ally, there was a chance that she might become a collaborator.

New Emissaries

O.O.S. 847/3.
24 Aug. 1943.
N.A.F. 342
28 Aug. 1943
Allied Strategy
Br. Hist. Sect./CM
AHB/II J.11/58/1

On his return to Italy early on 27 August, Castellano reported to his colleagues. General Roatta, Chief of Army Staff (who, said General Castellano at Lisbon, had not till then been taken into the confidence of the Badoglio Government), came into possession of the facts at some time. A few days later his chief assistant, General Zanussi, together with the British General Carton de Wiart, (released from captivity as a token of good faith), arrived in Lisbon. There was some well-justified apprehension on the Allied side as to the danger of the whole plan being prejudiced or deferred until too late. Zanussi, after having been presented with the terms of the comprehensive surrender instrument was flown to Algiers for further questioning.

Decision to employ Short Instrument of Surrender

Ibid

So far, all details of Allied plans and the planned strength of the forces engaged had been studiously withheld from the Italians. The Combined Chiefs of Staff impressed on General Eisenhower the desirability of the Armistice being signed on the full terms. He decided to apply the Short Term instrument. The next meeting between General Smith and General Castellano accompanied by General Zanussi was on 31 August at Cassibile in Sicily; General Alexander, Admiral Cunningham, Air Marshal Tedder and General Mark Clark were also present. Castellano, obsessed with the fear that the Germans were strong enough to seize the whole country, pleaded that we should reveal our intentions, or if we could not do that, at least assure him that the landing would be made North of Rome and in strength not less than fifteen divisions. He even seemed to think that we could land a force of that size in the Leghorn area. It was impossible to show our hand; the bluff must be played out. To allay Italian fears, an offer was made to fly the 82nd Airborne Division into the Rome area. General Eisenhower agreed to this plan the next day and the President and Prime Minister approved the same night the decision to go on with Avalanche and land the airborne division near Rome.

Allied Airborne Agent sent to Rome

Ibid

It was decided that we must have first-hand knowledge of the actual local situation before a final decision on its launching could be taken. It was decided therefore to send

/Brigadier

Brigadier-General Taylor⁽¹⁾ and Colonel W.T. Gardiner to Rome to report from there the chances of success; Taylor was instructed, if he decided against the operation, to include the codeword Innocuous in his signal. They sailed in a British motor torpedo boat on 7 September from Palermo and transferred off Ustica Island to a light Italian naval craft which took them to Rome.

The Plan for Airborne Operations in the Rome Area⁽²⁾

The Plan essential to the Signing of the Armistice

Conquest of
Southern Italy.
Allied Strategy
Br. Hist. Sect.
Central Med.

It appeared unlikely that an Armistice would be signed unless the Allies undertook to give some measure of support to the Italian Divisions in the Rome area and to rescue those members of that Government responsible for the official transfer of Italian allegiance. Essential conditions were that Italians seized and held the necessary airfields, stopped all A.A. fire and that the Italian Divisions in the Rome area took action against the Germans. It was a gamble and entailed the withdrawal of the plan to drop the 82nd U.S. Airborne Division (based at Kairouan) in the Volturno country in support of Avalanche, but was justifiable as likely to lead to disruption of German troop movements at a critical hour, and to just tip the scales in favour of the Italian capitulation. Although this Air plan was not carried out in the event, it must be recorded and borne in mind, for both its hasty forging and its last-minute cancellation undoubtedly played a part in the unfavourable developments in the initial phase at Salerno.

N.A.F. 359
6 Sept. 1943.

Task and Intentions

The initial Italian contribution was to be the preparation of the airfields of Guidona, Littorio, Cerveteri and Furbara and their protection while the first echelons of the Airborne Division arrived. This was to be from 2130 hrs. British Time on 8 September. If the situation was favourable, the strength of the Airborne troops was to be built up on succeeding nights; ammunition, supplies and heavy weapons were to be sent up the Tiber from a beachhead at Ostia, by landing craft.

LAPD/LM 90
Co5MA9
6 Sept. 1943.
N.A.F. 359
6 Sept. 1943.

Air Preparations

N.A.T.A.F.
Operation
Instruction
No. 138
8 Sept. 1943.

By 8 September, considerable detail had been planned and circularised. Fighter Squadrons were to be flown in to assist in the defence of Rome and the airborne forces, as well as to support the Salerno landings and cover convoys approaching and ascending the Tiber River. They were to be initially administered to a large extent by the Italians; 100 per cent octane aviation fuel was promised from the same sources. There might even be a ready-made fighter defence organisation in situ. These tentative assumptions reduced the commitment of ground personnel and equipment in the early phases to a minimum.

/Forces

(1) Later famous as the defender of Bastogne in December 1944.

(2) Operation Giant.

Forces and Command

Ibid

As it was unlikely that efficient contact between the forces at Rome and in the beachhead could be established for a period, local control of the Rome Air Force Units was to lie in the hands of Colonel Momeyer, C.O. No.33 Fighter Group (U.S.). This Group operated Warhawks; the remainder of the protecting force consisted of a Squadron of British Spitfires (transferred from D.A.F. to XII A.S.C. for the occasion); Colonel Momeyer, although under the command of the C.G., XII A.S.C., was to exercise autonomous authority so long as his force remained in tactical isolation. An unusual situation was likely to arise if the Italian Air Force carried out the promise of co-operation to the letter. In such case Colonel Momeyer was to exercise his authority in limiting their activities to the defence of their capital and of the ground and naval forces in the area.

The Armistice

Signature of the Armistice

Ibid

Castellano returned to Rome. The terms were accepted and signed at Cassibile at 1715 hours on 3 September. These military terms are given in extenso at Appendix 6. The points immediately affecting the Air Forces were the immediate cessation of hostilities, transfer of Italian aircraft to Allied bases and a degree of disarmament; guarantee of the free use by the Allies of all airfields in Italian territory, which were to be protected by Italian Armed Forces until taken over; the withdrawal to Italy of all forces overseas, demobilisation and demilitarisation. The Armistice was to be announced by the Allies and Badoglio simultaneously at 1815 hours 8 September. Approximately one hour later, the Italians were to stage an incident and, as an apparent result of this, were to call on their nation to rise and assist in throwing the Germans out of Italy, to co-operate by strikes and sabotage and generally help the Allies. The A.O.C.-in-C foresaw 'a dog's breakfast of a mess, with', it was hoped, 'the advantage to the Allies'.

L.A.P.O./L.M. 90
C.O.5 M.A.9
6 Sept. 1943.
Allied Strategy
Br. Hist. Sect.
C. Med.

Repercussions among the Allied Planners

Ibid

In the meantime, a decision was made to adhere to the principle that, with the exception of the diversion of the 82nd Airborne Division from the Volturno Valley to Rome, the main effort against Salerno was in no wise to be weakened. Plans were drawn up for acceptance of the surrender of the Italian Fleet, merchant shipping and aircraft. The Air Planners were now obliged to insert between the lines of their arrangements for Salerno the careful routing of surrendered aircraft. On 7 September, the Commander-in-Chief moved to his Command Post near Tunis, where he was now in close touch with Air Marshal Tedder at La Marsa Command Post, so improving co-ordination at a critical juncture. Security was not the least of the issues involved. Everyone concerned had been warned as to the paramount need for secrecy. Preliminary orders to A.A. gunners, issued as to care in firing on Italian aircraft in case they might prove friendly, naturally gave rise to local speculation. So long as conjectures were not shared with the public, or committed to paper, no harm need result.

N.A.F. 355
6 Sept. 1943.

/Air

N.A.T.A.F. Op.
Instruction
No. 137, and
Administration
Instruction No. 2
7 Sept. 1943.

Air Plans for Reception of Italian Air Force

Item 4 of the Short Instrument of Surrender provided for the transfer of Italian aircraft to points designated by the Commander-in-Chief. These points were specified airfields in Sicily, Libya, Cyrenaica, Cyprus and Sicily. Aircraft, probably in small groups, could be expected to land on the fields of Comiso, Ponte Olivo, Gela, Milo, Sciacca, Castelvetro, Licata, Pachino and Biscari in Italy, (all crowded except the last two); at Derna in Cyrenaica, El Adem and Tobruk (seaplanes only) in Libya, and at Nicosia in Cyprus, any time after noon on 8 September. The crews must first be correctly routed, then administered on reception.

The Routing Problem

Ibid

A rectangular area covering the air battle zone had to be prohibited to all but Allied aircraft, an area extensive enough to preclude accidental encounter or faulty recognition. Italian crews leaving Italy were warned to avoid the area, whose boundaries were, on the north - 41° North, on the west - 14° East, on the East $16^{\circ}30'$ East and on the South - $37^{\circ}10'$ North. Should they be initially stationed within this area, they would have to make their way by the shortest route to the Eastern boundary, before turning South and then, (as reference to the map will demonstrate), flying from seawards on a North-South bearing between Palermo and 14° East. It was fair to assume that the majority would arrive during daylight hours; but in some cases departure might be in the nature of hazardous escape, so that one airfield - Castelvetro - promised restricted night facilities. In any case, night-flying Italian aircraft were to burn full normal navigational lights over Sicily.

Identification of Italian Aircraft

Ibid

The problem of identification was eased to some extent by strict rules relating to flying heights. No chances were to be taken within the prohibited zone and everything there was to be intercepted. Friendly Italian aircraft approaching Italy should, if they obeyed instructions, be seen or picked up between heights of 500-1,000 metres; as they approached the Allied airfields, 500 feet was to become the maximum flying height and one full left hand circuit of the airfield, with undercarriage down, was to be made before landing.

Precautions

As for the intentions of Italians generally, these were to be assumed as doubtful until it was known for certain that Italy intended to carry out her part of the bargain. There was a minimum likelihood of air attacks developing against Allied targets in Sicily, but in view of the attacks by Italian aircraft against our forces landing at Reggio and other considerations, care was to be exercised and risks accepted. In these matters, very close liaison with A.A. Commanders was essential, and Fighter Controllers and Radar Units were to be warned, but this marked the limit of Air personnel to be let into the picture. Appropriate Army H.Q.'s, including those along the Egyptian, Libyan and Cyrenaican littoral, were naturally informed, for their co-operation was necessary from the moment the surrendering forces landed.

/Treatment

Treatment of Italian Personnel

Signal O/06640/
1910 from M.E.
7 Sept. 1943.

Signal CC/300/
13733 to
Air Min. for
C.O.S.
13 Sept. 1943.

The status of these personnel was, according to M.E., H.Q., pending the unfolding of the longterm policy, that of prisoner-of-war. In the Middle East theatre, all Italians arriving west of Tobruk were to be speedily routed to El Adem landing ground, for interrogation and onward transit. There were, at the time, some differences in the construction placed on the situation, for on 13 September the C.-in-C., M.E., asked urgently for a directive on this subject; should they be treated as prisoners-of-war, internees or Allies? The local position was that instructions had been received by the R.A.F., M.E. from M.A.C. not to treat the Italians as prisoners-of-war for the time being, but to disarm and segregate them in prisoner of war camps, with restrictions on movements, but extra amenities to encourage them.

In Sicily, similar steps were taken by the C.G., III Air Service Area Command to house and feed the incoming aircrews, as well as any passengers, who might include civilians; no risks were to be taken by the M/T parties meeting the guests, for the latter would be fully armed. It was only possible to check the final agreement to the Armistice by the Italians by listening-in to both Rome and Algiers broadcasts on the evening of 8 September.

Initial Axis Broadcasts

A.M.W.I.S.
No. 211
18 Sept. 1943.

During the day of 8 September, Italian broadcasts had given no hint of what was coming. The customary line of defiant determination, mingled with assertions of Italy's importance in the European scheme of things, was pursued. At about mid-day, a German agency declared that it was rumoured that Churchill was awaiting, in Roosevelt's company, the surrender of Italy and that they might as well wait for Father Christmas. Only 45 minutes before Badoglio's Proclamation was made, a broadcast in Arabic gave it out that the Italians were resolved to fight to the bitter end and that enemy propaganda to the contrary was untrue.

Italian Attempt to Retract

Allied Strategy
Br.Hist.Sect.
Central Med.
Letter from
Maj.Gen.Maxwell
Taylor to
Mr. Saunders
(A.H.B.(Hist.))
15 July 1943

The day of 8 September was a memorable and anxious one at A.F.H.Q. During the Commanders'-in-Chief Conference a message from Marshal Badoglio, which threatened to dislocate the invasion plans, was handed to General Eisenhower. Because of the presence of strong German forces in the vicinity of Rome, Badoglio could not guarantee the three airfields on which the 82nd Airborne Division was scheduled to land. This operation should therefore not be attempted. This was not nearly so serious as the opening phrases of the signal, which were to the effect that he could not now accept an immediate armistice.

N.A.F.388
8 Sept. 1943.

The reply to this message blended skilfully menace with an appeal to good faith.

"I intend to broadcast the existence of the armistice at the hour originally planned. If you or any part of your Armed Forces fail to co-operate as previously agreed, I will publish to the world the full record of this affair. Today is X Day and I expect you to do your part.

/I do

I do not accept your message of this morning postponing the Armistice. Your accredited Representative has signed an agreement with me and the sole hope of Italy is bound up in your adherence to this agreement.

On your earnest representation, the airborne operations are temporarily suspended. You have sufficient troops near Rome to secure the temporary safety of the city but I require full information on which to replan early airborne operations.

Send General Taylor to Bizerta at once by airplane. Notify in advance time of arrival and route of aircraft. Permission is given you to send with him the Sub-Chief of the General Staff as you requested.

Our plans have been made on the assumption that you are acting on good faith and we have been prepared to carry out future operations on that basis. Failure now on your part to carry out the full obligations of the signed agreement will have most serious consequences for your Country. No future action of yours could then restore any confidence whatever in your good faith and consequently the dissolution of your Government and Nation would ensue."

Cancellation of the Rome Airborne Operation

Press and Staff
Conference
Algiers
8 Sept. 1943.

At the same time after the morning conference that Badoglio's message was handed to General Eisenhower, arrived one from Brigadier General Taylor advising against the airborne operation against Rome; the pre-arranged codeword was present. The decision, based more on the obvious unreliability of Badoglio than on the danger from the Germans, was accepted. The version given by General Bedell Smith to a private conference of the Press and Field Censorship that afternoon, at which the author of this narrative was present, gave the reasons for cancellation as the presence of superior German forces. They had, of course, been in the area for some days and no major movement of troops had taken place since the signing of the Short Term instrument on 3 September. It was clear to Brigadier General Taylor and his assistant as they sat in conference at Badoglio's side on the night of 7/8 September that the Italians were still vacillating, and ruled by private fears.

Final Confirmation

Allied Strategy
Br.Hist.Sect.
Central Med.

At 1830 hours General Eisenhower broadcasted his announcement of the Armistice from Algiers, but not a sound came through from Rome. In the meantime, the Allied convoys were in the Tyrrhenian Sea, steaming towards the beaches. Allied H.Q. was anxiously waiting, fearing the worst, when at long last, at 1945 hours, Badoglio came through. It was now too late for the 82nd Airborne Division to operate in the Volturno country that night, but the main effort was to go through.

Flight of the King and Government

Ibid

After Badoglio had made his broadcast announcing unconditional surrender, he and some members of his government fled with the King by car to Pescara and thence by cruiser to Brindisi. They left no orders behind for the defence of Rome, where all was in confusion, and little response was made by

/the Italian

the Italian armed forces or the population to Badoglio's rather vaguely worded broadcast order that whilst ceasing resistance to the Allies, they were to resist "any attacks which might come from another quarter". At the last minute he had decided that he could not honourably order the Italians directly to take military action against the Germans. The result was a disastrous apathy and disorganisation, of which the Germans were quick to take advantage. Although the fleet and air force carried out the surrender terms faithfully, no real resistance was offered by the ground forces and little positive tactical benefit accrued to the Allies. The five divisions in the Rome area surrendered after brief resistance to the German 2nd Parachute Division and the hastily-summoned 3rd Panzer Grenadier Division.

THE OPPOSING FORCES

The Weight of Allied Air Strength

Gen Eisenhower's
Draft Dispatch
and Comments by
H.Q. M.A.A.F.
and N.A.A.F. on
same.

As for the adequacy of the Air Forces for the invasion of Italy, General Eisenhower stated in the draft of his Dispatch on the early months of the campaign that it was anticipated that the air forces would consist of a total of three thousand, six hundred and forty-eight aircraft, of which two hundred and forty-two would be heavy bombers, five hundred and nineteen medium bombers, two hundred and ninety-nine light and dive bombers, two thousand and twelve fighters, four hundred and twelve transports and one hundred and sixty-four Army Co-operation, representing a total reduction of three hundred and twenty aircraft, mostly heavy bombers, compared with those available for the Sicilian Campaign. M.A.A.F. suggested the addition of a statement to the effect that, in view of the strength of the German and Italian Air Forces, consisting of a total of one thousand eight hundred aircraft, which could be expected to oppose us, as well as of our demonstrated operational superiority, this strength was considered adequate. H.Q., M.A.A.F., in considering these totals, found them excessive and preferred a figure, true as available for offensive action, which omitted Coastal Air Force aircraft employed in a defensive role and in overseas operations. By regrouping types and roles, they arrived at the following forces as available at the opening of the Campaign. A total of three thousand, one hundred and twenty-seven aircraft, of which four hundred and sixty-one would be heavy bombers, one hundred and sixty-two medium bombers (night) seven hundred and three medium and light bombers (day), only one thousand three hundred and ninety-five fighters and fighter-bombers and four hundred and six transports. In addition to the named fighter strength one hundred and ten carrier-borne Seafires should be counted in.

Outline Air Plan
Operation
Avalanche

There were several angles from which an estimate of forces available could be viewed. Ultimately, the figures which were to carry most weight historically were the numbers of aircraft actually engaged in the fray. It was, as has been emphasised, difficult, with outside claims pending and the Sicilian Campaign unsettled, to give any cast-iron figures. The Outline Planners had given, as already mentioned, a third estimate of aircraft available, obviously based on the N.A.A.F. total of three thousand, one hundred and twenty-seven given in the preceding paragraph. This round total of two thousand, four hundred and sixty, based on a 75 per cent serviceability ratio, applied to a total of three thousand, two hundred and eighty aircraft, included Units of N.A.A.F., R.A.F., M.E., Ninth U.S.A.F. and R.A.F. Malta, but it did not include the Warhawks, Kittyhawks, Hurribombers and Tank Destroyer Hurricanes of T.A.F.,
/unlikely

unlikely to be employed in the Salerno landings, or any sea reconnaissance, anti-shipping, anti-submarine, photographic reconnaissance aircraft, or carrier-borne Seafires; it did assume that two Groups of B.24s attached to Ninth U.S.A.A.F. - approximately sixty-four aircraft - would be available.⁽¹⁾

General Air Order of Battle

Ibid

Orders of Battle valid as at 1 September, 1943, for N.A.A.F., Malta Air Command and part of M.E. Air Command are given at Appendix 2. They are comprehensive and show the general layout without specifying which Units were detailed for operations. A study of this Appendix with a map of the Central Mediterranean handy will give a broad view of the forces poised on the perimeter of the battle-field. Most of them in the course of time, played some role, direct or indirect, in the events of the Italian Campaign.

Order of Battle for D Day at Salerno

N.A.T.A.F.
Operational
Directive for
Operation
Avalanche No. 1
Appendix B
17 Aug. 1943.

Considering the forces actually expected to be standing in Sicily for operations on D Day at Salerno, one can read from the Provisional Order of Battle for D Day Salerno given at Appendix 3 the lay-out of the main formations. Broadly speaking, the whole of the D.A.F. Units involved were on Catania Plain; so, too, were the T.B.F. Units, some of whom were operating with D.A.F., some with XII A.S.C. The latter was divided between Milazzo, Catania Plain, Cassibili and perhaps Comiso. A few Units were standing by in N. Africa and in M.E.

Commanders of the Air Forces engaged

A chart showing the closely-integrated structure of Anglo-American command at the opening of the Italian Campaign is given at Appendix 1 and should be consulted. This is not merely a collection of names, but a record of a notable team in a vast federal body, composed of two sharply differentiated national groups, successfully blended into one. Some of these names had already shone in notable events. All were, in the course of time, to colour for better or worse the actions of their subordinates and leave traces, clear or faint, on the irreversible record of time.

Fighting Condition of the Allied Air Forces

Ibid

The general level of morale was high. The authority for this statement is not to be sought in files. It was the natural accompaniment of such daring operations, reinforced to some extent by a series of victories. The
/value

(1) A fourth and interesting estimate of serviceable operational aircraft available at 3 Sept. is given in a Loose Minute by Air Plans III of M.A.A.F. in S.5619/AD/10A. These totals are:- two thousand, nine hundred and twenty-two aircraft and three hundred and two gliders. N.A.S.A.F. is quoted as possessing eight hundred and sixty-one aircraft, N.A.T.A.F. nine hundred and seventy-seven, N.A.C.A.F. (including Malta) seven hundred and one, N.A.P.R.W. fifty-five and Troop Carrier Command three hundred and twenty-eight, plus three hundred and two gliders.

value of this high morale was enhanced when placed in relief against almost universal material difficulties which the cordial co-operation of the Americans, with their wealth of supplies, had not by any means eliminated, against the fact that the majority of forces engaged had been absent from their homes for years. While weighing these qualitative factors the general health of the Air Forces must be briefly considered. (1)

Adequacy of the Allied Air Forces for the Task

OZ. 2773
13 Sept. 1943

However great the paper strength of the Air Forces may have appeared at the time, the true situation was reflected in a signal sent by the Chiefs of Staff to Field Marshal Dill in Washington on 13 September 1943, in which the A.O.C.-in-C., is quoted as having said the situation in the Salerno operation was strained and expressed anxiety at the prospect of losing to the U.K. forces one-third of his night bombing (Wellington) strength. The bid for four additional Groups of Flying Fortresses had been made and had failed. No serious crisis had arisen regarding the adequacy of fighter cover, which although in the initial phase subject to serious limitations, appeared capable of meeting any opposition on terms favourable to the Allies. At the close of July, about half-way through the Sicilian Campaign, the Allied Air Forces had been at full stretch for weeks, owing to the slow rate - 15 per cent - of aircrew replacement, it was probable that the effort would gradually decline. The intensity of the closing phases of this campaign did nothing to improve this prospect.

A.C.M.T. 54
26 July 1943.

A.O.C.-in-C.
File 139

A.C.M.T.
19 Sept, 1943.

O.608
12 Aug. 1943.

TQ. 749
6 Sept, 1943.

The night fighter position to be read from a scrutiny of lengthy correspondence between Air Ministry, M.A.C. and M.E., had been tense for some months, owing to competing claims extending as far as India. Apprehension in Mediterranean Air Command proved to have had secure foundations, for by 19 September, (a critical period in the Naples area) the shortage was described as serious. Great efforts had been made, notwithstanding, to prevent such a crisis, and aircraft up to thirty in number sent from as far as Cyprus to fill the gap. The flow of night Beaufighters from the U.K. had been steady, but serious delays in putting them into the air were apparent, owing to the absence of certain essential radar equipment. From the beginning of the campaign, it will be seen, the air forces suffered from imbalance. The flow of Kittyhawks to M.E. had been diverted to N.A.A.F., shipped in the first place to Casablanca. These were some of the internal problems. The ultimate decision as to how far these air forces were adequate for the tasks that beset them can only be made at the end of the Narrative. Numerically, as will be seen by comparison with the picture of the Luftwaffe presented in the next Section, the advantage was definitely on the Allied side.

A.A.F. in World War II. Office of Air Force History U.S.A.F.

The final blow to hopes of an increase in air strength came a few days before the launching of Avalanche, when the theatre was informed that it would receive no more Lightnings until October. Lightnings were in especial demand by N.A.A.F., on account of their value for long range fighter work, serving as bomber and convoy escort, covering assault areas, giving ground co-operation, cutting lines of communication and destroying transport. The loss rate

/(sixty

(1) Refer Appendix 24.

(sixty in August and twenty-four in the week ending 5 September) already exceeded the replacement rate and less than two hundred and fifty were then available. The only noteworthy accession to air resources were three hundred and twenty Waco gliders from U.S. and fifty Horsa from U.K.

The German Air Force in the Mediterranean

Rise and Fall
of the German
Air Force -
(Air Ministry)
and returns by
Abt. 6 of German
Air Ministry.

After the Tunisian Campaign, the Luftwaffe in the Mediterranean had been drastically re-organised, and aircraft strength increased by at least 50 per cent. The same two main geographical commands, each of Luftflotte status, still existed in September 1943, namely Luftflotte 2 in Italy, Sicily, Sardinia, Corsica and part of S. France and the S.E. Command covering Greece, Balkans and Aegean. Notwithstanding this re-organisation, they had failed to reap full advantage of their six weeks respite, notably in Sicily, having been driven, early in the campaign, from the island. The toll paid in combat had been heavy; in addition, they had abandoned on the ground five hundred and eighty-four destroyed and damaged German aircraft, including two hundred and eighty Me. 109s, seventy FW. 190s and eighty Ju. 88s. The respite following their defeat in Sicily was to be still briefer than that between Tunisia and Sicily. Nothing short of a miracle could have enabled them to rebuild their air forces to a strength and serviceability high enough to cover all impending commitments. It was true that their doubts as to where the next blow would fall were not so grave as before Sicily, hence wide dispersal was not called for. A certain dispersal was, nevertheless, being forced on them, systematically, by the tactics of the Allied Air Forces. They could not fail to read from the crystallising pattern of these attacks the shape of things to come.

Strength and Serviceability

How strong then did the Allies believe the German Air Force in the Central Mediterranean to be on the eve of the landings, and how strong was it in fact? The answer to these questions is clearly revealed in a scrutiny of Appendix 4, which gives the estimated and actual numbers of aircraft, on the strength and serviceability, of the various role categories. The Allied figures were based on material from all sources of Intelligence. The German figures have been taken from the returns of 6th Abteilung (Quartermaster General's Department) of the German Air Ministry and may be accepted as true; it has been proved by check and counter-check by Air Intelligence that it was German policy that these returns represent the facts.

The dates shown as those for which the figures are true are the closest approximation that can be found; it was not the German habit to issue Consolidated Returns daily. That the passage of time did affect estimates, as well as fact, is clear when reference is made to the Allied Intelligence estimate of Luftwaffe strength in Italy, Sardinia and Southern France as at 3 September 1943, i.e. two days later than the statement shown at Appendix 4. In No. 42 of the Air Intelligence Weekly Summary only two hundred and sixty Long Range Bombers and two hundred and fifty Single Engine Fighters and Fighter Bombers appear, the grand total representing about one hundred less aircraft than Appendix 4 but still about fifty more than the actual German totals. Of the true grand total, about 70% were in Italy South of 42 degrees North.

N.A.A.F. A.-2
Air Intelligence
Weekly Summary
No. 42
5 Sept. 1943.

/Luftflotte 2.

Luftflotte 2

Ibid and
Abteilung 6
Q.M. 6/German
Air Ministry

Dealing first with Luftflotte 2, within whose perimeter the Germans felt increasingly certain the next blow would fall, one conclusion that springs readily from a scrutiny of these figures in Appendix 4 and text is the fact, fortunate for us, that Allied estimates of German strength in all significant categories exceeded, or were very close to, actual numbers. The Ground Attack aircraft not allowed for were too few to affect seriously operations, when offset against the overwhelming weight of the Allied Fighter force. The low number of Long Range Reconnaissance aircraft on the strength will account now for some of the surprise expressed at the time at the German lack of curiosity in our preparations. The long range bomber force was by no means negligible, but could, to the best of the Allies' belief as well as in actual fact, only stage one large or two or three small-scale raids simultaneously. The non-stop air fighting after the fall of Sicily had seriously reduced the Luftwaffe fighter strength which, in spite of accelerated output in Central Europe and a reinforcement ratio of almost 60 per cent of the total arrival of aircraft in the theatre, (sent direct from the assembly plants), was only functioning with difficulty.

Rise and Fall
of the German
Air Force.
Air Ministry.

The general crew situation was extremely serious; incompletely trained crews had failed to press home their attacks, and in the case of the long range bombers, their losses amounted almost regularly to 10-15 per cent of the forces engaged. The fighters had proved in the stages of the withdrawal of troops across Messina Straits, that they could attain an effort of one hundred and fifty sorties daily in extremity, but could not sustain it. In any case, the knowledge of the impending landings compelled a policy of resting and re-equipping. To aggravate the weaknesses of the Luftwaffe, units representing an establishment of two hundred and ten aircraft were withdrawn during August from the Mediterranean and all but one transferred to the Western Front. The Mediterranean as a whole had always been considered by the Germans as a secondary theatre of war. Individual efforts such as those against Crete and Malta stood out in relief against the general unevenness of interest. Now, irrevocably, operations in this region were fated to become, as the Germans themselves defined it, "a poor man's war."

Study by 8th
Abteilung -
German Air
Historical
Branch. A.H.B.6
Translation
VII/II

Air Command Southeast

Owing, among other reasons, to the great distances from Allied bases and the vastness of the area, less was known of Luftwaffe resources in the Balkans and Greek mainland and Archipelago. German aircraft were continually on the move in this area, owing in part to Axis apprehension of some impending Allied landing in Rhodes or the Archipelago, Greece or the Balkans; this, they felt with justification, might coincide with, or shortly follow, the main operations against Italy. Turkey's attitude, too, was a standing quandary for the Germans as well as for the Allies. Trouble might come from the whole region of the Levant.

The Allied estimates of Luftwaffe strength in the south-eastern theatre were wide of the mark in certain details. In the case of the dive bomber (no longer able to effectively oppose our fighters), the bulk of them were in the Balkans, where skilful deployment went far to maintain control over the partisan concentrations. Their long range reconnaissance was weaker than we thought, but there were a few more fighters, day and night, available for a switch to Italy for the support of ground forces.

/Fighting

Fighting Quality of Aircrews

As for the fighting quality of aircrews, there was no evidence of any lessening of German aggressiveness on fairly even combat terms. Wherever, however, inferiority forced a policy of conservation it was to be expected that they would avoid suicidal engagements, as had been reported in the course of Sicilian operations; but if concentration of forces could be brought about, the opposition to the forthcoming landings should be brisk and Allied shipping would not be immune from attack. Morale in the mass still preserved an apparently durable surface.

Meagre Harvest of Italian Aircraft

Information
supplied by
Air Historical
Office, Rome.

So far as the transfer of the Italian Air Force was involved, the Short Instrument of Surrender was largely a farce. The pre-Armistice Italian Air Force ceased to exist. A handful of aircraft flew to Allied bases, some more were destroyed by the Italians or by last-minute Allied air raids; a high proportion of the remainder, notably transport aircraft, were inherited and used by the Germans. The Italian Air Force itself disappeared, but its progeny, - twin-headed - appeared on both sides of the front line. Several hundred aircraft operated later loyally with the Balkan Air Force. In the North, the Italian Fascist Republican Air Force appeared alongside the Luftwaffe, in inconsiderable numbers on minor operations in Italy and anti-partisan tasks in the Balkans. Details of the small harvest reaped by the Allies, as well as some idea of the general balance sheet so far as is known and can be confirmed to date by Allied and Axis documents, may be seen at Appendix 5.

The Italian Air Force in Retrospect

'The Italian
Air Force in
Retrospect' -
Article in Air
Ministry Weekly
Intelligence
Summary No. 212
25 Sept. 1943
P. 21.

It has been the almost universal custom to belittle the efforts of the Italians without a full knowledge of the facts. It is true that their conserving tendency might sometimes be constructed as an unwillingness for battle, but the problem needs deeper analysis. It was possible by September 1943, to deal with a historic period dating from 1924, when a separate Air Ministry was created by Mussolini and the Air Force began a career of modernisation and expansion, a career, which, continuing through the careers of Marshal Balbo and General Valle, led up to the peak effort of the year 1937. Then, with two wars in hand, a strength of over one thousand five hundred first line aircraft had been reached. The decline which set in thereafter was never halted. Financial and political troubles and a vacillating air policy made it less and less possible to keep pace with technical advances; so when Italy was forced prematurely into the War in 1940, she was already a lap behind the Allies and Germany in production and performance. All the same, the study of the following campaigns and a check on strength reveals that in spite of continuous wear and tear, a nice balance was maintained between replacement and wastage; the average strength of first line aircraft stayed on the 1600 - 1750 line to the end.

After a decline in the effectiveness of their bomber force, a new feature, developed with vigour and considerable success, was the torpedo bomber force in the Mediterranean.

/The old

The old Savoia 79's were adapted and what seemed like a new race of skilled pilots, exhibiting high morale, established itself as a formidable force in those waters, rendering any Allied sea movement in the Inland Sea a highly precarious undertaking. By the winter of 1942-1943, the Italians realised that their future role was bound to be a defensive one and went over to increased fighter and ground attack production, at the expense of other categories. It was too late: the Re.2001 and 2005 fighters and the Re.2002 dive bomber were produced, but in too small numbers to play an effective role. The same judgement must be applied to the efforts to meet the night raid problem by a tardy and ineffective use of the Re.2001 as a night fighter.

Airfields in Italy

Ibid

The distribution of the basic airfield system in Italy had reflected an anticipated war with France, with the most important concentration in the Milan - Turin area and another group in Sicily available for use against Tunisia. In the Rome - Naples area, between these two extremes, there were some dozen airfields, bearing no relation to Allied conceptions of modern bases, which had formed a hub, round which the Italian Air Force had revolved. There were also lesser spokes, radiating to a small group of airfields in Sardinia and the heel of Italy. Most war-time development of airfields had been on the initiative of the Luftwaffe, who had extended and improved, during and after the Sicilian Campaign, in the Foggia and Grotone areas. It was known that Italian airfields lacked concrete runways and realised that serviceability during a winter notorious for its intemperance was going to be a major problem.

Summary of Chapter 2.

The Outline Plans having been traced in Chapter 1 from their conception to their final state, it has been essential that Chapter 2 should be devoted to a study of the balance of forces about to be engaged and the material conditions governing the use of ground and air in the disputed territory. It must be remembered that all that came to pass, did so at that time, and at no other, with those opposing forces and no others; and against the material environment described and no other. These facts were unique for the occasion and care must be taken when drawing conclusions and applying lessons to remember not only the facts, but what is more important, the relations between them.

/Chapter 3

CHAPTER 3

PRE - ASSAULT OPERATIONS

ARMY OPERATIONS

Army Activities between the Sicilian and Italian Campaigns.

Maj. Gen. Sir
F. De Guingand,
C.O.S. 8th Army.
"Operation
Victory".

The close of the Sicilian Campaign on 17 August 1943 coincided with the announcement of the decision to launch Baytown to be followed a few days later by Avalanche. A race against time was again inevitable. Sicilian roads, bridges and railways were repaired, new airfields in the Milazzo area constructed and assembly areas for transport and concentration areas for troops prepared. Vehicles were marshalled and waterproofed in dry river beds. Vast quantities of Bailey bridging were transported and collected near the ferry points. Artillery moved up into position for preliminary bombardments of the Toe.

C.-in-C. Eighth
Army's record.
"El Alamein to
the River
Sangro."
N.A.A.F. Air
Intelligence
Weekly Summary
No.40.
Eighth Army
"El Alamein
to the River
Sangro."
By C.-in-C.
Eighth Army.

Forecasts were made on likely enemy reactions. The Sicilian Campaign had proved that German formations, even though hastily thrown together and composed of odd units of varying calibre, were still capable of resourceful and tenacious fighting. Habits of discipline and traditions of victory hardly yet seriously impaired, made the German army as formidable an opponent in defence as in attack. No.29 Panzer Grenadier Div. was known to be defending the Straits and No.26 Panzer Div. had been located behind it. Field Marshal Montgomery, apprehensive of results, pressed for, and obtained, additional resources.

The German Withdrawal from Sicily.

Ibid.

A plan for withdrawal of men and material from Sicily had been executed by the Germans with considerable success, due largely to the narrow space of water to be crossed, night movement and an intense concentration of flak along the Straits, which rendered Allied low flying hazardous. Every day after 8 August several thousand troops, with tanks, artillery and M/T, crossed the Straits. Elements amounting to one division were saved, in spite of the bombing by the Allied Air Forces of the beaches near Messina in the Toe. Wellingtons by night and Mitchells, Kittyhawks and Warhawks, by day, had attacked against defences including about one hundred and twenty heavy guns. An examination of the tables of daily combat losses does not lead to the conclusion that these hazards, whatever they were, led to any really serious losses of Allied aircraft. On no single day between 13 and 31 August did aircraft losses in the whole of N.A.A.F. area reach twenty and only once exceeded fifteen: on seven out of these nineteen days they were less than five and on twelve days less than ten. The results achieved by the Germans constituted a minor triumph, achieved by skilful exploitation of local factors. Their light surface craft, used largely at night, were admittedly a bad target for our bombers.

N.A.P.R. Wing
Report.
N.A.A.F. A.3
Operations
Bulletin No.5
1 Sept. 1943.

/Commando

Commando Reconnaissance of the Mainland.

Cositintrep No.49
29 Aug. 1943.

C.-in-C. Eighth
Army's record
"El Alamein to
the River Sangro."

The situation in South Italy was closely watched, both by reconnaissance aircraft and by Commando parties. The first of the Commandos was landed on the night 26/27 August at Bova Marina. Prisoners(1) were taken by the troops, who returned safely to report all quiet and the locality undefended. During the night of 27/28 August, five other Commando parties were landed at sundry points in the Toe. Most did ~~not~~ not return; the Germans were still on the alert.

Reports of Enemy Road Movement.

M.A.C.
Cositintreps
Nos.179-194.

The reports of air reconnaissances were examined by the Eighth and Fifth Armies. As the days passed, the hurried exits of men and vehicles out of the Toe northwards slowed down to inactivity; it was rightly construed as improbable that the enemy would reinforce and supply the South to any extent. This situation would clearly help the Eighth Army, but bore out the contentions of those who anticipated hard fighting at Salerno.

Naval Operations before the Assaults.

N.A.A.F. A-2
Air Intelligence
Weekly Summary
No.40 and
Admiralty Battle
Summaries of
Operations
Baytown and
Avalanche.

In the final stages of the Sicilian Campaign, the Allied Navies had done much to harass the Axis forces retreating towards Messina. When complete evacuation was apparent, both the Royal and U.S. Navies diverted their attention to important points along the Toe of Italy, attacking shipping and shore targets. One advantage which accrued from the victory in Sicily was the bisection of the Italian Fleet, (whose attitude was still technically hostile) which could now hardly pass from Tyrrhenian to Adriatic or vice versa without disaster. On 17 August, the Aeolian or Lipari Islands, (from which all German troops had been evacuated), surrendered to the Royal Navy and the radio station on Stromboli was put out of action.

On four occasions between 19 and 31 August, cruisers and destroyers bombarded batteries on Cape Pellaro and coastal batteries between Reggio and Cape Pellaro. The passage of the H.M.S. Rodney and H.M.S. Nelson through Messina Straits on 31 August, with all guns firing, was one of the most spectacular naval shellings of the Mediterranean Campaign. Scalea was bombarded by British cruisers, and French destroyers. U.S. cruisers bombarded Gioia Tauro and Palmi and U.S. destroyers Gioia Tauro. H.M.S. Warspite and Valiant bombarded positions on Cape dell'Armi. Continuous patrols were carried out in the gulfs and landing craft and merchant ships attacked and sunk. The sea was by no means yet clear of enemy submarines, one of which was rammed and sunk on 22 August 30 miles S.E. of Pantellaria; another was brought into Palermo. Allied submarines, too, were active; a Polish submarine reported sinking a 5,000 ton tanker near Bari and leaving a 6,000 ton passenger vessel sinking in the same area. The elimination of heavy coastal batteries, disruption of communications and transportation facilities, added to the deterrent effect of our surface and underwater forces, played an important part in neutralising resistance to Operation Baytown. Hundreds of landing craft and ships were assembling in the ports of Augusta, Catania, Taormina Giardini, Santa Teresa and Mili Marina.

/Enemy

(1) Mostly from 29th Panzer Grenadier Div.

Admiralty
Battle Summary
'Salerno'

Coastal Air
Force O.R.B.

Enemy Air Reconnaissance of the Assembling Fleets.

The great concourse of ships in all the Allied-held Mediterranean ports, as well as the perpetual surface movement now proceeding with a long-lost freedom, could not be hidden from enemy reconnaissance. The scale of Luftwaffe bomber reconnaissance rose, and some aircraft penetrated to vital points. One aircraft was over Bizerta on 15 August. On the nights of 17/18 and 18/19, this port suffered two of the most severe raids in its history. On each night a mixed force of Ju.88s (1) and He.111s, (2) operating from S. France and Foggia, inflicted serious damage to ships and loss of life on personnel, for the penalty of eight and six aircraft on the respective nights.

Every day during the week following the fall of Sicily, an average of six long range aircraft thoroughly covered the harbours of, and sea approaches to, Sicily. The area was patrolled nightly by two other aircraft. There was also the four-day-a-week patrol of the coast of N.W. Africa, which usually returned intact to base. Fighters were plotted daily across the Sicily-Africa gap, approaching the Bizerta or Bone areas. They would usually approach to anything between 5 and 50 miles off the African coast, then turn back; but on 18 August several fighters made a thorough reconnaissance of the coast between Bizerta and Bone. As the days passed up to 2 September, the long range reconnaissance was stepped up to the highest point so far recorded in the theatre, maintaining, over the last week before invasion, a daily effort of up to fourteen aircraft. Not all reached their objective and some were accounted for by our patrols, but the net result of their non-stop investigations gave the Germans, although not the exact one, some measure of the forces mustering against them.

A I R O P E R A T I O N S

Rome

Detached in time and sequence from the pre-assault air operations planned from the fall of Sicily onwards, yet of great importance from both strategic and tactical viewpoints, were the attacks of 19 July and 13 August on Rome marshallng yards. The apprehension of the Italians over the safety of their capital seemed to stand out in relief against the profound internal differences of ideology. Rome was even more of a problem for the Allies, for they were divided between the military necessity of neutralising a target of the highest priority, comprising among other components the railway marshallng yards of Littorio and Lorenzo and Ciampino airfield, on the outskirts of Rome, and the consideration of far-reaching political repercussions likely to annul any quick dividends paid by an effective air raid,

F.D.M. 24/18 Sept.
1943 and F.A.N.
144 26 June,
1943.

The strategic view of Rome was dual. It was a centre of enemy communication known to be in constant use and likely to facilitate the movement southwards of German troops at a critical period before the impending invasion of Sicily. Allied strategy also referred to the city of Rome as the 'heart and shrine of Christendom'; it was important that nothing should happen which might give the
/enemy

- (1) Junkers
- (2) Heinkel

F.A.N. 144
26 June, 1943.

N.A.F. 251
30 June, 1943.
N.A.F. 288
12 July, 1943.

enemy a chance of saying the Allies had attacked it, thus creating misapprehensions not confined to the Roman Catholic world. The Combined Chiefs of Staff pointed out the need of drawing a clear distinction between the bombing of Rome itself and the bombing of the marshalling yards as a most essential military objective; they were of opinion that Gen. Eisenhower should attack this latter objective as soon as he saw fit. The latter delayed the attack until Husky had been launched, on the grounds that the bombing would have little material tactical effect on the supply and reinforcement situation. Shortly after the landing there would be, he thought, possibilities of a great psychological effect on the Italian people.

The Bombing of Rome Marshalling Yards and Airfields
19 July, 1943.

N.A.F. 251
30 June, 1943.
M.A.C. Intelligence Report
Allied Aerial Operations
N.A.A.F. - A-2
A.I.W.S. No. 31.

It was decided to attack the marshalling yards and Ciampino North and South airfields on 19 July. Before the event, the population was warned by leaflets that an attack was imminent. Crews were carefully selected and briefed with precision. The morning attack was made by a force of one hundred and fifty-six Fortresses and one hundred and forty-four Mitchells of North-west African Strategic Air Force and one hundred and seventeen Liberators of Ninth Air Force. Their targets were the Lorenzo and Littorio marshalling yards. The afternoon attack on Ciampino North and South airfields was made by one hundred and seventeen Marauders escorted by U.S. Lightnings, all of North-west African Air Force. The enemy put up only negligible fighter opposition and local flak was ineffective; the whole of the morning force returned to base; two of the Mitchells were lost on the afternoon raid.

Photographic coverage revealed evidence of a successful attack. The Lorenzo railway yards, engine houses and locomotive shops were wrecked and sheds in the main freight depot and much track and rolling stock damaged. A steel plant, a chemical plant and the tram garage were hit and damage inflicted on industrial buildings. At Littorio railway yards some eighty hits were scored along the length of the marshalling yards and sidings, including fifty direct hits on rolling stock and tracks. The locomotive depot and workshops were badly damaged. Ciampino North airfield was rendered temporarily unserviceable and hits were scored on ammunition dumps, hangars, buildings and barracks. Twenty-four grounded aircraft were destroyed here. At Ciampino South, fourteen aircraft were damaged or burnt out and airfield facilities badly damaged. This raid and that of 17 July on the Naples railway system created a gap between points north of Rome and south of Naples nearly 200 miles long and prevented, for several days, movement of Axis troops and supplies by rail from Central to Southern Italy.

Damage other than military

Damage was inflicted on the Basilica of San Lorenzo Fuori le Mura (St. Lawrence Outside the Walls), about 650 yards from the nearest point of the Lorenzo target area. Although the church, one of the five patriarchal churches, was not accorded special protection under the Lateran Treaty, the almost complete destruction of its front was regrettable. The Pope, as bishop of a diocese - most of which was at war - expressed public regret at the bombing of his diocese, but as a neutral sovereign he did not protest. A small number of dwelling-houses were damaged.

ibid.

Hist. Office
Italian Air
Ministry Aug.
1947.

Second Air Attack on Rome - 13 August

Allied Air Operations N.A.A.F. -
A-2 15 Aug. 1943.

On 13 August Randazzo was taken and the Sicilian campaign entered its last phase. It was adjudged timely to execute another attack on Rome marshalling yards, by then repaired and busy again. During the previous night two Wellingtons dropped warning leaflets on the city. One hundred and six Fortresses, sixty-six U.S. Mitchells and one hundred and two U.S. Marauders, escorted by one hundred and forty U.S. Lightnings carried out an effective raid on 13 August, on the Lorenzo and Littorio marshalling yards. Photographs revealed again that the damage inflicted was severe and comprehensive.

Air Opposition to Rome Raid

Article in
AMWIS No. 207
A.C.A.S.(I)
M.A.C. Intelligence Report,

Most of the fighters based in the Rome area were Italian; on this occasion some seventy-five were airborne. About eighty per cent of Italian fighters were obsolescent Me 202's and Re 2001's but on this occasion a few heavily armoured types were observed, which may have been the G.55 or Re 2005, which, (equivalent to the German Me 109 G) and existing in small numbers only constituted the only modern fighter aircraft the Italians possessed. A few attacked the medium bombers aggressively, but all fought shy of the heavy bombers. They lost five aircraft of those seen taking off from Guidonia and Gerveteri airfields (two of them German). Two Marauders failed to return out of the four co-ordinated attack formations. Flak was not impressive. Some of the bombs carried were not used when smoke and haze, from fires started, rendered accurate pinpointing impossible.

Scope of Air Effort against Enemy Bases and Communications

A.A.F. in World
War II Office of
A.F. History
U.S.A.F.

From 18 August to 2 September, every possible sortie was directed towards the neutralisation of the enemy air forces by attacks on his bases, by combat, by attacks on his communications, movements and fortified positions. To some extent, previous air bombing of Italy had partially met the commitment against communications and airfields. Rail and road routes throughout the length of Italy had been interrupted and airfields frequently damaged or put out of action. The effects were, notwithstanding, progressively nullified by the Germans, who pressed into service a large number of civilian foreign personnel under the Todt Organisation. They also temporised by increasing coastal shipping so that, for all intents and purposes, the Allied Air Forces began their problem with tabula rasa. This question of Italian communications must be clearly grasped if the full pattern of all future air operations in Italy is to be correctly interpreted. Map 14 illustrates the main features of the railway system. It should be consulted from time to time, for the war in Italy was very largely a war against communications.

Transportation Facilities in Italy

N.A.A.F. Air
Intelligence
Weekly Summary
No. 41, 29 Aug. 1943.
N.A.A.F/A.5/COM/3
Bombing of Comm-
unications (in
support of Army
Operations) Cen-
tral & Southern
Italy. 4 Sept. 1943.

The prosecution of the campaign by the Germans depended to a very large extent on supplies received by rail from outside of Italy. For example, 95 per cent of their oil requirements, 80 per cent of coal requirements, many finished steel products and industrial and military supplies were brought in by rail. The strain on sea communications, now that the main sea lanes and the Straits of Messina were closed, threw a heavier load on the railways.

/Ten

N.A.A.F/A.5/COM/2
Bombing of Comm-
unications (in
support of Army
Operations)
Calabria,
12 Aug, 1943.

Ten through lines crossed the frontier into Italy, the most important being the Brenner Route, carrying almost 50 per cent of all rail traffic into or out of Italy and the bulk of strictly military supplies. The two Swiss lines (St. Gothard and Simplon) took 36 per cent while the major portion of the remaining traffic moved over two of the eastern routes, the Tarvisio and Postumia. Most other heavy tonnage (such as coal), as well as one-third of the imported oil, moved over Swiss lines and the French Riviera - Mt. Cenis route - while the remaining two-thirds of the oil supply passed through Postumia and the Balkans.

The target problem, as it affected the blocking of the movement of enemy reserves and supplies from outside Italy, was to bomb first the most vital points in the north. These were selected; Verona, terminal of the Brenner Pass route, which could use no satisfactory by-pass route for large quantities; Milan, into which were funnelled the St. Gothard and Simplon traffic; Turin with Ventimiglia, receiving from France by Mt. Cenis and the coastal Riviera railway; then Trieste and Fiume, key transit points for any troop movement from the Balkans or Austria, as well as for two-thirds of the oil. Gorizia, Udine and Mestre were important secondary targets.

On the North of Italy the Leg and Foot depended. There were three main rail routes running south, one down the east coast, one down the west coast with higher capacity; the third, and most important, cut through the Apennines from Bologna to Rome. Ignoring for the moment certain very low capacity by-pass routes, all south-bound rail traffic was bound to pass through one of three bottlenecks; Rome, Naples or Foggia. There were minor ones in the North at Bologna, Genoa, Pisa, Florence and Rimini. Communications to Naples from Rome and the northeast were next to be considered. Two main railway lines and two main roads linked Rome and Naples. Although the terminals had already been damaged by previous air raids, it was expected that they would be carrying very heavy traffic about 15 - 20 hours after the Salerno landings. The two main railway lines were, firstly, the double track electric line Rome - Littoria - Naples and the old double track steam line Rome - Frosinone - Caserta - Cancelli - Naples. The two main roads, both two-way, 20 feet plus wide, all-weather state roads, ran through Cisterna, Littoria and Formia, and through Frosinone and Caserta respectively.

Obviously, all air bombing from this point northwards must indirectly affect the operations in Calabria. There were two narrow necks of land most suitable for interrupting movement, one between the Gulf of Squillace and the Gulf of Santa Eufemia, and the other further north between Villapiana and Scalea, including bridges over the River Lao, Castrovillari Defiles and Sibari Junction. Previous experience of the power of air forces to create roads blocks was used. Entrances and exits to small towns, where the demolition by bombing might fill the roadway with debris as well as hairpin bends on tortuous roads combined with steep slopes (most effective for convoy blocking) were considered the most important targets. Bridges were not thought good disruptive points in themselves, for they often presented a small target for bombs, and in many cases, even if destroyed, offered no real obstacle to M/T, which could often descend into the shallow or dry river bed: but road and rail intersections might prove to be more profitable.

/Allied

Allied Strategic Air Forces on Eve of Invasion

NATAF/34/Air
Oper, Directive
132 23 Aug. 1943.

Up to 18 August, Strategic Air Force's effort was directed mainly against targets in the Toe, in particular on the road/rail junction at Marina di Catanzaro and the bridge at Angitola. From 19 August on, their attacks were switched to north of the line Sapri - Trebisacce. Up to 23 August they dealt with targets in the Naples, Rome and North Italy areas, while Ninth Air Force operated in the Heel, on Foggia and as far north as Pescara. Night bombing in this schedule was principally the duty of the Wellington medium bombers. (1)

Ninth U.S.A.A.F. Heavy Bomber Organisation

A.A.F. in World
War II Office
of Air Force
History U.S.A.A.F.

The whole of the available heavy bomber units of Air Defences Eastern Mediterranean under M.E. Command were controlled by Ninth U.S. Army Air Force, whose H.Q. were at Tripoli. During this period and onwards through their absorption into Twelfth Air Force later in the year, they made a notable contribution to the strategical air preparations for the Salerno landings. The bulk of the Liberator II (B-24D) Heavy Bombers were on the establishment of two Groups (U.S.), each of four Squadrons. No. 240 R.A.F. Wing was a member of the Command, with one Squadron re-equipping during September and October with Liberators, one R.A.F. Squadron flying Halifaxes and one R.A.F. Squadron concentrating on S.O.E. (2) operations with its Halifaxes and Liberators.

Tactical Bomber Force (3)

T.B.F. O.R.B.
and Appendices.

Tactical Bomber Force, dividing its effort as will be recalled between the two major operations, will be seen to be a composite body flying medium bombers - Mitchells, in two U.S. Groups and light bombers - Bostons III's - in one S.A.A.F. and R.A.F. Wings, Baltimore III's in one S.A.A.F. and one R.A.F. Wings; Bostons - (A.20s), in one U.S. Group and French medium (N) Leo 45 bombers in the 8th French Groupement. All except the French units were by now in Sicily.

Strategic Air Operations night 17/18 August - 2 September

N.A.A.F. Op/Int
Summaries and
N.A.A.F. Air
Intelligence
Weekly Summaries
N.A.S.A.F. Opsums
Ms.5146/2/Air
(Malta)

The first score was registered by the Luftwaffe, who carried out a well-organised raid on the night 17/18 on Bizerta with some ninety Ju.88s and He.III's. This followed a raid the previous night in which 'Window' had been successfully used. In spite of our A.A. fire, one L.C.I. was sunk, one M/V damaged, an oil dump set on fire and other military installations hit; nineteen men were killed and one hundred and seventy five injured. The raiders lost six aircraft to our A.A. and two to the night fighters. This was a creditable performance in view of the fact that during the hours of daylight a force of one hundred and eighty Fortresses had been raiding their bases at Istres, and Salon (in Provence), which had just received bomber reinforcements, smothering the crowded airfields with fragmentation bombs. Photos

/taken

- (1) See Order of Battle - Appendix 2
- (2) Special Operations Executive.
- (3) See Order of Battle - Appendix 2

205 Gp. O.R.B.

taken during these strikes seemed to indicate at least one hundred first and second line enemy aircraft, including forty-five gliders, were destroyed or damaged. The same night forty-eight Wellingtons, for the loss of one aircraft bombed the Calabrian beaches from Briatico to Cape Suvero, where German evacuees were landing from small craft. Leaflets for the education of the Italians were also dropped; the town of Marina di Valentia was left blazing and tents and troops machine gunned. Only negligible opposition was offered.

A.A.F. in World
War II Office
of A.F. History
U.S.A.F.

Direct attacks on the coming field of action began 18 August, with an unsuccessful attempt to put out Angitola Bridge by thirty-six Mitchells escorted by Lightnings. Their bombs burst in strings across the ends of the bridge and one Lightning was lost. Another attack of similar scale by escorted Marauders on the Staletti rail and road bridge was more successful. Enemy shipping at large in the Gulf of Eufemia was surprised by four Mitchells escorted by twenty-four Lightnings, who scored hits with their cannon on a large landing craft and a M/V, which broke in two. Kittyhawks and Lightnings began sweeps in the Toe without meeting any enemy aircraft. Wellingtons returned to the South on the night 18/19 August, with a force of thirty-eight aircraft, whose target was Angitola bridge; but the bridge still functioned. Halifaxes and Liberators of Ninth Bomber Command bombed Crotone Marshalling yards. The following afternoon the mediums moved up, first to Sapri in the Instep, where fifty-one escorted Marauders dropped bombs on the town and marshalling yards, to Salerno where forty-eight escorted Mitchells attacked the marshalling yards; and to Foggia, whose marshalling yards and sub-station were well covered by some one hundred and sixty escorted Fortresses and seventy Liberators of Ninth Bomber Command. When Eighth Army entered Foggia on 27 September it reported that this attack, together with later bombings, had been most effective and that the damage surpassed all earlier estimates.

Sharp Rise in Enemy Fighter Reactions. Aerial Bombing

ibid.

From this last-mentioned raid onwards, a sharp rise in enemy fighter defence reaction to Allied heavy and medium bomber attacks on Italian targets was observed, reaching its peak on 3 September. At Foggia on that day, as a contrast to the meagre dozen Me.109s which opposed the Istres-Salon raid, the first wave of Fortresses reported a mixed swarm of some seventy Me.109s, Me.110s, (1) FW.190s, MA.202s, (2) MA.200s and RE.200ls (3) who attacked vigorously. The Liberators met only a Staffel (4). The defence appeared to have shot its bolt when the second wave of Fortresses came over an hour later, for only three Me.109s were airborne. The raid had cost S.A.F. five Fortresses, three Liberators and three Lightnings. Formidable flak scored hits on twenty-seven Fortresses.

Growth of the Air Offensive

ibid.

Foggia was allowed no respite; the same night, some fifty Wellingtons of Nos.231, 330 and 331 Wings flew over the marshalling yards. Fires lit by the day attack had been extinguished but were soon rekindled. All four Wellington wings were out that night and some thirty-seven more aircraft of Nos.236 and 330 Wings bombed troops, /railways

- (1) Messerschmitt
- (2) Macchi
- (3) Reggiani
- (4) Six aircraft.

railways, townships, rail and road bridges between the Sapri and Paola beaches. No night fighters were met at either target, but a Wellington was lost to flak. Key marshalling yards north of Naples were heavily punished on the day of 20 August by two forces of Marauders. The plans of the first went somehow awry, for some aircraft failed to register any hits on their first objective, the yards at Caserta. Interference by some forty to fifty German and Italian fighters occupied both bombers and their Lightning escort, who lost five of their company. Hits were however scored on Aversa railyards, two huge explosions being noticed here as well as at Capua railyards.

On the Aversa raid photographs showed that the main Rome-Naples line was blocked by craters in at least three places, the marshalling yards reduced to a burnt-out mass of rolling stock and twisted rails, the main lines littered with damaged freight cars and many trains still burning hours after the attack. The gas works and a warehouse adjoining the station were gutted and a violent explosion expunged the entire goods sidings. Multiply this picture many times and you arrive at an impressive total of material surface destruction, impressive but inconclusive, massive but not overwhelming, sufficient to reduce the ratio of opposition to Avalanche to the finest of margins, but not to paralyse it. Over Benevento yards the same day, 20 August, escorted Mitchells met brisk fighter opposition, reinforcing the conclusion that, as no air activity whatever was reported by Tactical and Coastal Air Forces, the Luftwaffe was concentrating his available defences on retarding the war on communications.

Sardinia, where the Axis still had fighters based, was visited almost daily at that time by Warhawks and Monserrato airfield was covered with fragmentation bombs. Photo coverage of the island was still incomplete. The hands of N.A.P.R.W. were more than full; after Salerno would come the turns of the two major islands and time would have to be found to gauge the quantity of aircraft still lurking there on our left flank. The ring round Salerno was still further defined by the attack that night 20/21 August by some thirty-five Wellingtons on Villa Litterno marshalling yards; they dropped some 4,000lb. bombs. To make assurance doubly sure, a force of Marauders bombed this same base the next afternoon, i.e. on 21 August. Opposition was met from some fifty to sixty mixed German and Italian fighters, most of whom attacked with determination, signalled into action by bursts of red flak fire. There was plenty of in-fighting, in which the bombers destroyed the greater part of twenty-five enemy brought down. These fighters dived beneath the rear of the U.S. formations, passing the last flight, then pointed their noses up and raked the bellies of the next to last element.

From then onwards to the night 2/3 September almost the whole available weight of the strategic bombers with their Lightning escorts was pressed against the marshalling yards. The Wellingtons were out every night, usually with a force of fifty aircraft, but of eighty upwards on three occasions, and left the yards of Battipaglia (just east of Salerno) on fire; they attacked Salerno three times, Bagnoli twice, Torre Annunziata (just south of Naples) twice, Civita Vecchia once; lastly Taranto twice, with a direct bearing on Operation Slapstick which was to mature on 9 September, and on the imminent Eighth Army landings in Calabria.

/Heavy

Heavy Bomber Contribution to the Offensive against Communications

After a raid on Aversa yards on 21 August, the Fortresses stood off for three days, then attacked Foggia and Capua airfields. They returned to the softening-up of rail centres. In turn Sulmone on 27, Terni on 28 and Forli on 29 August, were bombed. Again on 31 August Pisa yards, serving, in addition to super-normal north-south traffic, as distribution point for extra movement from Sardinia was attacked with some one hundred and fifty aircraft, and on 2 September the pre-Calabria series was wound up with a three-pronged thrust at the northern rail hubs of Bolzano, Trento and Bologna, this time by a combined total of some one hundred and twenty Fortresses unescorted, who dropped the then unusual load of 452 tons of bombs.

Strategic Contributions by Ninth Bomber Command, Middle East.

A.A.F. In World War II Office of A.F. History U.S.A.F.

Meanwhile the Liberators and Halifaxes of Ninth Bomber Command were supplementing the Strategic effort. On 21 August, fifty Liberators were over Cancellò, where they not only severely damaged the marshalling yards and rolling stock, but brought considerable numbers of fighters to battle. Of all the Me.109s, F.W.190s and MA.202s who bore in upon them, dropped aerial bombs and fired on them with cannon, the Liberators claimed to have destroyed twenty-five. The Luftwaffe, it will be remembered, were very short of fighters in this theatre. After a notable air battle on 3 September, when thirty-four Liberators attacked Sulmona marshalling yards, the German fighter defence effort slid away fast from its peak.

Most of the work of Ninth Bomber Command up to the Calabria landings was directed against the rail system. On the nights 21/22, 24/25 and 27/28, Crotone railways were bombed; in turn, between 23 and 31 August, they dealt with the marshalling yards at Bari, where strong air opposition was encountered, and fourteen enemy fighters were destroyed; Foggia, where they brought about a complete blockage of through traffic; Taranto, and on 31 August their heaviest effort of the period, Pescara with forty-five Liberators. This was the same day that some one hundred and fifty Fortresses were attacking Pisa. Lastly, on 3 September came the Sulmona raid already mentioned, by Liberators, in which they lost six of their company against their claim of twenty-seven enemy destroyed, and six probables. Their anti-air force contribution was important and, of course, closely synchronised with Fortress and Wellington programmes. Airfields at Pomigliano on 21 August, Bari 23 August and Grottaglie on the night of 31 August/1 September all received their attention and helped to disrupt the Luftwaffe's ground organisation.

Medium Strategic Effort against Communications

A.A.F. in World War II Office of A.F. History U.S.A.F.

On similar lines to the attacks already described in detail, and with cumulatively successful results, the Mitchells and Marauders of S.A.F. continued, with rare pauses, to carry on their own type of offensive. Marshalling yards successively attacked were Salerno on 22 August emphasising the effect of the Wellington raid of the previous night; Battipaglia on 23; Benevento on 27;

/Caserta

Caserta on 27; Cancellò on 28; Aversa on 28 and 30; Torre Annunziato on 29; Civita Vecchia on 30 August and Cancellò on 2 September with an average of sixty bombers per raid.

State of Dislocation at Time of Operation Baytown

ibid. and
A.F.H.Q.
Weekly Intelligence Summary
No.54.

A review of the damage done by all raids disclosed the following state of affairs, satisfaction with which did not dispel the prospect of constant maintenance of attack. It was one thing to cut communications, quite another to keep them cut. In Northern Italy, the Brenner supply route had been cut at Trento and Bolzano; the rail bridge over the Isarco River at Bolzano had suffered a direct hit, which might incapacitate it from functioning normally for a fortnight. That left the loopline from Bolzano open, but this could only carry 12% of normal traffic. No through traffic was possible at Pisa. In Central Italy, it was believed that the junctions at Civita Vecchia and Sulmona were out of action. Two important lines were cut at Pescara and Orte. In Southern Italy, no traffic could possibly reach the South by rail, as the lines were cut at Aversa, Cancellò, Benevento and Foggia. As for the western route to the Toe, cuts at Salerno, Battipaglia, Sapri, Paola and Pizzo guaranteed 100 per cent dislocation. On the eastern side, Catanzaro was blocked.

Major Blow at Foggia Satellites

N.A.T.A.F.
Operational
Directive No.132
23 Aug. 1943
and Outline Air
Plans Operations
Baytown and
Avalanche
A.A.F. in World
War II Office
of A.F. History
U.S.A.F.

One of the predominating tasks at this period was to drive the enemy air force northwards and away from the beachheads. To this end the Strategic Air Force began by going straightway to the greatest of all Italian airfields - Foggia - later to be their own H.Q. Foggia/Gino Lisa main airfield, with 1250 and 1100 yards runways, seventeen aircraft shelters and others under construction, stood 2 miles out of Foggia town. Its nine Satellites were growing in importance and capacity. Photographs taken at 0900 hours on the day of the attack, and the preceding day, of the four satellites selected for special treatment (Nos.2, 4, 7 and 10), showed sixty-six single engined fighters and forty-two Ju.88s, a target too good to be overlooked. So between 0925 - 0950 hours on 25 August one hundred and forty Lightnings flew low over the satellites, shooting up aircraft, men and buildings and on the return flight M/T on the roads and trains on the tracks, for the loss of six aircraft. They reported heavy destruction of aircraft and personnel. There was slight opposition by sixteen enemy aircraft. Hardly had the dust settled when one hundred and thirty-six Fortresses with Lightnings escorting were over dropping nearly fifteen thousand fragmentation bombs and some 500 lb bombs, in just over half an hour. The 99th Group ran into a full-scale battle with some sixty to one hundred enemy aircraft, the result of which, they reported, was the destruction of fifteen enemy fighters for the loss of only two Fortresses. The other three groups had things more their own way, as the divided defence left only a bare fifteen aircraft to meet them.

Claims were cleared up in the usual manner by scrutiny of photographs that seemed to show a bag of forty-eight enemy destroyed; twenty-nine certain Ju.88s, seventeen probable Ju.88s, one Ju.52 and one other; eleven damaged of which eight were single-engined fighters and three probably Ju.88s. The bombs intended for aircraft had left the landing areas serviceable. This was a major

/action

action; not for long would so many German heavy bombers be located so far South: it gave the required stimulus to a progressive movement out of danger northwards, but hardly reduced the power of the Ju.88 units to threaten our convoys when precariously massed in the initial stages of the assault.

Attacks on Naples Airfields

The following day - 26 August - Fortresses, Mitchells and Marauders, seventy-two aircraft of each type, went out to render Capua and Grazzanise airfields untenable. Capua was attacked by some eighty Fortresses who destroyed fifteen of the fifty-eight single-engined aircraft on the ground. Damage was done to fuel stores, hangars and installations in the face of stiff opposition by forty to fifty fighters, seven of whom were destroyed. Grazzanise Landing Ground and its No.1 Satellite were shot up by two successive waves - thirty-five Mitchells and seventy-three Marauders. As on all similar occasions, a Lightning escort of approximately two-thirds of the numerical strength of the bombers went in with them. Like Capua, the airfields were only to a small degree serviceable after the event owing to cratering. The total of German aircraft destroyed on the ground and in combat on the three raids, (about thirty-four) when set against the Luftwaffe's chronic need for fighters, was reassuring. It was four days before the next attack on an airfield was staged. This time Viterbo, a heavy bomber base, was attacked by thirty-five Fortresses, with Lightnings escorting, but without much success, only two Ju.88s being destroyed on the ground and three fighters in aerial combat. In common with other bombing formations, they reported the use by the defending fighters of rockets - "like Roman candles".

Warhawk Operations over Sardinia

While the heavy and medium bombers were concentrating on the mainland, the Warhawks of the Strategic Air Force were exploring fields which, although apparently remote, bore emphatically on forthcoming events. At this period the Luftwaffe potential in Sardinia was fairly constant at five Ju.88 reconnaissance aircraft, sixty Me.109/F.W.190 single-engined fighters and fighter bombers and ten Me.109s for Tac/R, representing a serious tactical menace on our left flank. Airfields in the south of Sardinia were being mined and only Pabillonis was to any degree active. The only forces that could be spared to deal with the situation were the Warhawk units of Strategic Air Force.

The offensive programme included three broad types of targets; airfields, factories and radar installations (in addition to communications, odd coastal shipping and anything that offered in the course of a sweep). Attacks on factories were carried out on 18 August (by twenty-nine aircraft), on 28 August (forty-four aircraft) at Fluminimaggiore and on 1 September (forty-eight aircraft) at Iglesias Zinc Works and Gonnesa. Airfields harassed by surprise attacks were Monserrato on 20 August (with forty-eight aircraft) and Pabillonis on four days running between 5 and 8 September. The most dangerous of the radar stations stood at Pula and Cape Carbonara. Both had Freyas and the latter a Wurzburg.

/Pula

A.A.F. in World War
II Office of A.F.
History U.S.A.F.
N.A.A.F. W.I.S.

N.A.A.F. W.I.S.
A.A.F. in World
War II Office of
A.F. History
U.S.A.F.

Pula was first attacked by forty-eight Warhawks on 30 August, fifty-one on 3 September and for the third time by four Mitchells, who attacked it with bombs and 75 mm cannon shells on 5 September. Considerable damage was done by the first and third attacks. That the Germans attached great importance to this site was proved by the display of intense and accurate flak defence. At Cape Carbonera four direct hits were claimed.

T.B.F. O.R.B.

Tactical Bomber Force Activities up to the Reggio Landings

Until the night 2/3 September, the T.B.F. effort was in large part night intruder work, although some day missions were flown against gun positions, marshalling yards and junctions. Some few attacks were designed to draw fire from shore batteries in the San Giovanni - Reggio area, so that Allied Army observers on the Sicilian side of the Straits could plot their positions. Although in general their programme was co-ordinated with that of S.A.F. prior to D Day, from D minus 8 Day (Avalanche) to D Day (Avalanche) T.B.F. was operationally controlled by T.A.F. through D.A.F. on a similar plan to that ruling in the last stages of Sicilian operations. Once Avalanche was launched, T.B.F. would, as will be recalled, divide its allegiance between D.A.F. (1) and XII A.S.C. (2) With the division of staff would come a change-over from strategical to tactical operations. Tactical Bomber Force still retained a measure of general control of its own affairs and from a small Advanced H.Q. alongside Advanced XII A.S.C. and Advanced D.A.F. controlled calls for night fighter escort. (3)

/Tactical

- (1) With No.232 R.A.F. Wing and No.47 U.S. Gp. - (both Light Bomber).
- (2) With No.326 R.A.F. Wing, No.3 S.A.A.F. Wing (both Light Bomber) No.12 U.S. Gp. and No.340 U.S. Gp. (both Medium Bomber).
- (3) The growth of their effort may be judged from the fact that from 16/17 to 31 August they flew a total of five hundred and fifty-two sorties by day, five hundred and four of them against communications and forty-eight against gun positions; five hundred and forty-five tons of bombs were launched during these attacks. By night there were ninety-one effective sorties flown, fifty-seven of them on armed recce., twenty-three against gun positions and eleven against troop concentrations. A rapid step-up in effort was achieved as the Calabria landings became imminent. On 2 September, T.B.F. attained a total of three hundred and fifty-seven sorties.

Tactical Air Force Operations up to the Reggio Landings (1)

TAF/69/Air
Operational
Directive for
Operation Avalanche
No. 1B. 17 August,
1943.

The efforts of Tactical Air Force (including D.A.F., XII A.S.C. and T.B.F.) were, up to D minus 1 Day (Avalanche), designed to assist Strategic Air Force in neutralising enemy air forces located in Southern Italy, to impose the maximum interference on the movement of enemy forces and supplies inside Southern Italy and towards the assault area, and to prepare the ground for the landings. The operations of S.A.F. up to the eve of Baytown, having been examined, it is now necessary to review the combined effort of T.A.F. up to and including 2 September. At that point, D.A.F. with elements of T.B.F., broke away to direct support of the Eighth Army, and to protect Avalanche convoys along the south and east Coasts of Sicily, in company with aircraft of Malta Command. N.A.T.A.F. Operational Directive of 23 August, after referring to the need for the resting of their units, laid down the principles of their immediate task in continuing the attacks on communications in the Toe of Italy began by Strategic Air Force. No hard and fast air boundary was observed, merely the general axiom that XII A.S.C. and D.A.F. were to keep as far as possible to the West and East Coast respectively.

Air Preparations by Tactical Air Force for Baytown

N.A.A.F. Int/Op
Summaries
August Sept.
1943.
N.A.T.A.F. O.R.B. -
August - Sept. 1943.
A.A.F. in World
War II Office of
A.F. History
U.S.A.F.

From 18 August, following the conclusion of operations in Sicily, T.A.F. kept a watching brief on every corner of Calabria. Mustang Invaders, sometimes escorted, began with formations of twelve on missions against road and rail traffic in the Cetraro, Scalea, Paola, Cosenza, Sapri areas, at Fuscaldo in Western Calabria and at Sibari and Catanzaro in Eastern Calabria. Enemy opposition, both from aircraft and massed flak, was more formidable than usual; for the Germans broke down the elements of their static sites and used them tactically on the roads with great mobility. On 19 August a formation of twelve plus

/eight

(1) As a yardstick by which to measure the efficacy of the preparations of the period, as well as our full capabilities, it is instructive to take the total sorties flown in the 13 days including 19 August to 31 August by units controlled by the A.O.C. -in-C., N.A.T.A.F., XII A.S.C. flew 961 sorties, D.A.F. 1441 and T.B.F. 646, totalling 3048; which total, set alongside the joint effort of 15,977 sorties for 1 - 18 August shows how deeply the need of rest and refit went. There was a clear fortnight during which the S.A.F. (and in particular the Wellington Squadrons) operated often to the extreme of their tether, while the more fortunate Tactical crews put up a daily score of only 27% of that achieved during the closing half of the Sicilian Campaign. The only point to be noted here is that it is not true to say the Tactical Air Force carried on non-stop at full pitch between the two campaigns. Furthermore from 18 August for seven days the entire Tactical Bomber Force stood down. A breakdown of the 19 - 31 August effort shows as might be expected a preponderance of D.A.F. sorties, actually 1441 to 961 by XII A.S.C. and 646 by T.B.F. XII A.S.C. was gathering strength for Avalanche.

eight escort - all Invaders - after dropping bombs on Catanzaro marshalling yards, were jumped by a dozen Me.109s while returning over Cape Vaticano, as they circled round one of their own pilots parachuting after a flak hit. Five Invaders were destroyed as against five Me.109s and two probables.

Invaders also provided escort for strategic attacks on Salerno on 22 August. Together with D.A.F. Kittyhawks, other Invaders escorted S.A.F. Mitchells raiding Battipaglia on 23 August. With Operation Avalanche impending, Invader units were steadily moved, towards the end of August, on to Milazzo bases, from which they were to function as close cover to the assault. Contemporary with the 64th Fighter Wing Invader effort, was the Tac/R work by the P.51 Mustangs of No.111 Squadron, and Spitfires of D.A.F., who cruised in pairs every day over the Toe, checking up whatever road movement was visible. Their reports pointed clearly to big-scale enemy night movements. It became clear that Baytown would be to all intents and purposes unopposed by active forces, although the terrain would be liberally sown with mines.

Other tasks of the D.A.F. and XII A.S.C. Spitfire squadrons were escorting Invaders fighter-bombing, and protecting shipping moving round Sicily.⁽¹⁾ On 20 August D.A.F. Spitfires escorted Warhawk fighter-bombers over the Toe; on 21 August they escorted the three fighter-bomber missions who attacked the Bovalina-Bagnara road, driving two armoured cars over a cliff, destroying fourteen M/T and damaging thirty-five. Every day onward, small formations were out on similar missions, or on the look-out for Ju.88s on reconnaissance. By 25 August the road blockages in the Sapri, Castrovillari and Sibari areas had defied all the German efforts at dispersal and concealment. Each of these localities was attacked by twenty-four Invaders, (escorted by Invaders of No.27 and No.86 Bombardment Groups as top cover); thirty-six D.A.F. Spitfires gave withdrawal cover. A lucky hit was scored on the mouth of the railway tunnel at the north end of Sapri yards; a cruiser off the same town suffered two direct hits and was left burning near Sibari, which was set well alight.

D.A.F. Kittyhawks and Warhawks

ibid.
D.A.F. O.R.B.
No.1 M.O.R.U.
O.R.B.

After inflicting heavy punishment on craft in the Gulf of Gioia evacuating Axis personnel, D.A.F. Kittyhawks and Warhawks turned to the work of fighter-bombing the retreating German units on shore, and in general finishing Sicilian operations. On 18/20, 23/26 and 29 August, small formations of Kittyhawks and Warhawks attacked sectors traversed by the enemy - Scilla, Melito, Gioia, Locri, Sinipoli, Angitola and Bagnara, shooting up trains, M/T and road-blocks, adding to the confusion caused by the medium and light-bombers, which they escorted on several days against such targets as Catanzaro and Cosenza. T.B.F. returned to active operations on 26 August, after rest and restoration of serviceability.

/Approaching

(1) E.g. on 20 Aug. XII A.S.C. Spitfire sorties were 58 and D.A.F. Spitfire sorties 93.

Approaching the first Climax

ibid.

On 1 and 2 September, the general sense of apprehension increased; the effort against the Toe was stepped up, while the weather suddenly worsened, often to 10/10th cloud by day and night. The Navy was, it will be recalled, shelling Calabrian shore positions at that time; one of the duties of our Spitfire squadrons was to cover them while in action, the Fleet Air Arm Martlets being no match for Me.109s or F.W.190s. T.B.F. sorties rose to one hundred and eighty-six on 1 September and again to three hundred and fifty-seven on 2 September. D.A.F. Spitfires on these two days flew one hundred and forty and three hundred and thirteen sorties respectively. Warhawks and Kittyhawks swept on this day in sixty-seven and fifty-two sorties respectively.

In the Tactical effort on 1 September, thirty-six Baltimores flew missions against Sinopoli, bombing roads and rail tracks; twenty-six Bostons attacked and bombed Salimo. Twelve Bostons of the S.A.A.F. Wing dropped bombs South and East of Leggambaria. Thirty-six Mitchells bombed Bova Marina. Twenty-four Bostons bombed the Radar Station and lighthouse at Cape Spartivento. Mitchells bombed Olivento Town and bridges, Cosenza and Catanzaro marshalling yards. More Bostons, escorted by Kittyhawks, bombed Cosenza yards, but thick cloud rendered results hard to assess and many bombs were dropped through gaps in cloud in the vicinity. Spitfires patrolled the Syracuse - Augusta area, now jammed with shipping.

Sudden Change in Target Pattern on Eve of Calabrian Landings.

ibid.

1/2 September saw a dramatic change in the nature of selected targets in the Toe, which was assuredly not lost on the Germans. Their refusal to be drawn and their unbroken retreat northwards were two of the many pointers to their correct appreciation of our main tactical intentions. As on the previous night, a few Bostons dropped, on the night of 1/2 September, bombs and flares on points in the tip of the Toe; targets all within the potential perimeter of the first day's fighting - San Stefano, Scilla, Melito, Spartivento and Reggio. Again cloud, 6/10 at 2000/1000 feet, with poor visibility, did nothing to help the bomb-aimers. More than usual of Beaufighters of No.600 Squadron (eight) and No.108 Squadron (two) were on patrol, but met nothing.

Army H.Q.s and gun areas assumed target priority on 2 September. They were not numerous and the forces engaged were all that could be spared and few in number. On the other hand, little effective opposition in the air was expected, for by now the Luftwaffe fighters were nearly all located on bases out of range. An attack by thirty-six Mitchells on an Army H.Q. east of Orti was successful. The weather forecast had been one of scattered low cloud over land areas, persisting all day. In the event, this proved to be true for certain local areas; largely on this account, the major effort of the day, a four-missions raid by Mitchells on the Army H.Q. S.E. of Rosarno, had little success; the results of the first formation bombing were not seen, while the second bombed short of the pinpoints. The third formation could not locate the target, owing to cloud, and the fourth lost contact with its fighters, so returned to base. Both these H.Q.s were the objects of further attack

./that

that day, the first not very fruitfully by twelve S.A.A.F. Bostons, who only scored a few hits on the tented camp, and the second by twenty-four Baltimores whose bombs straddled the area. Cloud of 10/10 baulked another mission against an Army H.Q., this time by twelve Bostons who had to bring their bombs back. Several gun areas came under fire and bombing.

Radar stations had become of paramount interest as the two D Days approached. Twelve Bostons and twelve Baltimores went to Cape Spartivento Radar Station after lunch on 2 September. Their bombs fell among buildings not far from the wireless mast. Other targets were troop concentrations at Bova where 250 and 100 lb bombs suitable for dealing with the well-dispersed tents between road and river, were placed by formations of twenty-four Bostons. Back at Locri, Bianco and Siderno Marina, wagons were piling up and the track was in constant use. Forty Mitchells shot up the road, rail track and town at Locri, Bianco rail tracks, and Siderno crossroads and rail tracks, Lamezia, Sapri and Catanzaro rail systems (for the last time before Baytown) were bombed by fifty-seven Mustangs. The only airfield of any dimensions in the area and still in active use was Crotone Main: it would have been an excellent thing to have put its fighters and facilities out of action, but a force of thirty-six Mitchells sent to accomplish this ran into 10/10 cloud and probably never hit the airfield.

Malta

Malta's Part in Pre-assault Operations

Malta Command
O.R.B.'s August -
September, 1943
N.A.C.A.F. Review
of Activities in
the Western and
Central Mediter-
ranean March -
30 September, 1943
Reg.No.7209
N.A.A.F. INT/OP
Summaries August
- September, 1943

The role assigned to Malta fell into a few broad categories, namely a standing watch on the Italian Fleet and Axis shipping in the Adriatic, and on enemy airfields in the Heel of Italy; night fighting and intruding; photographic reconnaissance and patrols over enemy ports; convoy escort to and from Alexandria. Her own defence had now no longer to contend with German bombers, but continuous penetrations by German long range reconnaissance aircraft had to be discouraged.

Watch on the Italian Fleet and Shipping Protection

ibid.

For many months Malta aircraft had watched the Italian Fleet at Taranto and in other South Italian ports. When on 24 and 27 August, a cruiser made two sorties from Taranto for a little gun practice, Malta knew it and her aircraft watched her back to harbour. P.R.U. Spitfires and Special Equipment Wellingtons kept the closest watch on enemy naval and air bases in South Italy, to such effect that while convoys were under Malta's protection no attacks on them either by sea or air developed. There were some fifty Italian torpedo bombers stationed in the Heel, but probably in view of the Italians' desire for an honourable peace at an early date, they were not used at this juncture against our convoys. Baltimores, Wellingtons and Spitfires reported no interference by submarines.

Night Fighters and Intruders

ibid.

During the moon period over the second and third weeks of August, Malta-based Mosquitos flew eighty sorties over Sicily and the Boot, bombing rail centres and installations, marshalling yards, factories etc. On the night 17/18 a Mosquito shot down a Do.217 over Brindisi. On 22 August Mosquitos carried out dusk and dawn patrols over Crotone, Taranto and Corfu, as well as Foggia airfields. On the night 29/30 August a few Mosquitos and Beaufighters, using Sicilian airfields, shot down a Cant.1007 which was taking part in a raid on our shipping. These were typical episodes in a constant day and night programme.

Watch on Enemy Sea Supply

ibid.

The Adriatic, where Axis shipping was very active on tasks such as carrying oil from Trieste to the southern ports, was Malta's special hunting ground. Here her aircraft often ran up against Italian and German night fighters, including a few Do.217s and obsolescent German seaplanes such as the He.115. They supplied valuable information and confirmed that, apart from submarines, the enemy relied to a great extent on his F-boats and Siebel Ferries, largely responsible for the evacuation of troops from Sicily.

Summary of Malta's Contribution

ibid.

The protection by Malta of convoys and shipping in harbours and roadsteads continued into September up to the landings at Reggio and Salerno. Their careful check on the Italian Fleet paid big dividends when the task of steering them into safe custody arose, after declaration of the Armistice. The Allies, thanks to Malta's P.R. Units, knew that the air opposition they were likely to meet in the Toe did not amount to more than fifty Me.109s and, on 3 September, that the nearest Ju.88s were at Foggia, about one hundred strong, with another seventy further north at Viterbo. Malta had presented a clean bill of undamaged convoys, and had harassed and reported on the manifold activities of the enemy within her air perimeter.(1)

Luftwaffe Attacks on Allied Invasion

Shipping

Major Raid on Bizerta

The Germans lost no time. At 1520 on 17 August, two Airocobras on a practice interception were vectored on to an aircraft 50 miles N. of Algiers at 15,000 ft. They contacted it over Algiers harbour, chased it and hit both engines so that it crashed into the sea. Fourteen other aircraft flew after reported enemies which proved 'phantoms'. That evening at 2050 hours, a force of upwards of ninety enemy long range bombers were plotted 40 miles north of Bizerta. A Beaufighter was already in the air and was joined by three others who scrambled at 2110 hours - an interval of 20 minutes. The Beaufighters closed in and brought down a Ju.88 and a He.111,

/but

- (1) All this had been achieved between 17 August and 2 September by the following sortie totals; two hundred and thirty Spitfires, one hundred and fifty-four Beaufighters (Day and Night), ninety-six Mosquitos, one hundred and eleven P.R.U. Spitfires, sixty-six Baltimores, eleven Bostons and sixty-three Wellingtons.

A.M.W.I.S.
No.208
A.H.B. IIG/1
N.A.A. Int/
Op. Summaries
A.H.B. II
J15/10.

but three other patrolling Beaufighters saw nothing. Anti-aircraft fire accounted for another seven bombers. The two waves of the Luftwaffe, taking bearings from their own flares, dropped a large load of bombs. Two ships and one landing craft were hit and military buildings in the town damaged. At 0410 in the morning another two aircraft were signalled but neither the two Beaufighters scrambled nor the A.A. fire made any contacts.⁽¹⁾

Second Night Raid on Bizerta

N.A.A.F.
Daily Int/
Op Summaries
August -
September,
1943.

N.A.A.F.
A.I.W.S.'s
August -
September,
1943.

The following night a bomber force of similar size set out for Bizerta, this time including a few He.111s. As frequently happened, not all reached Bizerta; some lost their way or suffered technical trouble. Forty aircraft in all, again in two waves, attacked the port and shipping. After a day of fruitless scrambles and patrolling by Allied fighters, a few enemy aircraft were plotted at 2000 hrs. S. of Sardinia on a southerly course. When two Spitfires scrambled the enemy elements turned North. Later at 2340 hours, the serious business of the day began with the arrival of the first of two waves of bombers. One Beaufighter was on patrol, four others scrambled. They destroyed two for certain, one probably. The A.A. defence, formidable as usual along the African coast, accounted for four others. Two He.111s were among the victims. In the face of the combined defence, the attack was not pressed home and many bombs fell wide. The only damage was to two ships. Allied sensitivity to the double stroke was reflected in the stepped-up patrols on 19 September. From dawn to dusk twenty-six Spitfires patrolled the area.

Enemy Raids on Sicilian Bases

ibid.

The next port raid of fair dimensions was staged on the night 23/24 August. A force of some forty to fifty aircraft, (mostly Ju.88s with a few Do.217s) approached Palermo Harbour at 0411 hours, dropping flares, followed by a few bombs. Three Beaufighters were scrambled and had some success, bringing down two Jus, the same score as that by the A.A. defences. Two small submarine chasers were sunk, a coaster

/damaged

(1) German Interference with Beaufighter R/T and R.D.F. Jamming

Interrogation
Report on Crew
of Ju.88 baled
out at Saoule
27 August,
1943.

N.A.A.F.
A.I.W.S. No.
42 A.H.B. II
J 1/43.

Interesting evidence bearing on night fighting tactics was given by an experienced pilot of Kampf Geschwader 1, the oldest unit in the Luftwaffe. While it must be treated with some reserve, it does suggest that the Germans knew more than they were often given credit for. He said that on one of the raids on Syracuse during the Sicilian Campaign, a W/T Operator from his unit happened to have tuned in to the Beaufighter R/T frequency on his Fu.Ge.16 and, because of his English, claimed to have spoken to the Beaufighter crew, vectored his aircraft on to it, shot it down and then informed the British Controller that he had done so - 'Beaufighter pilots talk too much', he said -. On his returning to base, the events of the early morning were reported to Oberst Pelz, the Bomber Commander, who detailed K.G.6 to gather further relevant information. From now on each bombing mission carried an "H-Funker", a special English-speaking W/T operator in the Flight-Leader's aircraft, whose job it was to listen in to Allied R/T; he was fed with information on our frequencies by German ground listening posts. A special extra-wide band listening gear was installed in the H-Funker's aircraft.

damaged and there were considerable military casualties; poor results considering the strength of the force and the amount of work put, as usual, into the planning of the raid; for sometimes bombers would travel from Sardinia or N. Italy to the S. of France, stage in Sardinia and after the journey to their target return to an Italian base.

During these days, day bombing was entrusted to small formations of fighter-bombers - F.W.190s and Me.109s - who bombed Augusta several times, as well as other vital spots, not with impunity, or without scoring some telling hits. These attacks were regular, one at dawn and one in the morning or evening every day except 28 August. Bizerta was left alone for the time being, although a Ju.88 dropped flares over it on the night 25/26 and was shot down by a Beaufighter. Four nights after the Palermo raid, about fifty aircraft flew to Algiers and after flying round for some 25 minutes, came in from all directions. Thirty-seven were plotted over the target, yet the sole damage sustained was to three houses in the town. It was true that the five Beaufighters of No.153 Squadron and the two of No.414 did much to interfere, and believed they brought down a He.111; but the whole effort was stamped with futility. The A.A. defences, who had had plenty of practice since November, 1942, accounted for two of the raiders.

It was now the turn of Augusta; apart from the continuous attention of fighter-bombers, it was to feel the weight of the German heavies twice before the Eighth Army moved across the Straits. After two small afternoon raids, each by four Me.109s, followed, at 2100 hours, an attack by upwards of forty bombers (mostly Ju.88s with a few Ju.87s) who bombed the harbour without doing much harm. T.A.F. Beaufighters from Cassibile were patrolling that night, but did not intercept; the defence was left to the A.A. units, who brought down two Ju.88s. The next morning formations of four F.W.190s bombed the same port twice and three days later some twenty F.W.90s bombed the harbour just after noon. Patrolling Spitfires ran into this force when it had joined up with a smaller force of a dozen F.W.190s raiding Catania and accounted for four of the enemy, while another fell to ground gunners. That this was the largest fighter-bomber attack along the east Sicilian shore, now jammed with material, is an index of the general shortage of aircraft on the German side. There were ample opportunities at several points for really damaging concentrations of bombing attacks. The Luftwaffe did not, because it could not, take advantage of them.

Coastal Air Force

Anti-Shipping Strikes by Coastal Air Force

ibid.

After the sudden end to operations in Sicily, two Australian Wellingtons of No.458 Squadron took off early on 18 August with two torpedoes each to attack a small enemy convoy 25 miles W. of Rome, off Fiumara Grande. Weather prevented them checking results and other Wellington reinforcements sent made no contacts; fog at base had been forecast, so they returned home early. On the afternoon of 19 August four torpedo and four anti-flak Beaufighters were reconnoitring in the same area when a schooner was spotted 12 miles S.E. of Civitavecchia. After they had set it alight they were jumped by three F.W.190s and one MA.202. One Beaufighter crew, whose aircraft had been hit, made base just in time to jump out when their aircraft went up in flames. Again, on

/the night

the night 22/23 August, Australian Wellingtons halted a merchant vessel with a torpedo. Eight Beaufighters of No. 39 Squadron were sent to continue the attack but failed to find the ship and its four companions. All they saw was five Ju. 52s and one of the now rare six-engined Me. 323s (all transport aircraft). On 24 August eight Beaufighters of No. 47 Squadron had a field day; four carried torpedoes; 15 miles N. of Civitavecchia they sighted two barges, one tug and a schooner. The barge was afire and the schooner sinking when one of the latest model Italian fighters - a Re. 2001 - attacked. A Beaufighter had to jettison its torpedo. An hour later, at 5 miles S. of Alistro, they attacked with torpedoes and cannon fire a small vessel and two tugs. On the way home two F.W. 190s came in to attack, but unsuccessfully. One of the Beaufighters which was in trouble ditched off Cuni Island - the crew were picked up by a launch and an American destroyer pinnace aided by two Spitfires. On 2 September, a sharp attack on two large barge type vessels 5 miles N. of Corsica proved costly: two of the ten Beaufighters engaged were shot down by flak.

Defensive Role of Coastal Air Force

N.A.C.A.F.
Review of
Activities in
the Western
and Central
Mediterranean
March - 30
September, 1943.
Regd. No. 7209

Radar coverage had by now been extended from North Africa to Pantelleria, Lampedusa, Sicily and Ustica Island, owing to the progressive replacement of units in the west of the theatre by U.S. personnel and equipment. During the occupation of Sicily, Tactical Air Force received its first Night Fighter squadron from Coastal Air Force, equipped with Mk. IV A.I. Soon after the fall of the island an American Beaufighter squadron followed. The mass of port and convoy defence still lay with Coastal Air Force, who had only attained their present powers of interception of the enemy and control of own night fighters by exercising ingenuity, intensive training and a high degree of mobility among their ground units.⁽¹⁾ Many difficult problems had been faced such as the interception of low flying aircraft, for which, it is worth remembering, warning is recorded on instruments much later and closer inshore than say at 10,000 ft. While the student should note that at this time the high power G.C.I. sets were used for controlling and vectoring our fighters on to enemy aircraft while protecting major ports, whereas the C.O.L. station (originally designed for warning and information only), had to be equipped with Very High Frequency (V.H.F.) and was then sited along coasts to protect convoys against low flying attack.

Coastal Air Force had been hard put to cope with the fast high-altitude, single seater reconnaissance aircraft which the Germans had stripped down and sent over regularly. Spitfire Vs. and Airocobras were relatively poor in climb and altitude performance; even when the long awaited Spitfire IXs and Lightnings arrived, and two of the latter were attached to each U.S. Airocobra squadron and a few Spitfire IXs to some British Hurricane and Spitfire squadrons, the position was still unsatisfactory and the Luftwaffe did get through to our harbours and bomb them with some success.

/The obligations

(1) By September, 1943 there were ninety Radar ground stations within the Command.

The obligations of Coastal Air Force prior to Baytown and Avalanche were in general, as laid down in the Outline Air Plans, the protection of shipping and ports as they were vacated by the Tactical Air Force 50 miles behind the front line. The Allied anti-submarine war in the Mediterranean was still in the defensive stage - although that was to undergo radical change before long - and, though the Germans were being driven from the high seas, they suffered as yet from no lack of experienced German seamen willing and even anxious to try their luck in ships along the coastal sealanes.

Convoy Protection, Anti-Submarine and Anti-Shipping Operations by Coastal Air Force.

N.A.C.A.F.
O.R.B.

The night before the fall of Sicily, five He.111s attacked a vessel out of Bone as it was joining a convoy, and with a torpedo hit sent it to the bottom, with three hundred and twenty-five Italian Ps/W and three Allied crew. Two of four Beaufighters from No.219 Sqn. vectored on to the Hes shot down two of them and ship's gunners a third. Every night onwards patrolling was extensive and continuous, correlating with the great number of ships both eastbound and westbound along the N. African littoral and the shuffling of units round Sicily and between that island and Africa. On the night 18/19 August, for example, in the sector from Bone eastwards, one Hudson, seven Beaufighters, eight Spitfires and fifty-two Airocobras of 3/6 Squadron (all 52 French), were airborne on convoy protection. Allied interception frequently picked up enemy aircraft, but these preferred as a rule to keep their distance.

G.R. anti-submarine patrols were the special role of the Hudsons of Nos.608 and 500 Squadrons, the French Latecoeres of No.4 S. Squadron and the Wellingtons of No.36 Squadron. They sighted several submarines, who crash-dived just in time; tell-tale oil patches and shots from the darkness revealed the presence of others. Also engaged on this work were the Warhawks of the French Lafayette Squadron, the Bisleys in No.614 Squadron and occasionally R.A.F. and U.S. Spitfire Units. There were, too, the Walruses of No. 4 S. French Squadron, and the Swordfish of No.813 Squadron, each of which carried a torpedo.

Other Air Operations in the Mediterranean
Theatre 1 August - 8 September

N.A.A.F. W.I.S.
A.A.F. in World
War II Office
of A.F. History
U.S.A.F.

It is necessary at this point to review some of the other activities of M.A.C. which, although not apparently affecting the proposed landing areas, bore decisively on the whole course of the campaign. August opened with a raid by some one hundred and sixty Liberators of Ninth Bomber Command on the Rumanian Oil Refineries at Ploesti. From a low level, in face of very intense flak and against the opposition of some eighty-five enemy fighters of sundry types, the Liberators bombed the Ploesti refineries and twenty-nine Liberators those at Campina. In the light of the later growth of the oil offensive to epic proportions, it is as well to note what happened to the bombers on this occasion and the results they claimed. This was only the second attempt to bomb Ploesti.(1)

From the number and variety of aircraft mustered and the massed flak, it was clear that the Germans attached major importance to their fuel output. Twenty Liberators were shot down over the target, five were destroyed when /crash-landing

(1) The first was on 12 June, 1942, when fifteen B-24s were despatched.

crash-landing in friendly territory, nineteen more were missing and one crashed into the sea on the outward journey; a total of fifty-four aircraft were lost, or 30 per cent of the force employed. The apparent results appeared promising, but in light of later survey were by no means decisive. At three refineries out of the six bombed, the plant was put out of action for some time; the other, although crippled, continued to function in part, and were rapidly reconditioned.

In considering operations against Italy in the critical formative period, the attacks by R.A.F. Bomber Command from U.K. must, although their main significance was political, not be omitted. These amounted to ten in all, of which one was against Genoa, which seventy-three aircraft attacked on the night 7/8 August: four were against Milan, where some nine hundred aircraft attacked on the nights 7/8, 12/13, 14/15 and 15/16; three were against Turin, involving some three hundred and eighty bombers on the nights 7/8, 12/13 and 16/17 August.

The month of August is also noteworthy for the first attack on Austria by aircraft of Mediterranean Command. On 13 August about one hundred Liberators of Eastern Air Defences set out to bomb the Messerschmidt Factory at Wiener Neustadt, near Vienna. Bad weather and poor visibility conspired to baffle the attackers; north of Zagreb thirty-two aircraft gave up hopes of finding their way further and turned back. Sixty-one of the balance pressed on and found the target. They damaged every building in the Steyr Daimler Works. A hangar was destroyed and twenty aircraft on the ground destroyed or damaged at the aircraft works and heavy damage brought about at the Henschel Works. On this occasion, in view of the unexpectedness of an attack, air opposition was slight. On the way some thirteen F.W.190s scrambled to meet them - probably from the Udine neighbourhood - and seven F.W.190s were found at Wiener Neustadt itself.

A glance must be taken, too, at the infancy of the operations by the Special Squadron of Eastern Air Defences over countries soon to form the right flank of the Allied armies in Italy, and a note made that the partisans in the Balkans were supplied during August with 64 tons in Yugoslavia, 18 tons in Albania, 148 tons in Greece, and 2 tons in Crete. This traffic was to grow vastly in the course of time and a special air force formed from the rib of Mediterranean Allied Air Forces, to be christened the Balkan Air Force. One more unusual event, which was to establish a precedent for transcontinental flights in co-operation with the bases of another theatre was the landing, on 17 August, of one hundred and forty Fortresses of Eighth Bomber Command, in North Africa, after bombing the Messerschmidt Factory at Regensburg. Flying south across the Mediterranean, seven aircraft had to force land in the sea north of Bone and forty-three of their crews were, thanks to the Air Sea Rescue organisations of Coastal Air Force, rescued. Seven days later eighty-four of these aircraft bombed Bordeaux on the return flight to U.K.

Strategic Attacks on Airfields 3 - 8 September, 1943, in Preparation for Avalanche

A.A.F. in
World War II
Office of A.F.
History
U.S.A.F.
Operation
Avalanche
M.A.T.A.F.

Strategic Air Force, assisted by elements of Ninth Air Force, now turned to the objects of neutralising the enemy air forces and disrupting communications within striking distance of Salerno. The first object they partially achieved in a series of co-ordinated attacks on the fighter bases in the Naples area, namely Capua, Capodichino and the two Grazzanise landing grounds. The night 3/4 September, seventy-one Wellingtons opened the attack.

/At

At Capua dispersal areas were hit and some aircraft damaged, while the Capodichino field was cratered and its hangars damaged. They saw their bombs explode and start fires. The aircraft attacking Capua dropped, as was very frequently done, a large weight of propaganda leaflets (1) prepared by the Psychological Warfare Department of A.F.H.Q. Four of the Capua mission's aircraft turned to attack the small coastal town of Torre Annunziata and Grazzanise landing ground. Neither mission met any enemy aircraft or suffered loss. Grottaglie airfield was severely bombed by twelve Halifaxes and four Liberators of Ninth Bomber Command. The next day, the whole area was concealed by a thick pall of cloud, but the bombers set out. Nineteen out of forty Fortresses, heavily escorted by their own Lightnings, sent to raid Capua airfield, dropped their load of bombs on Terracina town and the landing ground 3 miles to the West instead; ten enemy aircraft fought this much superior force for the loss of one Fortress and a Me.109. The rest of the Fortresses dispatched returned their bombs to store. Another mission of forty-one Fortresses had even less luck, failing to locate the airfield at Capodichino. A few Me.109s met dropped some aerial bombs, which fell wide.

Strategic Lightnings joined in the action. Sixty were dispatched, flying in at almost ground level. Even now the weather was so hostile that only twelve found their target, No.1 Satellite at Grazzanise. They took advantage of their surprise advent to shoot up a few aircraft standing idle. Others of the formation flew on to a key target, the Radar station on Ventotene Island, which they bombed with dubious results. They shot at a variety of odd targets, of which there was a profusion in those days; goods trains, gun positions and M/T on the road. Thirty-six others were sent, vainly, to bomb the landing ground in the same airfield complex. Between the coast and Sessa Aurunca, they attacked barrack rooms, power station and grid lines. The only enemy aircraft destroyed in the entire Grazzanise effort was a Fieseler Storch 156 Communications aircraft, the type used for the transport of high-ranking officers.

A great deal more had to be achieved before it could be claimed that Grazzanise was crippled. Another seventy-nine Wellingtons set out the same night - 4/5 September - to continue the assault. The first formation dropped long delay bombs with dubious success on No.1 Satellite and the second came in later over what, in the light of their own flares, seemed to be the main airfield. A heavy load was dropped, not as thought on the field, but four miles away. In all, a night wasteful but not entirely profitless, for a big ammunition dump was hit. Grazzanise had the rest of the night and a forenoon to recover, but in the afternoon one hundred Marauders and fifty Mitchells (escorted by Lightnings) bombed No.1 Satellite and the main field, successfully, as photographs showed. There was unconvincing opposition by a number of German and Italian fighters. The rest of the hundred Mitchells allocated to the target were defeated by the overcast weather, so they bombed railway bridges, tracks and highway just S.W. of Minturno, (before long to become a key point in the German defence system). Grazzanise airfields were by now well cratered and only partially serviceable. Capodichino received one more visit before the invasion. It was an ambitious raid on 6 September, by sixty-six Fortresses; but thanks to the omnipresent cloud only eighteen bombed the airfield, which suffered a little more

/cratering.

(1)

Referred to in official documents as nickels.

cratering but still continued to function. A few fighters only put up token resistance. The defence was obviously husbanding its resources.

On the same day a force of one hundred and twelve Mitchells and about one hundred Lightnings bombed Capua about noon. It was confirmed that their bombs covered the field with one hundred and forty craters. The barracks and a hangar were set on fire and four fighters on the ground destroyed. The air opposition was again half-hearted. Some fighters went for the escort, neglecting the bombers. Cloud cover the same day wrecked another effort by seventy-four Fortresses to reach Pomigliano airfield; almost the entire bomb load was carried back to base.

Summing up the results of the attack against the Naples area fighter groups, it could be said that Capua was unserviceable for a short time and the others partly so. Many a well-cratered field showed up 24 hours later on photographs as having been levelled. The margin of time between the raids and the actual landing in fact allowed the enemy to repair most of the not very heavy damage inflicted. Bad weather achieved what enemy fighters and flak could not, by preventing follow-up raids.

Effort to cripple the Luftwaffe's Heavy Bomber Bases

Ibid

Other counter air force operations bore out the pressing need to break down the formidable concentration of heavy bombers at Foggia and Viterbo, so dangerously near the coming convoy and battle areas. The first of two raids on Viterbo, the smaller and more northerly base, took place on 5 September; if the one hundred and thirty Fortresses taking part did not eliminate more than a few aircraft, they put the airfield out of action. The second attack in the late phase, and the fourth in September, was well-timed for the night 7/8 September, when forty-eight Wellingtons bombed without loss. It was hoped to have put out the airfield and some of the fifty-seven Ju.88s just photographed there: a dozen heavy flak guns put up patchy resistance, but were fairly accurate. Reports of results were not too encouraging. The dispersal was, as at Foggia, good. At the latter, certainly, the succession of Allied attacks did not appreciably affect the bomber strength and serviceability. Indeed, Foggia served at the time of the Salerno landings as the base for all the fighter units of the Close Support Forces, as well as a large force of Ju.88 bombers. Another small force of Liberators and Halifaxes of the Eastern Air Defences M.E. (Ninth Bomber Command) set out the same night - 7/8 September - to bomb San Pancrazio airfield, a small base in the Heel which might well serve the retreating Germans as a base for a few

N.A.A.F. Daily
Op/Int,
Summaries.

The last attempt to cripple Foggia before the Salerno landings came on 7 September. About one hundred and twenty Fortresses, for the loss of two aircraft, bombed Satellites Nos.1 and 2. Three of the four groups engaged ran into aggressive opposition by some fifty to sixty fighters, mostly Me.109s and F.W.190s. Some came in to 300 yards range and "rocket type shells leaving a trail of white smoke" revealed the presence of some elements of the Mortar Staffels of Jagd Geschwader No.3 or No.53, who could now muster a dozen serviceable aircraft. They fought the bombers for upwards of half an hour, over and from the target, losing thirty-seven aircraft in the struggle. The photographs of the event were

/disappointing,

disappointing, for both fields were left fully serviceable, although six Ju.88s and four S.E. Fighters were left damaged on Satellite No.2.

The week's work proved the difficulty of destroying even large enemy air formations on the ground when the airfields are large and the aircraft skilfully dispersed, especially in bad weather such as ruled throughout the whole week. The Air Outline Plan had envisaged the possible need for attacks on the enemy's Sardinian airfields. By this time air strength on the island had substantially decreased, in view of the decision to evacuate through Corsica. There was now only one bomb-worthy air target left, namely Pabillonis landing ground, and this was dealt with on 5, 7 and 8 September, by a total of over one hundred U.S. Warhawks.

Strategical and Tactical Attacks on Communications

3 - 8 September 1943

N.A.A.F. Weekly
Intelligence
Summary.

N.A.A.F. Daily
Op/Int. Summaries.

A.A.F. in World
War II. Office of
Air Force
History U.S.A.F.

The Air Forces' other main commitment at this time was communications, especially those leading to the Salerno area. On the night of 3/4 September began the concentration on railway points near Salerno with an eighteen Boston raid on Battipaglia; four Mitchells and thirty-two Warhawks went out to extinguish the Radar at Pula, where their bombs hit both Freya and Wurzburg Stations. On the night 5/6 a force of forty-eight Wellingtons started fires in Villa Literno marshalling yards. A few Mosquitoes went intruding over the area, one of which crash-landed at Monte Corvino. Close on the heels of the Wellingtons followed forty-three Fortresses, who after bombing Capodichino and Pomigliano airfields, divided their efforts between Villa Literno railways, Gaeta Harbour and Minturno rail yards. The same night 6/7 September, forty-eight Wellingtons set the Battipaglia marshalling yard on fire. Sulmona, to the North, had already been hit again on 3 September; it was now the turn of Benevento. Twenty-one Bostons and six Baltimores bombed these vital⁽¹⁾ marshalling yards on the night 7/8 September, completing the blockage. One-hundred Wellingtons went back on the night 8/9 to Battipaglia to swell the blockage there and at Eboli. Small formations of Wellingtons bombed Gaeta and Forio harbours, (near Naples), the same night, a cover move which, in the light of later revelations, could not have distracted the Germans.

The Raid on Kesselring's H.Q.

A.A.F. in World
War II Office of
Air Force
History U.S.A.F.

One all-out attack on German Army Headquarters was planned and launched at a critical moment. It was known that G.-in-C. South, General Kesselring, had his two operational H.Q.s⁽²⁾ at Frascati near Rome. It was to the advantage of the Allies to paralyse this nerve centre just before the landing. One hundred and thirty-one Fortresses were over the target at 1209 hours and from then to 1234 hours dropped 389 tons of mixed bombs on the area. The flak was, as might be expected, intense and accurate and a Fortress fell to it. Battle was joined by some forty enemy aircraft, who lost heavily to the defensive armament of the Fortresses. These claimed twenty-two Me.109s, two F.W.109s, two M.A.202s and two Re.20001s destroyed, as well as several probables. Damage among the villas was considerable and the axis radio reported that Kesselring narrowly escaped death.

/Senior

(1) Some 33 miles due North of Salerno.

(2) Luftflotte 2 and O.B.S.W.

C.S.D.I.C. Report
No.A.592/FN.935
Von Pohl Series
(Air) C.M.F.

Senior German officers admitted later that many buildings were destroyed and the signals network very badly disrupted, but less than ten per cent casualties suffered. Immediately after the attack an operational control section with the most vital records and equipment was sent up to Monte Cavo, an important link in the German communications system and also in their radio network, and of great value in view of the poor Italian communications. By 1800 hours the same day the H.Q. was again in control of the situation. The attack, they claimed, did not interfere with ground operations that day or air operations for the following night: their dispositions were already made.

Coastal Air Force Anti-Shipping Strikes and Anti-Submarine

Operations between Operations Baytown and Avalanche

N.A.A.F. W.I.S.
Nos. 42, 43.
A.H.B. II J.1/43.

C.A.F./Air/
O.R.B.

On four days between 2 and 8 September, aircraft of Coastal Air Force were hard at work finding the elements of what was now a dwindling coastal shipping force. Results were poor. On the 6 September, ten Beaufighters set out to deal with a tanker and three E-Boats, sighted a few miles off Leghorn. All the six torpedoes carried were launched against the small convoy, but with apparently negligible results. Continuous patrol was maintained up to the eve of the landings over normal coastwise convoy traffic, over every mile of sea from Oran to Bizerta and over ships taking up their final dispositions. The same squadrons as before of Beaufighters, Walruses, Swordfishes, French Latecoeres, Kittyhawks, Airocobras, Hudsons and Bisleys, covered our cargo ships and transports along the North African coast or went after suspected submarines over the areas through which the assault forces must pass. Although their presence served principally as a deterrent, there were incidents to justify the high consumption of effort. For example, late on 3 September, a Ju.88 attacked a convoy off Cherchell (Algiers) and was damaged (but not fatally), by seven escorting Beaufighters. There was one night attack by German aircraft on an Allied convoy on the night 2/3 September, off Cape Tenez. Once again, the bombers failed to make use of their opportunities. The three Beaufighters scrambled - but made no contacts. One of the escorting destroyers was hit but made port.

State of the Luftwaffe

First Use of Window by Luftwaffe in Mediterranean

Mare Nostrum
No.52 (period-
ical) M.A.C.A.F.

The only other attempt before Avalanche to interfere with shipping concentrations was on the night 6/7 September at Bizerta. A force of seventy-nine bombers set out from base; the majority reached Bizerta at 2040 hours. Three waves of Ju.88s and He.111s, each of about fifteen aircraft each, were plotted flying in over Bizerta and Ferryville. Allied radar was saturated by Window, dropped by the enemy for the first time in the Mediterranean, and were so unable to achieve complete accuracy. Although the defence was confused by this method, it proved a costly night for the enemy; four bombers fell to A.A. gunners and five to Beaufighters. Not a ship was hit. A handful of men were wounded; a few torpedoes fell harmlessly outside Ferryville. The only serious long range bomber effort by the Luftwaffe against a profusion of sitting targets in the assembly ports ended in failure.

/German

German Long Range Bomber Situation

Most of the available Ju.88s, a few Do.217s and the long range reconnaissance Ju.88s and Me.210s, in all some one hundred and seventy more or less serviceable aircraft were based at Foggia⁽¹⁾ and Viterbo airfield. Most of the He.111 torpedo bombers - some fifty/sixty aircraft - were at Salon. Of the one hundred and sixty Ju.88s photographed on 7 September on Foggia fields, upwards of one hundred were bombers, the rest reconnaissance aircraft. On Viterbo fields were photographed another fifty-seven Ju.88s⁽²⁾ probably all bombers.

There had been heavy falls in the overall strength of the German Air Force in the entire Mediterranean from one thousand, two hundred and fifty in early July to one thousand and eighty-five on the fall of Sicily and now to eight hundred and eighty aircraft, of which only about six hundred were in the Central Mediterranean; but the reduction was largely in fighters withdrawn to Germany. Fighter moves were fluid and confused but the bomber position was more stable. During the period 3 - 5 September, while thousands of troops poured through the Calabrian funnel, only thirty-eight long range bomber sorties were recorded. The formation of seventy-nine against Bizerta was merely a desperate gesture, interrupting a process of conservation for days of greater need in Italy, and, it was firmly held in some quarters, Sardinia. The general state of bomber readiness was fairly high, but machines were often worn out and crews very mixed in quality. O.C. Bombers in South France sent the aircraft of K.G.26 and K.G.100 down to Central Italy, to stiffen the bomber forces for an intended all-out effort.

N.A.A.F.W.I.S.
1943.

German Close support Weakness

The close support forces under Luftlotte 2 were far from adequate. After the loss of Sicily an O.C. Close Support Calabria had been set up, working hand in glove with O.C. Fighter Operations Calabria. In the same area Fliegerkorps II established an Advanced H.Q. with the task of using the weak force in the region to the best advantage. The Luftwaffe had suffered even more sorely than the Allied Air Forces the tug of

/the needs

(1) On D Day Baytown, Foggia housed the following Gruppen.

Gruppen	I and II	of	Kampf Geschwader	1
Gruppe	II	of	K.G.	30
Gruppe	III	of	K.G.	54
Gruppen	I and II	of	K.G.	100 *
Gruppe	II	of	L.G.	1

(Lehr Geschwader of experts/experimentalists).

Note A Geschwader, comprised normally 3 Gruppen, each of 3 Staffeln, and represented, with its Stab (Staff) Flight, about 100 aircraft.

* K.G.100 was a newcomer to the theatre since early August, when it arrived equipped to use Glider and FX bombs.

(2) Units at Viterbo were:- I and III/K.G.30.

General Back-
ground Informa-
tion from
D. of I.(0).

the needs of other theatres and, during August, had lost three Gruppen⁽¹⁾ mainly to the Western Front defence forces, one Gruppe being due to return to Capua after refitting. They also felt the pinch after the heavy losses in the air and on the ground in Sicily and Italy and never caught up with the loss of those aircraft abandoned in Sicily. There were in Italy at this time eight Gruppen of fighters.⁽²⁾ Serviceability ranged between 40 - 70 per cent. We knew from experience that after a week's intensive effort it would fall by another 40 per cent. of the present ratio. The Germans, now convinced that Sardinia was already condemned, arranged in accordance with Operation Achse for Fliegerfuhrer Sardinia to transfer his Battle H.Q. to Ghisonaccia airfield in Corsica, to be followed in a few days by his flying units. Sardinian airfields were put methodically out of action.

German Appreciations of Allied Intentions

Admiral Western
Task Force Report.

"Salerno"
Captured German
Document
(with A.H.B.6).

The landings in Italy in the areas chosen were no surprise for the Germans and the evidence for that undoubted fact must now be considered. Certain basic information was available to both sides. The Germans, hence, knew that the gradients at Salerno were the most favourable on the West coast and that the moon period would be most favourable during the period chosen. Their reconnaissance aircraft were attempting to fix the dimensions of the preparations, although inadequately. They noted the progressive pattern of the air attacks on radar sites and communications in the South, and the blitz on the circle of airfields in the Naples and Foggia areas and doubtless plotted their significance in terms of range.

German Tenth Army Commander's correct Appreciation of Significance of Naples-Salerno Area

Appreciation by
10th Germany Army
to C.-in-C.,
South. 11.8.1943.
Captured German
Document. Report
No.18. Army H.Q.
Ottawa (with
A.H.B.6).

General of Armoured Troops Von Vietinghoff, in his capacity as Commander Designate of the Tenth Army, believed in active moves against possible Allied landings in the Naples-Salerno sector, as well as on both coasts of Southern Calabria. In view of the battle which was to follow four weeks later, his appreciation of 11 August is interesting. He saw Allied landings in the Naples-Salerno sector as the main danger to the whole of the German forces in Southern Italy and advocated reinforcing the actual inadequate Axis forces at that point, by one motorised division. It was foreseen that Southern Calabria would have to be evacuated up to the narrow part of the isthmus around Castrovillari. Nos. XIV and LXXVI Corps must eventually join forces farther north and be ready to counter any Allied landings.

Notes on
Conversation
with Fuehrer
17.8.1943
G.M.D.S.42803/2
Captured German
Document. Report
No.18 Army H.Q.,
Ottawa.

Von Vietinghoff's representations seem to have carried some weight at the conference of 17 August, at which Hitler, Keitel and Jodl were present. Hitler, although still obsessed with the fear of a landing in Sardinia, defined the Naples-Salerno area as the centre of gravity of any campaign in Southern Italy, to be held in any event, as the focal point of all supply lines. He went as far as ordering three Divisions

/to be

(1) II/N.J.G.2 (night fighters), II Z.G.I. (new type fighter) Stab and III/S.K.G.10.

(2) II and III/S.K.G.10, IV/J.G.3, Stab and I and II/J.G.77, Stab I, II and III/J.G.53.

to be transferred there. He would defend Southern Italy, especially Calabria, by delaying actions with fully mobile forces, but only evacuate it under pressure. That he visualised the possibility of a mass withdrawal to Central Italy, backed by the Gothic Line, is clear in his order for preparations for such a move to be made if ordered.

Germans still considering Calabrian Landing as unlikely

G.M.D.S. 42803/2
22 Aug. 1943
Captured German
Document from
Report No. 18
Army H.Q. Ottawa

On his arrival at Polla on 22 August and assumption of command of Tenth Army, having conferred en route with Kesselring, Von Vietinghoff wrote another appreciation. This document, while it paid lip service to the Hitler concept of Corsica and Sardinia, and gave a landing in Southern Italy only as a secondary possibility, only thinly veiled the author's own concern with the Naples-Salerno sector and shrewdly pointed out the unlikelihood of the main landing coming in Calabria. (This plan (Buttress) had only been cancelled in favour of Avalanche five days previously.) It was considered that a landing in Apulia with its Adriatic seaboard was a probable course of action, not to be left out of account, for did it not open up possibilities of action against the Balkans, always a sensitive spot in German eyes?

German Change of View on 29 August

G.M.D.S. 42803/2
29 August 1943
Report No. 18
Army H.Q.,
Ottawa.

The view that a large-scale Allied landing in Southern Calabria was rather a remote possibility changed after 22 August, as intensive air reconnaissance, heavy artillery bombardments across Messina Straits and from Allied ships (detailed in ~~Section 2 of~~ Chapter Three) and prisoners from the Commando raids in the Toe all pointed to a definite menace from that quarter. The signs were correctly read and although they had no knowledge of the exact beaches, they were very near the mark and rightly assessed the Allied intention of holding down the formations then in the South, so that they could not take any part against a main landing elsewhere.

Growth of German Conviction of a Landing in Naples-Salerno-Gaeta Area

Admiral Western
Task Force
Report

On 17 August, it was definitely decided to proceed with the major landing at Salerno. On the same day the Abwehr⁽¹⁾ heard that the Allies planned to land in Salerno Gulf and push across Italy through Avellino - Benevento - Foggia - Bari. Others, a few days later, thought Gaeta a more likely spot. There were occasional scares in late August at the sight of some of our larger convoys. The Army pointed out the need to press on with the defence of Apulia, Calabria and Campania. New strong points were built in the hills round Salerno, covered by Tiger tanks. Kesselring, the German C.-in-C., an old Luftwaffe man, had warned his Commanders in mid-August to expect a landing, without specifying where. The Luftwaffe itself held that Naples-Salerno was the likely target, not only with the object of bisecting the German ground forces, but of driving Luftflotte 2 off Foggia, so that Southern Germany, with its vast production plant, could be bombed. The thought of Floesti does not seem to have entered their minds.

Perhaps the most striking individual piece of evidence that the Allies were expected in the Naples-Salerno-Gaeta area was the disposition of the six German Divisions south of Rome (the Tenth Army). For two weeks before the main assault, three

/of these

(1) Secret Intelligence Organisation.

of these - 16 Panzer Division, 15 Panzer Grenadier Division and Hermann Goering Division - were strung out in the Gaeta-Salerno area, a little way back from the coast. 16 Panzer Division was in the immediate vicinity of Salerno; guarding the Gulf of Gaeta was 15 Panzer Grenadier Division, brought up to strength, after its evacuation with nine thousand men from Sicily. At Caserta, between them, was Hermann Goering Division, also rehabilitated, so disposed as to act as a mobile reserve. In spite of what was happening in Calabria from 3 September onwards, these Divisions stood fast. 26 Panzer Division, 29 Panzer Grenadier Division and the remaining elements of No.1 Fliieger Division were in North Calabria, retiring behind their own demolitions, and elements of 3 Panzer Korps were based south of Chiusi, mopping-up Italian centres of resistance round Lake Bracciano.

Admiral Western
Task Force Report
on Operation
Avalanche.

Apart from these patent moves, and a number of local cases of nerves, nothing happened to suggest that the enemy actually expected landings at the time anywhere in Italy except in the general area where they actually took place. At the end of August, a full-dress rehearsal exercise was carried out on Salerno Beaches for the repulse of a night landing. A week before the assault, Rommel had ordered the taking over of all coastal defences and, after the Italian armistice on the evening of 8 September, their strengthening. The Germans, then, correctly appreciated the general area and time of the assault, but not, in the event, the exact location and hour.

/Chapter 4

Journal of Management Education 30(6)p.789-806

and in 1964, the world's first large-scale production of a synthetic polymer, polyethylene, was achieved. This was a major milestone in the history of polymer science, as it demonstrated the potential of synthetic polymers to replace natural materials in a wide range of applications. The development of polyethylene was the result of a series of experiments conducted by the chemist, Sir George Egerton, who discovered that the polymerization of ethylene could be controlled by the use of a catalyst. This discovery led to the development of the first large-scale production of polyethylene, which was achieved in 1964. The production of polyethylene was a major breakthrough in the history of polymer science, as it demonstrated the potential of synthetic polymers to replace natural materials in a wide range of applications. The development of polyethylene was the result of a series of experiments conducted by the chemist, Sir George Egerton, who discovered that the polymerization of ethylene could be controlled by the use of a catalyst. This discovery led to the development of the first large-scale production of polyethylene, which was achieved in 1964. The production of polyethylene was a major breakthrough in the history of polymer science, as it demonstrated the potential of synthetic polymers to replace natural materials in a wide range of applications.

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2. Government has not been able to secure the
3. necessary funds to carry out its policy.
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5. Government has not been able to secure the
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12. necessary funds to carry out its policy.

Table 1. Demographic characteristics of study population

1. The first of these is the fact that the Commission has not yet received any information from the Government of the United States regarding the activities of the Committee for the Liberation of the People of the East (CLPE) in the United States. This is a serious omission, as the CLPE is a well-known and active organization which has been operating in the United States for many years. It is therefore essential that the Commission be kept informed of its activities, in order that it may be able to take appropriate action to prevent its operations from continuing.

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 26

C H A P T E R 4

THE ASSAULTS

THE LANDINGS IN CALABRIA

D Day

Admiralty M.013838/43
 Flag Officer
 Sicily's Report on
 Operation Baytown.

N.A.A.F. W.I.S.
 Sept. 1943.
 N.A.A.F. ORB.
 Appendices.

F.M. Montgomery's
 "El Alamein to the
 Sangro River"
 A.F.H.Q. G.2
 Weekly Summaries

Admiralty Battle
 Summaries.

By three o'clock in the morning of Friday 3 September 1943, exactly four years from the outbreak of war, the operation was well under way. In the darkness of Messina Straits the convoys for the three appointed beaches; three hundred landing craft in strength, had sailed from Augusta, Taormina, Catania, Santa Teresa and Mili Marini, to rendezvous off the latter port and quietly steam towards the Calabrian shore, covered by powerful offshore forces of the Royal Navy and protected by assault and supporting craft. At 0330 hours the silence was broken by a barrage of the guns of the Eighth Army - one hundred and twenty-five naval guns ranging from 4" to 15", four hundred and ten field, and one hundred and twenty medium army guns in all - the climax of a succession for days past of army and warship bombardments. The barrage continued to play on the Calabrian beaches between Gallico and Reggio and succeeded with a final blast of a full outfit of rockets in sweeping the Italian defence back into the foothills. Just before the first craft were due to touch down, the barrage was lifted.

The first wave of the 17th Brigade touched down at 0440 hours, just a little north of their intended position on How Beach, about the same time as the first wave of 13th Brigade, due on George Beach, touched down close to Torrente Scuccioli and Gallico. They found their way in despite an unexpected heavy smoke screen for which Eighth Army were to blame. Without consulting Flag Officer Sicily, the Eighth Army had included five hundred smoke shells in the barrage quiver. The craft ran into a visibility reduced to 20 yards, a great handicap although first light was breaking. The follow-up flight for George Beach also fell into confusion, owing to the smoke. Fortunately there was little prepared opposition, nothing but some desultory shelling as the craft approached and on through the day; there were no casualties among British and Canadian troops, either at How or George Beaches

Beaches, or at Fox Beach, where a Brigade of the 1st Canadian Division beached at 0450 hours. Reggio and San Giovanni seemed almost deserted; white flags were fluttering from windows. (1)

Air Operations on the First Day

N.A.T.A.F.,
322 and 329 Wings
No. 1 M.O.R.U.
O.R.B.
A.A.F. In World
War II.
Office of Air
Force History
U.S.A.F.

At daybreak began standing patrols of all the D.A.F. Spitfires of Nos. 322 and 329 Wings over the Straits and the Sicilian loading ports between Augusta and Catania, landing craft and naval units offshore, and disembarking troops. A force of Bostons, Baltimores and Mitchells, escorted by fighters, strafed Crotone airfield with good results. Two airfields at Camigliatello, recently reported as harbouring a score of enemy fighters, were visited at 0803 hours by sixty-nine Mitchells. Nothing much came of these attacks except some cratering, hits on buildings, a Me.109 destroyed and a few damaged. A few Baltimores attacked Crotone field, still in use.

The Army moved forward without opposition, occupying Reggio and Scilla before noon, with Kittyhawks, Bostons and Baltimores attacking gun areas ahead of its advance, north of Orti, south of Scilla, east of San Stefano. Medium bombers went further inland to tap the roots and joints of supply and communications. A mixed force of thirty-six Mitchells, Bostons and Baltimores straddled Cosenza with bombs and a force of thirty-six Invaders, with twelve of the same aircraft as escort, hit the tunnel, yards and oil tanks at Marina di Catanzaro rail yards and Stalgetti rail junction. (It was in these latter regions that the retreating Germans were bottlenecked). The Allied aircraft operated in comparative immunity. At Cosenza three fighters interfered. In the afternoon eighteen plus Me.109s and F.W.190s were intercepted by Spitfires on their way in to bomb Messina and so harassed that they jettisoned their bombs in the sea. German reconnaissance was intent on keeping touch with the flow of surface craft and sent over two Ju.88s to observe Sicilian ports. The first was shot down.

/Light

(1) Coastal Defence

Tenth Army War
Diary & GMDS
42803/1
30 Aug. & 3 Sept.
Captured German
Documents. Army
HQ., Ottawa -
Report No.18.

As late as 30 August all Italian demands for greater German participation in the protection of the immediate coastal strips had been met by the statement that it was the task of the Italians to protect the coastline, and the task of the Germans to throw their highly mobile divisions into the breach at the scene of any major landing. On 3 September the Commander of the Seventh Italian Army requested German help in throwing the enemy back into the sea. The reply was that such a course of action would be out of step with German intentions, and was therefore declined. The Germans knew that the first hours of a landing were the decisive ones, but had no intention, especially in view of their evacuation plans, of exposing their troops to the fire of naval guns and becoming pinned down in fighting on beaches far removed from the probable scene of the main action. The Italians were unaware of the German intention to evacuate Calabria without major resistance, although the thinning out of air personnel and the preparations for demolishing certain airfields, must have been apparent. Meanwhile the Luftwaffe activated a new local air command ---- Close Support Calabria ---- with Fighter Operations Calabria co-operating closely.

Light Opposition

No. 1 M.O.R.U.
O.R.B.

8th Army
Operations
Br. Hist. Sect.
Central Med.

Ground targets were hard to find; (1) the Germans never stayed long enough in one place for aircraft to find them where first reported, although up near Cosenza some Kittyhawks did a little damage to M/T on the move. Only two enemy aircraft fell as a result of chance meetings. Yet the Luftwaffe was not idle. One hundred and twenty-three of their fighters scrambled and carried out free-lance patrols, escorted fighter bombers or rescued their airmen from the sea. Forty German ground attack aircraft operated ineffectively against the landings. As the day wore on the bag of Italian prisoners increased. Only a solitary German straggler was netted. The British Division pushed on towards Bagnara, with Nicastro a likely goal at the end of the week, while the Canadians faced the hilly country, with Catanzaro as their first big objective. Reggio airfield fell an early prize, damaged but repairable in a short time. Gallico village was also in our hands by the close of Friday. There was no break in the ferry service from Santa Teresa. While patrols felt their way ahead, Eighth Army poured into Calabria.

Commando Landing at Bagnara (2)

Ibid
C.A.F. O.R.B.

About 24 hours after the first troops had landed, a Commando of two hundred and sixty men was landed at Bagnara, a few miles ahead of the main forces. They took the small German garrison completely by surprise and on 5 September were joined by the main advance part of XIII Br. Corps. Sulmona, well up in Central Italy, was bombed by thirty-four Liberators of Ninth Bomber Command who met the record fighter opposition for this period in the theatre, losing six aircraft.

The only night activity, apart from night fighters, was a raid by sixteen Halifaxes and Liberators against Grottaglie airfield in the Heel, where eighteen single-engined fighters had been photographed. Other pictures eagerly scanned on the same day were those showing two Italian cruisers moving out of Taranto Harbour into the Gulf. The two seas had been combed and the results so far revealed no threat from the sea. It was seen, however, that hard work on the rail tracks in the Naples and Sulmona area had not yet cleared all the blocks. Some wagons were on the move, but there was no sign of any migration southwards to help the Axis divisions now retiring with their legendary speed.

The Second Day

Ibid

2/5 A.A.S.O.
War Diary

On Saturday 4 September the air was relatively quiet, the enemy staying well hidden from the air and still declining battle with the ground forces; the elements favoured these tactics by providing general cloudy conditions, so negating attempts to photograph their airfields. Twenty-four Baltimores, with Spitfire escort,

/attacked

(1) During the day D.A.F. recorded 273 Spitfire, 131 Warhawk, 99 Kittyhawk and 2 Mustang sorties.

(2) Operation Hooker.

322 Wing O.R.B.

A.A.F. in World War II.

Office of A.F. History U.S.A.F.

attacked a gun area near San Stefano. The Army moved into the ground they had bombed: others reconnoitred ahead of the troops. A patrol of a dozen aircraft over Messina proved to be justified, when a formation of twenty enemy aircraft, this time mainly Italian MC.202s, came in to bomb shipping at Messina and the landing beaches. The enemy broke up in confusion, jettisoned their bombs and had a hard fight before they got away, with seven aircraft missing. Some time later, the patrol was again busy chasing a Staffel of FW.190s who attacked a destroyer escorting convoys. U.S. Invaders and U.S. Bostons were busy, before their withdrawal for cover work in Avalanche, attacking road and rail junctions higher up at Cosenza, Catanzaro and Nicastro. Kittyhawks were out on armed reconnaissance over the areas ahead of both the British and Canadian forces, morning and evening, shooting up a locomotive and trucks at Bova Marina. Warhawks stood down, but Spitfires stepped up their sorties to nearly three hundred during the day. Photographic coverage now revealed that all airfields had been evacuated from which the enemy could effectively operate fighters against our troops.

A.F.H.Q. G.2.

W.I.S.

A.H.B.II J15/5

The Army crept on towards Bagnara and by 1800 hours the central forces had advanced elements in Delianova and had thrust forward from Gallico Marina. Along the south coast the Canadians were moving on towards Bova Marina. The tally of prisoners had risen to two thousand, five hundred. Near Bagnara, the Army first caught up with the Germans. Elements of 15 Gren. Regt. defended their rear with vigour, while the British pushed on into the area occupied in part by Commandos landed the night before. Demolitions were encountered everywhere, but, in spite of them, the Allies had by nightfall reached the general line Bagnara - Gambarie - Bagaladi - Pilato. There was no sign of 26th and 29th P.G. Divs. The Italians, showing great reluctance to fight, gave no trouble; their coastal units surrendered en bloc. If the Germans intended to put up any serious big scale armed resistance it would be beyond Castrovillari and even then, it was said, in view of the crushing Allied air superiority, it would not be for long.

The Third Day

Ibid

Sunday 5 September was quieter. The pattern of the work of the light bombers reflected the Army's steady push forward. Bostons in the Dinami area, Bostons, Baltimores and Kittyhawks over Gioja and Warhawks over Bovalina all found troop concentrations and straddled the roads with fragmentation bombs. Bombing and rendezvousing with 10/10 cloud in patches was far from simple, but Cosenza road junction being at that time vital to withdrawal for the Germans, twelve Mitchells sent out about 0800 hours to bomb it, attacked the road and town. Twenty-four others sent to emphasise the damage saw nothing and returned with bombs intact. Another twelve aircraft were more fortunate and dropped a full load across the coastal road N.E. of Tropea, where Germans were hurrying up towards Pizzo.

Full Air Support

No.1 M.O.R.U.
O.R.B.

5 September was a full day for D.A.F. (1) At first light Kittbombers escorted by Spitfires bombed M/T on the

/move

(1) Total D.A.F. sorties for 5 September were 556 Spitfire, 32 Warhawk, 72 Kittyhawk.

A.A.F. in World War II.Office of A.F.
History U.S.A.F.

move N. of Gioiosa; and the Dinami area, still crowded with troops, was attacked by Bostons and Spitfires. Spitfires continued their cover of the ferry crossing and brought down a Do. 217 over the Straits. They also escorted Warhawks sweeping the path of Axis formations still held round Scido, Mangiana, Bovalino and Bianco, as well as T.B.F. Mitchells attacking on the crowded Pizzo - Tropea road. Close watch on weather indications was maintained by four Invaders. All airfields from which the enemy could effectively operate against Eighth Army had by now been evacuated. A few Wellingtons were out on reconnaissance along the east coasts of Sardinia, Corsica and Elba, and even as far north as Savona port. A Beaufighter kept watch over Bizerta.

N.A.P.R.W. O.R.B.

5 September saw enhanced activity by the Mosquitos and Spitfires of N.A.P.R.W., bringing the mapping of Italy up-to-date wherever visibility allowed coverage. Malta provided five Spitfires to observe southern ports and airfields. The first tallies of aircraft abandoned on the ground by the enemy were now coming in: Reggio had yielded fifty-six aircraft in all, a tolerably good capture: in detail, four Me.109s, one FW.190, some thirty Italian fighters, and a score of bombers and transport aircraft; some were repairable or useful as salvage.

The Fourth DayNo.1 M.O.R.U.
O.R.B.A.A.F. in World War II.
Office of A.F.
History U.S.A.F.

Railroad targets figured again in the programme for 6 September. Invaders hit Sibari junction, Kittyhawks raked a train near Gioia Tauro. Rearguards posted N. of San Ferdinando in a pillbox and flak concentrations S. of Laureana di Borello were shot up by Kittyhawks. Other Invaders swept ahead of the main enemy forces in the Catanzaro - Cosenza - Soveria region. In such weather and with an enemy by now a master of the art of camouflage, targets were harder to find and flying less profitable. D.A.F. Spitfire sorties fell to one hundred and one. It was a disappointing day for the air forces. A few Bostons pounded Altamura junction on the road to Bari, to hinder movement in and out of the Heel. The Army advance was slowing down, not because of armed resistance, but of multiplying demolitions in their path. There were brief encounters, but that was all on the West coast. Palini had been taken and the British were well on the way to Rosarno. Other forces pushed on east and south from Bagnara to reach Cosoleto. In the south the Canadians, after occupying Bova Marina on 5 September, thrust towards Locri.

G.2 Summaries

Pachino to Ortona
Army H.Q.
Ottawa.Operations in the Toe. 7 - 8 September 1943.Pachino-Ortona
Army H.Q. Ottawa.8th Army
Operations Br.
Hist.Sect/CM.2/5 A.A.S.C. War
Diary.A.A.F. in World War II. Office of
A.F. History
U.S.A.F.

On 7 September, Army Close Support was stepped up as targets clarified. Twenty-four Bostons were busy on gun positions in the Rosarno area, the same number West of Laureana, in preparation for a ground attack which was abandoned; twenty-four Baltimores bombing gun positions and billets at Catanzaro and Kittyhawks between Pizzo and Catanzaro helped to clear blockage and resistance in the Army's path, although their first light sweep over the enemy side of the line Palmi - Cittanova - Bovalino - Siderno reported the area deserted. Rail and road at

/Trebbisace

Trebissace, Lauria and Sapri were bombed and shot up by Mitchells and U.S. Invaders. There was more M/T to be seen; more was accordingly burnt up or brought to a halt. The pressure against the enemy pulling out towards Catanzaro was increasing. The Army was growing in strength.(1) The service was a day and one half ahead of schedule.

Admiralty Battle
Summaries

Because of the lack of naval and coastal opposition, and the growing needs of Avalanche, all cruisers and destroyers had been withdrawn, leaving only the warships Erebus, Aphis and Scarab to support Eighth Army's northern flank. As the time was now considered ripe for a leap-frog landing, coastal surface patrols were strengthened. The enemy, too, was looking ahead and ploughed up all the Crotone airfields, except two landing grounds. At the close of 7 September, the front line in the British sector ran thus:- Rosarno, Cinquefondi, Grottasia. The Canadians were pressing on to Locri. That night, Vibo Valentia was believed to be some 25 miles behind the main German defence line and it was considered timely to bring into play the plan for a landing at Pizzo.(2)

The Landing at Pizzo - 8 September

Admiralty Report
M.013707/43
Coastal Forces,
Vibo Valentia.
NAAF O.R.B.
Appendices
Sept. 1943
A.H.B.IIM/A36/IF.

The plan was to land the 231st Brigade at Pizzo, cut off the retreating Germans and capture the airfield at Vibo Valentia. These beaches were named Red, Green and Amber: the success of the landing, doubtful for some hours, was assured by a succession of accidents. The first effort at Red Beach was a failure. The craft which touched down here went astray in pitch darkness, were spotted and raked with heavy fire from Red Beach and retired. Following what they thought was the flash of the marker for Red Beach, the L.C.I's came in at what was, fortunately for them, a clear stretch between Green and Amber beaches, uncovered by fire. L.C.G's and L.C.F's standing out came under heavy fire and when day broke the landing had been only effected in part. At 0730 hours the first of three attacks by small formations of F.W.190s on the beaches developed. Spitfires, who maintained continuous cover patrols all day, broke it up before any damage or casualties could be inflicted.

No.1 M.O.R.U.
O.R.B.

Far from landing, as hoped, well in the rear of the Germans, the Brigade ran into strong, well-armed formations on the move.(3) Machine gun and mortar fire increased in intensity. Admiral McGrigor was wounded. The decision was made to land at all costs on Red Beach. Craft moved in, men landed and went into action where they stood. The fire grew heavier: F.W.190s bombed the craft, but the whole Brigade were ashore by 1400 hours. During the afternoon, German infantry, supported by heavy fire, broke through to within a mile from the beaches, and the L.C.T's withdrew from the shallow water. H.M.S. Erebus and Scarab shelled the Germans at 1550 hours. Casualties on the beaches were by now fairly heavy, but the situation improved when a smoke

/screen

(1) Some 6900 vehicles and 35,000 men had been ferried across.

(2) Operation Ferdy.

(3) Battle Group Krueger, in process of formation and of taking up positions in the Nicotera - Laureana sector.

No. 1 M.O.R.U. .

O.R.B.

A.A.F. in WorldWar II.

Office of A.F.

History U.S.A.F.

screen hid the British troops from enemy view. Twenty-three Kittyhawks bombed offending mortars near the town of Vibo Valentia, and a field S. of Lamesia, and knocked out an armoured car. Warhawks watched the roads leading to Catanzaro and along the east coast towards San Leonardo, damaging a score of lorries and holing a Me.109. All the Kittyhawks supported the Pizzo landing. (1)

On Pizzo beaches matters improved: the Germans began to pull back, but carried on shelling the beachhead until 2300 hours. So effective was the whole diversion, that the Germans left the long coast road to Sapri in clean condition, with hardly a bridge demolished. While the Pizzo craft were drawing towards the beaches, fifteen Liberators and Halifaxes of Ninth Bomber Command had been bombing two airfields in the Heel, San Pancrazio and Manduria, and Mitchells and a few Bostons and Mosquitoes had been tying up railway activity, in the rear, at Metaponte, Potenza and Sapri. During 8 September close on seventy Mitchells worked over the same problem at Trebisacce and Lauria. The Trebisacce raid was hotly contested by a score of fighters, including some mortar-firing Me.109s, who brought down two Mitchells for the loss of three aircraft. There was some very effective bombing here, as well as at Lauria; Sapri bridge, too, was hit and caved in on the south side. No fighters disputed the last two named attacks. Meanwhile Photographic Mosquitoes and Lightnings brought back evidence of the diminishing strength of German fighter formations in the extreme south and of a new and busy airfield at Scanzano in the Instep. They flew as far north as Ravenna, narrowly escaping disintegration at the hands of ten Me.109s.

205 Gp. O.R.B.

Army Progress up to 8 September 1943AFHQ.G.2 Weekly
SummaryGen. Montgomery's
"El Alamein to
the Sangro River"

The Army made good headway along the whole front and by nightfall had occupied Rosarno (up the west coast road) and Locri (on the east coast road). The plan was working well; on both coast areas the advance was to continue to the line Catanzara - Nicastro, where, after a short rest in the Catanzaro 'neck', to reassemble the strung out forces and to improve maintenance, reconnaissance was to be pushed forward to report on the position at Crotona and the adjoining airfields. Then Eighth Army was to concentrate on pinning down the German forces in Calabria, in order to assist the divisions at Salerno.

Tactical Air Effort. 31 August through 8 SeptemberMATAF Report
on Operation
Avalanche

It is instructive, for the making of comparisons, to consider the arithmetical total of the Tactical Air Force effort expended over the nine days preceding the landing at

/Salerno

(1) The D.A.F. effort for 8 September was 281 Spitfire, 74 Warhawk and 91 Kittyhawk Sorties.

Salerno and covering the landings in Calabria. These are elaborated in the footnote.(1)
Operational losses(2) by T.A.F. during this period were low as against twenty-five enemy destroyed, two probables and six damaged in combat.(3) The work had been extensive. Both claims and losses were unimpressive.

THE LANDINGS AT SALERNO

The Convoys

The Passage of the Convoys(4)

Salerno: M.I.D.
War Dept.
Washington.

The Allied navies had set up three main convoys, sailing from Oran, Tripoli and Bizerta on staggered schedules, in order to converge on Salerno opposite their objectives on

/D-1.

(1)

Sorties

T.B.F.	Day	1141
	Night	235
D.A.F.	Fighters	2228
	Fighter Bombers	702
	Tac/R and P/R	96
XII A.S.C.	Fighters	153 *
	Fighter Bombers	309
	Night Fighters	106 * *

* Includes 113 sorties of P.38s from N.A.S.A.F. on 6 Sept. temporarily under control of XII A.S.C.

* * 608 and 108 Sqdns. throughout; 23 and 415 Sqdns. after 5 Sept.

(2) Operational Losses

	<u>Destroyed</u>	<u>Damaged</u>
Invader	2	1
Mitchell	2	2
Warhawk	-	1
Baltimore	-	8
Boston	-	4
Kittyhawk	1	1
Spitfire	4	-
Totals	9	17

(3) Operational Claims

	<u>Destroyed</u>	<u>Probable</u>	<u>Damaged</u>
Do.217	2	-	-
FW.190	7	-	1
Ju. 88	1	-	1
Me.200	-	-	1
MA.202	7	1	0
Me.109	8	1	3
Totals	25	2	6

(4) Refer Map 1 for Convoy Routes.

Report on Operation

Avalanche by
Air Commodore
Scarlett-
Streatfield
N.A.C.A.F.
16 Dec. 1943.
A.H.B.IIM/AL5/IGI.
Report of Flag
Officer Command-
ing Force H.
4894/MED/00367/
R/7
Admiralty Battle
Summary No.37
AHBIK/18/30.

N.A.T.A.F. and
N.A.C.A.F. ORB's

Report~~ing~~ Pro-
ceedings of
Force V.AHBI
J11/19.

D-1 Day. Secondary and follow-up convoys were to sail from the same ports and from Sicily. The main body of the U.S. convoy sailed from Oran at 1700 hours on 5 September, covered by C.A.F. and carrier-borne fighters. Although its departure was reported by enemy reconnaissance, it was not attacked. In clear, fine weather the ships sailed past the western tip of Sicily into the Tyrrhenian Sea, protected by cruisers and destroyers. The Tripoli convoy T.S.F.I. sailed at noon 6 September from Tripoli, with X Corps (Br.), calling at Sicily en route. In the flagship H.M.S. Hilary was an R.A.F. Complement, made up of a filter and fighter operations room staff, a "Y" Section, a Signals Section, air lookouts, C.A.F. representatives and the Close Support Section of X Corps.

Air Attacks on the Tripoli Convoy

The Tripoli convoy ran into trouble at 2220 hours on 7 September in the Sicilian Narrows, when a single aircraft dropped a torpedo just astern of one of the ships, now passing through the main bomber lane from the Tunisian airfields: friendly aircraft had already been fired on and a signal to this effect had been sent to all ships confirming this, and that anti-submarine night escort was being provided by C.A.F. F.S.S.2 Convoy was lying off Bizerta during the raid by German bombers on the night of 6/7 September, but escaped harm, thanks to the effective smoke-screen it laid down, and sailed. Passing Termini, an L.S.T. was torpedoed by an aircraft and beached.

On the morning of 8 September, all three convoys were away from the Sicilian coast, heavily escorted by warships. As early as 0635 and again at 1147 hours German reconnaissance planes had a clear view of them. Their reports were fairly speedily acted on, for at 1355 hours an attack on the Bizerta convoy was made by five F.W.190s, who scored no hits, although U.S. L.C.I.87 was damaged by near misses and H.M.S. Blakoney straddled. Again at 1650 hours, 10 - 15 miles from Capri Island, ten F.W.190s and Ju.88s attacked the same convoy, this time sinking H.M.L.C.T.624 but causing no casualties, for the loss of one F.W.190. The Tripoli convoy, escorted all day by Lightnings, was left to proceed in relative peace until the evening. Up to the time of their arrival within the Coastal Air Force O.C. Palermo's Sector, the three convoys had been covered by aircraft from their bases; the Oran convoy by Beaufighters, Hudsons and Bisleys, with Wellingtons, Baltimores and Marauders roaming on long range armed reconnaissance to many points of the Tyrrhenian Sea, the islands and the Italian coast as far as Genoa. East of Bone Hudsons, Bisleys, Beaufighters, Spitfires, Hurricanes and French Warhawks gave day cover, with Wellingtons on reconnaissance and U-boat hunts. Bizerta was watched by Beaufighters throughout the night and by three Spitfires and two Lightnings by day.

Tenth Army War
Diary Captured
German Document.
Report No.18
Army HQ, Ottawa.

German Air Reconnaissance over Salerno Convoys

Headquarters Tenth Army watched the reports of aircraft shadowing the Allied convoys. On 7 September these convoys were sighted on a N.E. course and the likelihood of a landing appreciated. Battle Group Krueger, in Calabria, (the unit which collided with Operation Ferdy), was ordered to withdraw. At his H.Q. at Frascati, Kesselring

/attempted

attempted vainly to reconcile separate reconnaissance reports, speculating on the destination of the convoy of about sixty landing craft seen about 40 miles N. of Palermo, as well as of others, and the strong Allied fighter protection along the eastern coast of Sicily. At 2300 hours on the same day - 7 September - three vessels, thought to be aircraft carriers, were sighted 35 miles N.W. of Trapani, on a northerly course; near the anchorage of Bizerta, a further formation of sixty freighters and thirty smaller units, believed to be landing craft, was reported as on an easterly course. In the harbour, canal and lake of Bizerta, only thirty merchant vessels remained. At 0525 hours on 8 September, a large convoy was reported 80 kilometres S.E. of Salerno. Later, Von Vietinghoff made an entry that convoys were then S.W. of Naples and that a landing in the Gulf of Salerno or at Naples was possible. That evening the acceleration of the withdrawal from Calabria was ordered, with emphasis on the need to save flak equipment.

A large-scale landing was expected and, as has been seen, the Naples - Salerno area was the best guess, but the anxious speculations about the destination of the convoys revealed in the daily reports of C.-in-C. South⁽¹⁾ as well as the text and tone of other relevant documents, reveal the failure of German Intelligence to obtain concrete evidence of the exact spot and hour of the landings before the event. Technically speaking, local surprise was achieved, but this statement amounts to a mere splitting of hairs, when it is remembered that the German dispositions in the area were so scientifically prepared for tactics which in the event almost defeated the operation.

Cover by A.H.Q. Malta

Malta H.Q.
O.R.B.

Malta provided Spitfire cover for the Tripoli convoy, bringing her total of Spitfire sorties from 3 - 8 September up to the two hundred mark. Malta sorties over these six days now comprised, in addition, thirty-three Spitfires on P.R.U. work, thirteen Mosquitoes, five Beaufighters, eight Baltimores and eighteen Wellingtons, all playing a part in the plan, night-intruding, submarine-chasing and being generally on the qui vive over the sea areas and the Italian Fleet. Apart from the three main convoys, others sailed from Castellamare Bay, Termini and Palermo. The Tripoli Convoy passed from Malta's care to M.A.C.A.F's at the line between Tripolitania and Licata.

Day Cover 8 September

Spitfires of the Palermo (No.52 Gp.) sector and Day Beaufighters,⁽²⁾ based at Bo Rizzo, escorted convoys passing /Sicily

O.R.B. and Operation Order 3
C.A.F. 3 Sept.
1943.

(1) O.B.S. --- Oberbefehlshaber StG.

(2) Fighter Protection of Convoys - Palermo Sector D-1 Day.

Convoy	Type of Aircraft	Patrol Strength	Sorties	Time	
				On	Off
NSF.1	Beau	4	16	0600	1400
	Spitfire	6	12	1400	1600
TSE.1	Spitfire	4	32	0600	1400
FSM.1	Spitfire	2	10	0600	1100
FSS.2	Spitfire	2	10	0600	1100
FSM.1 & FSS.2	Spitfire	4	8	1100	1300
TSM.1	Spitfire	2	12	0600	1200
TSS.2	Spitfire	2	12	0600	1200
TSM.1 & TSS.2	Spitfire	4	20	1200	1700
FSS.1	Spitfire	2	6	0600	0900
TSS.1	Spitfire	2	6	0600	0900
FSS.3	Spitfire	2	28	0600	2000

Sicily, northwards as far as 39° 20' N., each Spitfire providing one hour's and each Beaufighter one - two hours' patrol. At this latitude Lightnings from Termini, lent for the occasion to Coastal Air Force by Strategic Air Force, took over daylight cover. They flew to Ustica Island, whence they were vectored by the C.O.L. Ustica on to their convoys. They flew two-hour patrols and had normally eight aircraft over each convoy or pair of convoys. Patrols begun at 0900 hours over the slow convoys F.S.S.1. and T.S.S.1., covered them without break until 2000 hours. The same coverage was furnished over the other four convoys proceeding north; over F.S.M.1 and 2 from 1300 hours onward, over T.S.F.1 (Blue) from 1400 hours on, and over the fastest convoy M.S.F.1 (Blue) from 1600 hours on.⁽¹⁾ The Spitfire patrols began at 0600 hours on D - 1 Day, all patrolling finishing at 1700 hours, except for the patrol of two aircraft over F.S.S.3 (Green) convoy, which was continuous from 0600 to 2000 hours.

Force H

Report of F.O.
Force H.

The main battle fleet units under Force H had sailed at 1600 hours on 7 September from Malta, under an anti-submarine umbrella provided by carrier-borne aircraft. By the afternoon of 8 September they were approaching Salerno with the rest of the convoys, the whole assembly now numbering some seven hundred ships and craft of all categories, carrying one hundred thousand British and sixty-nine thousand American troops, with twenty-thousand vehicles.

Ibid

Continued Day Air Attacks on the Convoys

During the late afternoon and evening of 8 September three more small-scale attacks on the convoys developed, each by small formations who successfully penetrated our fighter screen. At 1750 hours convoys F.S.S.2 (X) and F.S.S.2 (Y) were singled out by six aircraft, (the type unrecorded), who dropped several bombs fairly close to the ships, without scoring any direct hits. Again at 1800 hours F.S.S.2 were attacked by three unidentified aircraft, who damaged H.M.S. Mendip with a near miss. The last daylight raid came at 1950 hours, when an unidentified bomber attacked the same convoy without causing any damage.

Success of Coastal Air Force's Effort on D-1 Day

C.A.F. O.R.B.

On 8 September C.A.F.'s sorties on convoy cover totalled three hundred and sixty-five and on the protection of vital harbours two hundred and ninety. The success of this effort may be gauged by the slight losses in Allied craft recorded up to dusk that day. The Luftwaffe, who secured useful photographs of the composition of the convoys, flew one hundred and fifty-five fighter and sixty-five fighter-bomber sorties, all intended to be offensive. The coastal cover and the massed A.A. of H.M. ships were too strong a deterrent, so the Luftwaffe by dusk had lost great opportunities, but preserved its aircraft.

/In Salerno

(1) Thirty P.38 pilots had been specially trained in night flying so that the relay period, at the end of which Beaufighters took over, should pass smoothly.

In Salerno Bay

Admiralty
Battle Summary,
Salerno.

Through lanes swept for 30 hours past by minesweepers, the three convoys moved on towards their approach dispositions, about 20 miles off Salerno. It was 1830 hours when listeners heard the radio announcement by General Eisenhower that hostilities between Italy and the United Nations had terminated, effective at once. A relaxation of tension and alertness began to spread so visibly that commanders had to remind their troops that although the Italians had surrendered, the Germans had not. A few minutes later all ships were slipping into the transport area about 12 miles offshore outside Salerno. A series of manoeuvres proceeded and, on the vessels carrying troops, the men between decks began to prepare for the moment when they would take up stations for proceeding over side into Landing Craft.

Night Air Attacks on Convoys and Escorts

At 2015 hours on 8 September the first enemy flares fell, illuminating the whole of the ships in the convoys of the Northern Attack Force. This artificially prolonged daylight was the prelude to a very noisy night off Salerno, in which the Luftwaffe put up the largest long range bomber effort for some considerable time in the Mediterranean theatre. By economising rigidly over the past few weeks and with some new blood in the veins of Luftlotte 2, in the shape of elements of two Geschwader⁽¹⁾ from the South of France, one hundred and fifty-eight long range bombers including some twenty-five torpedo bombers, were sent out during the night. Had they been more skilfully controlled, and the Allied system of control itself been less enthusiastically handled, our losses would certainly have been much heavier and the battle on the beaches the next day correspondingly harder.

Report of F.O.
Force H.

255 Squadron
O.R.B.

The first enemy formations, oddly enough as it seemed at the time, attacked the heavy ships of Force H at 2100 hours with torpedoes, just missing H.M.S. Warspite and Formidable. A Beaufighter of No. 255 Squadron observing reported this attack at 2115 and at 2145 another aircraft of the same squadron saw a He.111 against the starlit sky dropping flares; he chased it and shot it down into the sea. Survivors of one Heinkel, when picked up by Allied craft, said they had been briefed to attack the troopers, but had been, unhappily, vectored on to H.M. Ships. The mistake was not rectified until past midnight; the attacks on the Fleet, continuous until then, finished at 0025 hours. The first series of attacks on the convoys finished at 2230 hours. H. Force claimed that their A.A. gunners destroyed three bombers for certain and probably three more. They expressed great satisfaction with their Radar Sets,⁽²⁾ which gave good results in the case of low-flying aircraft. The Germans lost eighteen aircraft.

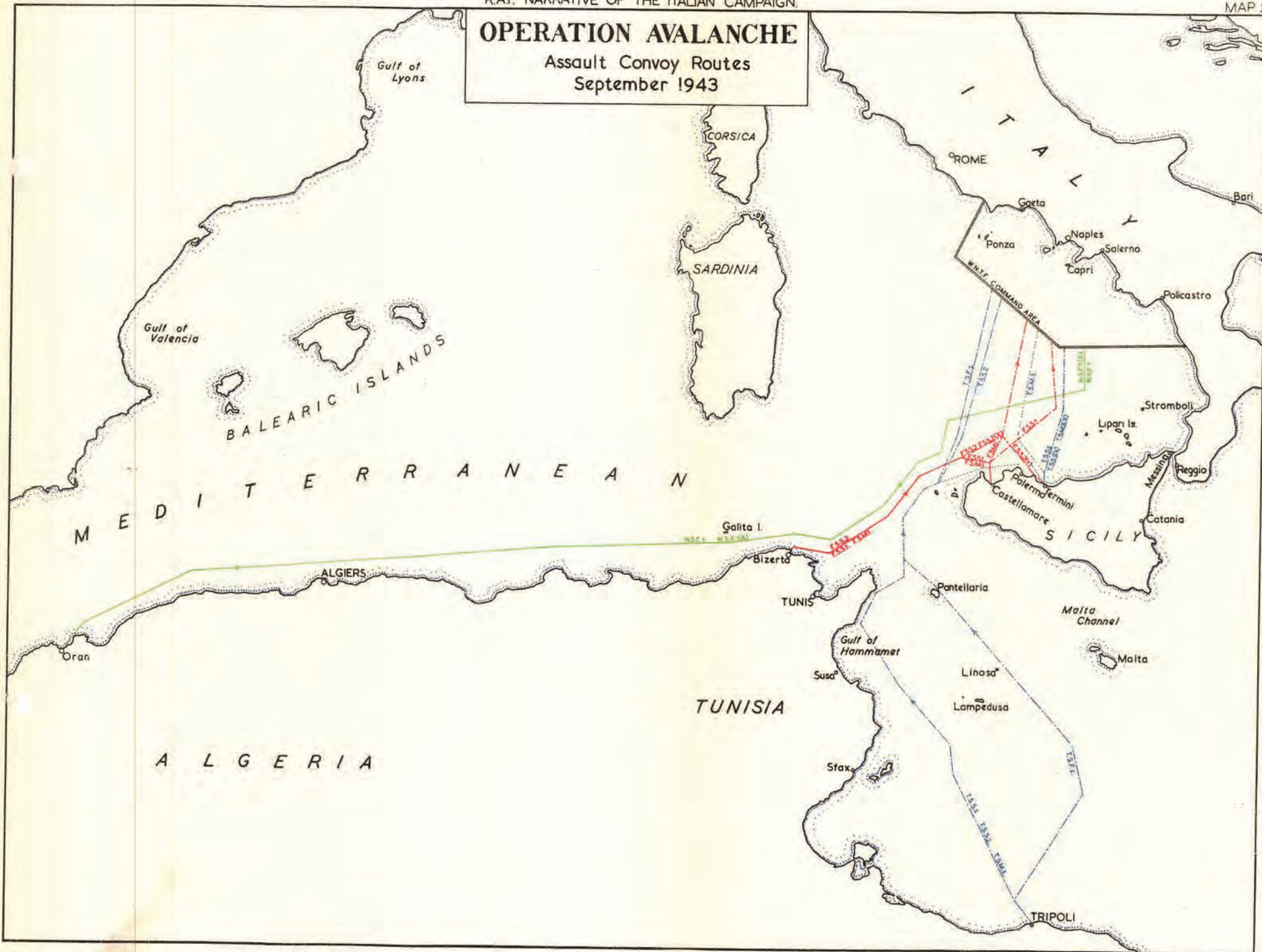
No. 255 Squadron
O.R.B.'s

At 2153 hours, some 15 miles north of Capri, another Beaufighter of No. 255 Squadron (which had twelve aircraft out), shot down a Ju.88 at 1,000 ft. The same squadron had two more successes that night. One Ju.88 was caught at 2145 hours off Capri and another during the morning series of raids at 0450 hours 20 - 30 miles S.E. of Capri. They also

/accounted

(1) K. G. 26 with its torpedo-carrying He.111s and K. G. 100.

(2) Sets Nos. 273 and 285.

OPERATION AVALANCHEAssault Convoy Routes
September 1943

No.600 Squadron
O.R.B's

accounted for a He.111 south of Ponza Island and another Ju.88. No.600 Squadron, too, played an active part in this eventful night, one of its Beaufighters bringing down a Ju.88 into the waters round Capri. Later at 0510 hours while the next series of raids were developing, one of the aircraft of this squadron came down into the region of flares and ship's gunfire and, after an early failure to contact G.C.I., picked up several contacts, bringing him within sight of the exhaust of a Ju.88. After receiving hits at 300 yards, the Ju.88 dived so steeply that the pursuing Beaufighter just pulled out of its curve in time to prevent it following the Junkers into the sea, off Licoosa Point. The Beaufighter continued its normal patrol span of 3 hours 10 minutes and picked up another Ju.88, which after attack fell burning to earth at 0525 hours.

Intruder Operations

Ibid. and No.23
Malta Sqn.
O.R.B.

The Luftwaffe bombers met with interference at their bases as well as in the target area, for nine Mosquitoes of No.23 Malta Squadron were out intruding over the two principal long range bomber bases at Foggia and Viterbo, as well as in the Rome and Grosseto area. They were most successful at Viterbo, where they shot down one He.111, one Ju.88 and one unidentified aircraft.

The Watch for Submarines and Surface Craft

Ibid

German Naval
War Diary (with
N.I.D.I.5).
(See Appx.8.)

It is a tribute to the work of the Navy and Coastal Air Force that no attacks by surface craft or submarines on the convoys or the Naval Forces developed either on the way to, or at, the anchorage on D-1 Day or the night of D-1/D Day. The German War Diary mentions that a force of E-boats set out, but met with no success. No sightings of this force were reported. A few minesweepers and light craft in Salerno Bay retired hastily on the arrival of the Allied armada.

Cover Operations

Activities of Diversionary Group T.G. 80.4.(1)

Admiralty Battle
Summary -
'Salerno'.

While the convoys were being bombed, a small diversionary group made its way to the Island of Ventotene, 37 miles west of Naples. A part of the Force arrived offshore at 2345 hours on 8 September and, with gramophone records, called on the garrison to surrender. On the landing of the 82nd Airborne Division troops the inferior German force surrendered. The Radar Station, principal target of the raid, had been only partially dismantled. The Force re-embarked and steered for the Gulf of Gaeta, where they staged a counter-radio and counter-radar operation, the Air Sea Rescue boats flying balloons fitted with radar deceptive devices. Beyond

/attracting

(1) Original Composition:-

U.S. Destroyer Knight	5 Br. M.T.B's
Dutch Gunboats Soemba, Flores	6 A/S/R Boats
4 U.S. Submarine Chasers	55 Troops of 82 Airborne
1 U.S. P.T. (M.T.B.)	Div.
6 Br. M.L.S.	14 O.S.S. Personnel.

attracting some mild interest on the part of enemy radar and the dropping of a few flares, there is no evidence that the group activities swayed the course of the night's action to any great extent; it is certain however that the loss of one of their few significant Radar Stations at this juncture was a serious event for the Luftwaffe, for in addition to its elimination on a critical night, its loss left a gap through which low-flying aircraft could approach the Rome area by flying inland across the Gulf of Gaeta.

The Landings

Rendezvous

At one minute past midnight on 9 September, loud-speakers on the transports called the first boat teams to their stations and soldiers, with men of the Air Force units, clambered down the nets into Landing Craft. These craft moved off to take up position through spray and occasional floating mines. Guide boats led the L.C.M's and L.C.V.P's with the first assault waves towards the rendezvous deployment line, 6,000 yards from the Salerno beaches.

The Beaches(1)

There were four main groups in the assembly. Firstly, X British Corps, comprising the 46th and 56th Infantry Divisions and 7th Armoured Division, bound for the beaches to the north of the River Sele, named Uncle, Sugar and Roger beaches. Thence they were to deliver the main blow. First objectives, from their starting place on beaches nearly 25 miles long, were the port of Salerno, Monte Corvino airfield, the important rail and road centre of Battipaglia, and Ponte Sele on Highway 19, the chief German approach route from south and east. Secondly, U.S. VI Corps, to operate on the right flank of X British Corps and establish a beach-head south of the Sele River, advance inland to seize the high ground commanding the southern half of the Salerno plain and prevent enemy movement into the plain from the east and south. Between the British and American beaches lay a strip of land, more than 10 miles wide, which was to be closed without delay as the two corps moved towards a point of junction at Ponte Sele; for owing to the division of stowage, certain U.S. equipment would be landed on the British beaches and vice versa, and a road be opened between the sectors - it was hoped. Thirdly and fourthly; included in the command of Lt. General Sir Richard L. McCreery, the British X Corps leader, were Nos. 2 and 41 Commandos and the 1st, 3rd and 4th U.S. Ranger Battalions. The Rangers made ready to land at Maiori; from thence they were briefed to push up the broad Nocera-Pagani pass to a point overlooking the Vesuvius plain; the Commandos were to land at Vietri Sul Mare, turn east along the coastal road and enter Salerno.

Ranger and Commando Landings

By 0330 hours all assault troops and necessary vehicles had left the transports. Heavy naval gunfire played on the northern British beach sector; inland flares and fires were burning. The moon had set, the sea was smooth, the wind N.

/to N.E.

(1) Refer to Map 3.

N.A.A.F. W.I.S.
No. 43.

Admiralty
Battle Summary

Report on the
use of the R.A.F.
Component of
Beach Gps. in
Operation
Avalanche
N.A.A.F. 2453/
O.R.B.
Encl. 106a
A.H.B. 2 List.
5 Nov. 1946.

to N.E. and the sky almost clear. First ashore at 0310 hours were the 4th Ranger Battalion, who met no opposition. Followed closely by the 1st and 3rd U.S. Ranger Battalions, they secured a beachhead and reached Maiori. Nos. 2 and 41 British Commandos beached at Vietri Sul Mare, running into sharp fire; they took Vietri, lost it, but held the beach and were firmly established by 0817 hours.

X Corps Landings

Ibid

At 0330 hours the first waves of the 46th British Division beached under fire from the rising ground at Uncle Beach and those of 56th British Division at Sugar and Roger beaches. With them went in the kernel of the Air Force organisation. On each X Corps beach was an R.A.F. Beach Brick Component; on each of the VI Corps beaches, Charlie and Baker, (1) was a Service Command Detachment, with a Liaison Officer from R.A.F. and U.S.A.A.F. working with the air troops of the other national's beaches.

The British Air Beach Brick Components

Ibid and N.A.A.F.
2453/ORG/46a
and 106a
AHB. List 2
5.11.1946.

Acting on the brief given them by H.Q. XII Air Support Command, these Beach Elements (2) set about their tasks of co-ordinating movement of all Air Force Units landing that day. Their charges were an important cross-section of units, which went into immediate action. (3) Among primary tasks /undertaken

- (1) Sub-divided into Red, Yellow and Blue, running from north to south.
- (2) R.A.F. Beach Brick Components Nos. 35, 21 and 3 on X Corps beaches and the two U.S. Beach Parties on the VI Corps beaches.
- (3) The air party which moved from Milazzo to the beaches by the D Day Convoy was as follows:-

<u>XII Air Support Command</u>	<u>Personnel</u>	<u>Vehicles</u>
Det. H.Q. XII A.S.C.	25	5
Det. H.Q. 64th Fighter Wing	50	10
Bal. H.Q. Det. 31st Fighter Sqdn.	34	2
308th Sqdn. 31st Fighter Sqdn.	160	20
927th Signal Battn. A.S.C.	264	75
82nd Fighter Control Sqn.	88	30
Prov. Sigs. Air Warning Battn.	251	42
23rd F.U. 329 W.G.	48	9
G.C.I/COL.	49	14
<u>R.A.F.</u>		
324 Wing Adv. Party	20	4
324 A.L.O.	5	2
324 Sigs Sect. A Party	35	8
1/2 225 Sqdn (Tac/R) A Party	86	12
P.R.O.	5	2
P.R.O. Film Unit	4	1
3203 Servicing Commando	153	15
3226 Servicing Commando	200	19
No. 1 Wing Sigs. Section (A.F.S.)	51	4
1/2 No. 54 Line Section (A.F.S.)	34	10
Captive Intelligence Party No. 3 (S.D.)	6	3
Captive Intelligence Party No. 4 (Tee)	44	4
<u>III Air Service Command</u>		
H.Q. Det. III A.S.A.C.	35	12
Det. 1983 Q.M Truck Co.	54	21
Det. 1658 Ord Co. (MM)	11	4
Det. 1062 Sigs Co.	39	5
Det. Ord Co. (AMN) A.B.	72	4

undertaken were the setting-up of an Air Forces Movement Control Command Post, connected by R/T with H.Q. 3rd Air Service Area Command in Sicily, themselves in direct touch with the loading point of the Milazzo Ferry Service. W/T lines were also set up with Beach H.Q.'s of 46th and 56th British Divisions, with the U.S. VI Corps Beach H.Q. and Beach Supply Dump Area. Wing Commander George, Deputy Commander of Air Force Movements, took charge, pending the arrival by air of his chief, Colonel Ayling of 3rd A.S.A.C. who met his death later in the day when landing on Monte Corvino airfield, after its recapture by the Germans.

The Servicing Commandos got ready to move on to Monte Corvino airfield with maintenance kit and technical stores as soon as it was captured. The R.A.F. Section of the Beach Unit controlled from its Transit Area the arrival and despatch of all air units. Most of these reported as instructed, but those who neglected to do so ran into blind alleys and blown bridges and added to the congestion on the roads. Kit, stores and vehicles were landed, sorted out and allotted. Transport, for the first time in such an operation, was reasonably adequate and the mobility so essential in such a problem enjoyed by some of those who needed it so desperately.

Land-Based Fighter Cover

Co-ordination of A.A. and Fighter Defence during Darkness

The Fighter Controller in H.Q. Ship Ancon warned the G.O.R. ashore of the presence of all friendly aircraft and co-ordinated his information with the Controller in the Fleet Fighter Control Ship. There were three main I.A.Z. (1) areas; the landing beaches and ships lying off the beaches, the port of Salerno and the port of Naples. Only the first two need interest us at this point. The beach I.A.Z. area extended 12,000 yards to seaward and 12,000 yards inland, bounded on the S.E. by a S.W./N.E. line through Agropoli, and bounded on the N.W. by a S.W./N.E. line through Salerno, (except for the area within a 3 mile radius of the centre of Monte Corvino airfield or any other airfields constructed in the area, to provide for landings and take-offs). The second area was in a radius of 12,000 yards from the centre of Salerno port. These areas were prohibited to Allied aircraft from half an hour after sunset to half an hour before sunrise. Gun commanders were warned to allow for margins on arrival times. Fighters had been warned, too.

L.S.T. Control

The two control L.S.T.'s 305 and 385 took up their positions, on orders from H.M.S. Hilary, some 40 miles to seaward of the anchorage off Salerno Bay in a spot where reasonably clear P.P.I. was obtained. During the night L.S.T. 385 was put out of action by shell fire, leaving L.S.T. 305 to carry on. As there were no good G.C.I. sites ashore for some days, the latter carried a heavy and vital load. By day she moved into the anchorage and functioned as reporting station. Night-flying Beaufighters were allowed to fly over the anchorage either as freelance or under the control of G.C.I. (2) a fact which enabled them to defeat the

/plans

(1) Inner artillery zone.

(2) By A.M.E.S. 15076 in L.S.T. 305.

Ibid and Op.
Memo No. 36
A.F.H.Q.
25 Aug. 1943
N.A.A.F./2453/
ORG.

Report on
Operation
Avalanche
A.H.B.IIM/
A45/191 and
Admiralty Battle
Summary.

plans of several enemy formations by shooting down their flare-droppers or pathfinders. The rules for opening fire on the northern anchorage were rigidly observed, smoke being relied on for defence; the Beaufighters flew over them at not less than 8,000 ft., showing I.F.F. well clear of the 7,000 ft. A.A. ceiling. The southern anchorage were more exuberant and 'trigger happy', which may correlate with the fact that they took the majority of the bombing.

Sea-borne G.C.I. Control

Ibid and
Reports on
Operation
Avalanche
AHB File/
List 18
"Lessons from
Avalanche"

Although it was felt by the Air Section and Air Control on board H.M.S. Hilary, which was acting both as H.Q. ship X Corps, (Br.) and as stand-by ship to U.S.S. Ancon, that night fighter control would in the long run have been more suitably invested in them rather than in sea-borne G.C.I., reports were frank in their approval of the way L.S.T. 305 carried out its task. The latter could, however, have done with more personnel and in view of the breakdown on D day of one of her main transmitters, with more reserve equipment. The R.D.F. cover obtained by the Fighter Control Ships seemed to some critics to have been inadequate, but the situation was counterbalanced by the wealth of information obtained by the "Y" parties.

Breakdown in the L.S.T. Supply Service

It had been apparent at an early stage in the preparations that something was radically wrong with the service of six L.S.T's appointed to transport Air Force supplies from Sicily to Salerno. Wing Commander George signalled three times to 15 Army Gp. on 4/5 September that the L.S.T's had not arrived at Milazzo for loading, and he flew to Cassibile twice to discuss matters. No action was taken.

Letter from
C.-in-C. Med.
to A.F.H.Q.
8 March 1945
Enclosure to
M.C.W.T.F. Report

On 7 September, 15th Army Group confirmed that the craft had not been detailed and that it was then too late to obtain replacements which could be loaded in time to catch the planned convoy for D Day. C.-in-C., Mediterranean stepped into the breach and instructed Flag Officer Sicily to load Air Force stores into any craft obtainable for Salerno. The latter diverted ten L.C.T's from the Eighth Army reserve and these arrived off Salerno shortly before midnight on D Day. The schedule was out of gear and the completion of the original D Day programme was not reached until 12 September. On D + 1 Day, the D + 1 and D + 3 personnel arrived, but then the craft were diverted by the U.S. Navy on their own initiative and no further Air Force units were embarked for seven days. The C.-in-C., Mediterranean wrote in his letter to A.F.H.Q. of 8 March 1945, in connection with M.C.W.T.F. Report on the Salerno Landings, that had military progress proceeded according to plan, considerable embarrassment would have been caused by the late arrival of material for the preparation of Monte Corvino airfield.

Day Fighter Cover over the Assault

M.A.T.A.F. Report
on Operation
Avalanche
M.A.T.A.F. O.R.B.
Appendices.

At first light Allied fighters took over from the night-fighters. Seafires from Force V patrolled the north flank Salerno - Capri - West at 12,000-16,000 feet altitude; Spitfires of ten British Squadrons in No. 322 and 324 Wings and three U.S. Squadrons of 31st Group patrolled Salerno - Agropoli at 16,000 - 20,000 feet; nine Squadrons of

/Lightnings

Lightnings of 1st, 14th and 82nd Fighter Groups patrolled Capri - Salerno and Agropoli - Pisciotta at 10,000 - 14,000 feet and Invaders of Nos. 27 and 86 Groups patrolled Salerno - Capri and Salerno - Agropoli at 5,000 - 7,000 feet. The Fighter Direction assigned each flight to its specific patrol line, changing the area and altitudes when necessary. For example, the L.2.C. Seafires on the standing patrol south and west of Capri, by request of the Fighter Direction Officer in U.S.S. Palomares, in whom was vested the control of fighters when inshore, moved in to the beaches owing to lack of enemy activity in the vicinity of Capri.

Fighter Cover over the Assault D Day to D plus 4⁽¹⁾

Air cover proceeded according to plan. Success was greater than expected and very little enemy air action was encountered the first day. The actual test to which fighter direction and organisation were submitted was far lighter than anticipated. The general appearance of inevitability and smoothness in the patrols of the first four days must not be taken as a universal model. There was not enough weight behind the German air reaction, although it was swift, to submit the machinery to any great strain. This fact was fortunate, for up to the night 11/12 September, there were only two temporary fields and one emergency strip which could be used by Allied fighters in the beachhead area.

Ship-Based Fighter Cover

Force V Operations

The Carrier Force has left the clearest and fullest report of any air unit taking part in the operation and one which, in view of the pioneer occasion, as well as later developments in carrier-borne operations, is deserving of close study. Four carriers had, after practice in manoeuvring in company at Gibraltar, proceeded to Malta for force formation. At 1000 on 8 September, Force V sailed from Malta. They opened operations off Salerno in an area 30 miles square, the centre of which was 30 miles from the Seafire patrol lines. The first sortie, at 0615 hours on 9 September, (twenty minutes before sunrise), was followed at hourly intervals by others; aircraft maintained 80 minute patrols, until the last aircraft landed at 1930 hours, fifteen minutes after sunset. Allowance had to be made for operating aircraft when there was no true wind, and it was laid down that the maximum number to be flown in any one serial should be eight in Unicorn and four in each of the escort carriers.⁽²⁾ The Seafires took off with overload tanks sufficient for 80 minutes flight. With the Force Flagship H.M.S. Euryalus in the centre, all the carriers, one mile apart, turned into wind together on the hoisting of a blue pendant. When the day's operations were concluded and all aircraft back on board, the Force steamed for the open sea, returning early the next morning to resume its former formation close inshore.

/The Seafires'

(1) Movement of Fighter Squadrons on to the Strips

As a result of tactical delays, the moves of squadrons into Italy proceeded as follows:- No.324 Wing to Tuscano 12 September, 33rd Group to Paestum 13 September, 86th Group to Capaccio 15 September, 27th Group to Sele 18 September, 31st Group to Monte Corvino 16 and 22 September, No.322 Wing to Asa 16 September and No.600 Squadron to Monte Corvino 26 and 27 September.

(2) In the event, these numbers could not be maintained, owing to reduced serviceability and the high accident rate.

Report of a Meeting at Admiralty on Lessons learnt from Naval Air Operations in Avalanche 20 Oct. 1943 in A.H.B. ID/12/46

Report of Proceedings of Force V 23 Sept. 1943 A.H.B. File II.J.II/19

The Seafires' Contribution in the Assault Phase

Ibid

M.A.C. divided the operations in the Salerno area into two phases; firstly, the Assault Phase from last light 8 September, over the bridgehead crisis until 17 September, inclusive; and secondly, the phase of the Extension of the Bridgehead and the Capture of Naples, covering the period from 18 September to 1 October inclusive. The Seafires' contribution to the Assault Phase was a vital one; all the more so in that on D plus 2 Day all the Invaders and approximately half of the Lightnings failed to arrive at the scheduled time; protests restored the original schedule from approximately 1200 hours onward. The Seafires worked at intensive pressure for three days, at the end of which their low cover patrols had dropped from an average of sixteen to eight aircraft, and the high cover patrol from six to four aircraft. In spite of adverse conditions, shortage of staff and absence of news of battle progress ashore, the five carriers put up two hundred and sixty-five, two hundred and thirty-two and one hundred and sixty sorties daily for the first three days; and, with seven Seafires and eight Martlets from Force H, fifty-six sorties up to shortly before 1000 hours on the forenoon of the fourth day, when the Force left the area for the South. During their sustained patrolling, pilots had engaged in ten combats, claiming one enemy aircraft destroyed, one probable and four damaged. Their own losses were two pilots killed and five missing. Aircraft suffered heavily owing to faulty gear, wind conditions and lack of practice.⁽¹⁾ Haze and poor visibility added to the problems of homing aircraft. The fact that the carriers were in compact formation meant that pilots had to fly in very tight circuits whilst in the circling position before landing on. There were many perfect landings on, as well as some spectacular crashes and lucky escapes. The general standard of flying was high, although some of the pilots had never landed on an escort carrier, (where space is restricted), before the working-up period.

Summing-up the Seafire Support Effort

Ibid

The numerical weight of the Seafire beach patrol effort was high in proportion to the land-based air patrol. For example on 9 September, the Seafire total of two hundred and sixty-five sorties stands out well against the 12th. Air Support Command total effort of one hundred and thirty-eight U.S. Invader., two hundred and eighteen U.S. and R.A.F. Spitfire, three hundred and nine U.S. Lightning and ten Mustang sorties. The patrol effort exceeded the estimates.⁽²⁾ The British Rear-Admiral of Force V reported a high standard of flying discipline in the air and deck landing; the direction of all operations and the general control of the fighter patrols from the cruiser Flagship were outstandingly successful. This Flagship was free from the distraction of engine noise and better placed for visual signalling and for

/watching

(1) 32 aircraft had to be written off as unrepairable. There were 55 broken propellers (these were too long, by general agreement), 17 damaged undercarriages and 24 wrinkled fuselages.

(2) The average Seafire strengths on 9, 10 and 11 September respectively were 20.5, 18 and 12.

watching flying operations, than any other ship. Owing to heavy signal traffic, fighter direction of the Force fighter umbrella provided by the main naval units of Force H had to be delegated to another ship, an escort carrier. R/T discipline and procedure were above reproach, although the fact that the U.S. H.Q. Ship was unable to use the H.F. Inter F.D.O. line, connecting the Control Ship with Force H and the Fighter Direction Ships, was serious. H.M. Ulster Queen, to whom control of Force V fighters was delegated, was near-missed by a German rocket bomb just before operations opened. H.M.S. Palomares took her place until, after speedy repair, she returned to function as stand-by for H.M.S. Palomares. Although there were several breakdowns in W/T equipment, the general system of control worked admirably, said the report.

The Force V report attributed the low total of combats with enemy raiders to the superior speed of the F.W.190 and the fact that within two days the Germans jammed the three High Frequency World Guards and Homing frequencies most effectively and appeared to our Fighter Direction to understand the small grid map carried by our pilots and the code words for place names. The least satisfactory part of the Fighter Direction was the lack of information of enemy air activity. Radar, sited close inshore, suffered from the proximity of high hills surrounding the Bay: inside 25 miles no useful plots of enemy aircraft approaching could be recorded, owing to land echoes.

A meeting held at the Admiralty on 20 October 1943 had as object the drawing of conclusions from Carrier operations at Salerno, which could be transmitted to the Allied Naval Command in the Far East, to assist in planning similar enterprises. In a comment within the Air Ministry on this report, it was stated that the Fighter Direction Ship at Salerno was badly equipped and probably wrongly placed to obtain the best cover. The possibility of land echo had been clearly foreseen by the planners and could have been no surprise to those on the scene. The Seafires functioned for nearly three and a half days. Only the low scale of Luftwaffe opposition and the favourable weather made it possible to operate longer than one day and only the use of the landing strips ashore helped them to keep so many of their squadrons airborne. They turned the fortunate concurrence of events to strengthening, notably, in the opening critical days, an air cover which deterred the Germans from using their own fighters and bombers more effectively.

Force H Fighter Umbrella

It must not be overlooked that for the first few days of the assault, aircraft of H Naval Force covered the fleet and convoys by day. Martlets from H.M.S. Formidable had shot down a flying-boat in the early morning, one of six destroyed during the days Force H operated in the vicinity. It is noteworthy that there were two hundred and nine landings on H.M.S. Illustrious, and not a single crash. This good record was attributed by the Flag Officer Commanding the Force to the ample deck park space and the American Clarkat tractors used on deck.

/Direct

Minute by
D. of Ops (A.D.)
to A.C.A.S. (Ops)
29 Nov. 1943.

A.H.B. File
ID/12/46

Admiralty
Battle Summary

Direct Air Support of the Allied ArmiesDirect Air Support

No. 7 A.A.S.C.
 War Diary
 (Cabinet Archives)
 Air Support Italy
 War Office
 Monograph
 A.H.B. ILJ. 1/115

Before proceeding with the account of the battle for the existence of the beachhead, the accounts of Allied air support for the ground fighting as well as the persistent Luftwaffe attacks on our shipping up to 13 September must be recapitulated. In general terms, the intended method of carrying out air support for the Army, (apart from fighter cover for convoys and beaches) was, that demands for air support by fighter bombers and bombers should be transmitted direct from tentacles with forward British brigades, and from Air Support Parties with American formations, to Advanced H.Q. XII A.S.C., whether ashore or afloat. Approved requests were then to be re-transmitted by XII A.S.C. back to XII A.S.C. Rear H.Q. in Sicily, for aircraft based there, and the latter organisation was to be responsible for their dispatch. A British liaison party was provided for duty with XII A.S.C. Advanced, first in U.S.S. Ancon and later ashore. It had been anticipated that fighter-bombers could be over the target in 30 to 45 minutes plus flying time, and bombers in one and a half hours plus flying time. Tac/R(1) and Arty/R(2) requests were to pass through the same channels.

Fighter Bomber Support proved to be the quickest

Ibid and
 No. 2/5 A.A.S.C.
 War Diary
 (Cabinet Archives)

In actual practice the only really quick support available to the Army was from fighter bombers. For some days, while Tactical Bomber aircraft were operating in support of Eighth Army, it took from 4 to 5 hours from first call for support to the arrival over the area. One advantage of our air superiority was, that it became possible to send fighters detailed for beach patrols direct to the battle area with bombs, for them to drop on targets indicated by the Army and then to continue their patrol. It took too long to pass demands through XII A.S.C. to Sicily; hence the method adopted in the case of X Corps (Br.), as soon as 64th Fighter Wing took over control, was to pass targets by landline from Corps H.Q. (some 2 to 3 miles away) to 64th Fighter Wing, who briefed the fighter formations in the air as they arrived overhead. Affairs were not so smooth in the American sector. The landlines were so unreliable that a despatch rider had to carry calls for air support by VI Corps by road from XII A.S.C., to the airstrips.

Report on Air
 Operations -
 Operation
 Avalanche
 N.A.A.F./A-5
 A.H.B. ILJ. 11/19

Briefing Fighters in the Air

Nos. 2/5 and 7
 A.A.S.C.
 War Diaries.

The briefing in the air was an excellent piece of improvisation, but by present day standards a crude affair. The 1/500,000 Air Edition map used by pilots and Fighter Wing Control Room had to be used without the vital military grid. No one had thought of this, so the short briefing had to be carried out, by reference to some easily identifiable feature or town shown on the map by name. There was insufficient reporting on the general ground situation coming through and bomb-line changes were received too late to avoid bombing

/errors.

(1) Tactical Reconnaissance.

(2) Artillery Reconnaissance.

errors. The report by N.A.A.F. A.5. mentions shortage of staff at X Corp's end and too much air signals traffic there for one man to handle; also lack of experience in air liaison at brigade and divisional level and a lack of understanding of the routine laid down for air support requests. Yet, gradually, the close support programme acquired shape and succeeded in this and later periods in augmenting, by the visible and audible presence of our aircraft, the morale of the troops.

Tactical Reconnaissance

Ibid

Tactical reconnaissance for British X Corps was carried out by No.225 R.A.F. Spitfire Squadron, which put up six missions a day of two aircraft each: from 12 September onwards it was affiliated to this Corps and operated on its direct instructions. On 9 and 10 September R.A.F. Spitfires covered the Southern (U.S.) Sector. Tac/R in the Northern (British) Sector was the task of the P-51s of 111th Lightning Squadron (U.S.) When Asa air strip began to function, the R.A.F. Squadron had seven aircraft operating: the U.S. Squadron changed over and was affiliated to VI U.S. Corps for work in its sector. On 18 September, for the first time in the European war, a Mustang (P.51) adjusted artillery fire on enemy gun positions.

Eighth Army and Desert Air Force had worked out a business-like procedure for passing Tac/R information to interested parties. A squadron's airfields passed the time of its broadcasts over the Army Air Support tentacles. With a suitable radio set, formations concerned could tune in to the broadcast. A number of technical reasons militated against its smooth operation in the Fifth Army sector. Results during the first days, before squadrons were based on the mainland, were disappointing. The units involved had had nothing like the long practice of the Desert team, and radio transmission and reception were poor. Pilots in the air passed certain information, but were issued with the wrong kind of map, too small and lacking a grid; the information passed was too vague to be acted on, especially as the fighter and bomber crews lacked the experience of specialist Tac/R personnel in co-operation with the Army. As the air situation was very much in our favour, these Tac/R aircraft needed no escort.

Artillery Reconnaissance

Ibid

This last fact left more aircraft free for artillery reconnaissance. As well as Tac/R, No.225 Sqn. (R.A.F.), whose attachment to X Corps (Br.) has been noted above, carried out a considerable amount of this work at this period. Its procedure was one designed during and after the Tunisian Campaign, and worked over during the summer of that year, at the Gunnery Practice Camp at Setif, (Algeria) with the Royal Artillery. Usually the Fifth Army artillery used its own aircraft for artillery spotting; the British Auster Taylorcraft and the American Piper Cubs. No fire spotting was carried out for the Navy until 15 September, when some missions were flown by the Mustangs of 111th Squadron at the request of the U.S. Navy, spotting the shellfire of the U.S. Cruisers Boise and Philadelphia, with highly satisfactory results.

/Inadequate

Memorandum on
Air Support
Control
Arrangements at
H.Q. 5th Army
for Avalanche and
subsequent
Operations of
Fifth Army
to date
15 Nov. 1943.
Annex D to
Report on
Operation
Avalanche.
M.A.T.A.F.
7 A.A.S.C.
War Diary
Sept. 1943.

Inadequate Air Support Control for VI Corps

The paragraphs above give a rough idea of the problems confronting Army and Air Force personnel responsible for ground calls for air support in the early phase of Avalanche. To grasp the development of air support through the campaign, from its elementary beginnings to the triumphant co-operation of the final battles, a closer look must be taken at the history of Army Air Support in these early days. A memorandum by Support Control 7/Operations of 15 November gives reasons for the inadequate system at Salerno for calling on fighter-bomber support in the American sector and shows what steps were taken to remedy the situation.

Owing to the complete commitment of fighters to the protection of beachheads and the assault convoys, no Close Support day bombing, it will be remembered, was to be expected in the first few days by the troops in either sector. There were no fighters to spare for escort work. The machinery for air support control was in existence, ready to be set in motion as soon as air bases on the mainland were established: plans were based on the assumption that Monte Corvino airfield would be captured on D Day or D plus 1. Monte Corvino was not useable until D plus 11, but strips progressively provided space for more and more aircraft.

Planning for Air Support Control

Ibid

When Operation Buttress held first priority, two Army Air Support Controls (A.A.S.C.'s) were attached to X Corps, and awaited the assault back in North Africa, (1) Buttress went; Avalanche came into play. X Corps, now under command of Fifth Army, obtained the services of No. 7 A.A.S.C. As there was by now no time to deploy its tentacles in X Corps formations, (some of them in Tripoli, some near Algiers), a compromise plan was agreed to by X Corps and authorised by Fifth Army after consulting Twelfth Air Support Command. From D Day to D plus 20 latest, 2/5 A.A.S.C. would remain with X Corps, then be relieved by 7 A.A.S.C. tentacles and return to Eighth Army. From D Day to D plus 3 these tentacles would work on the British Air Support wave to H.Q. Ship U.S.S. Ancon, to a staff and operators provided by No. 7 A.A.S.C. From D plus 3 on, and when relieved by No. 7 before D plus 21, they were to work to a Control provided by themselves, plus one of their own officers and a staff of No. 7. Meanwhile, the gradual take-over was prepared by having the necessary No. 7 staff, personnel and vehicles standing by in Sicily ready to embark with the 2/5 Control Contingent and land at Salerno, 10 September. Twelfth Air Support Command, anxious to adopt the British Air Support Control system throughout Fifth Army, wanted to centralise control for both sectors through the British Air Support Control staff. The intention was to pass requests direct to A-3 of Twelfth Air Support Command for action. Twelfth Air Support Command asked Fifth Army to send two Air Liaison Officers (A.L.O.'s) to each of the U.S. Fighter Bomber Groups, but the policy was not actually decided on before the assault. The course of the battle hindered the plan.

/Partial

(1) Nos. 7 and 2/5 A.A.S.C.'s.

Partial Air Support Control only achieved

Ibid

In the British sector there was a measure of success. The U.S. sector fared badly. Owing to an error in the shipment schedule, no Air Support Parties were landed in that sector. The Tac/R aerodrome transmitters were not powerful enough to convey information; Army and Air H.Q.'s were separated. Twelfth Support Command H.Q. which it was planned to move in smartly to Monte Corvino as soon as it was tenable, was landed conveniently for that purpose in the British sector, also Army H.Q. twenty miles further south in the Paestum area, both on the same day - D plus 3. By late D plus 3, the Germans had thrown the Allies out of Battipaglia and Altavilla and were feeling for the big thrust through the Sele corridor between the two Allied Corps; their big guns shelled as far as the shore without effort. It was too hazardous to lay land-lines between the two H.Q.'s during the height of the dangerous counter-attack which followed. There was nothing to be done, if the hard-pressed troops were to be encouraged by the sight of our own aircraft, but to move Air H.Q. south alongside Army H.Q. This was done on 13 September.

Agreement to experiment with British Air Support Control System

Ibid

With the two H.Q.'s now in close proximity, chances of efficacious action improved. G-3 of Fifth Army and A-3 of Twelfth Air Support Command agreed to experiment with the British system. The Air Support Control was set up adjacent to G-3. American Air Support Parties joined up on the day of landing with their own formations; arrangements were made to deal with their traffic as well as that from X Corps tentacles. In due course, Air Support Control was accepted as part of G-3 staff and became responsible for the detailed "laying-on" of targets approved by G-3, with Twelfth Air Support Command, who regarded the A.A.S.C. as the medium for all detail on Army-Air matters, with the exception of policy.

From 13 to 16 September, it was still not possible to accept opportunity targets from the tentacles or Air Support Parties, for no fighter-bombers had so far been established on landing grounds in the Fifth Army area. On 16 September, a fighter-bomber squadron began to operate from Paestum strip by day: from that time forward opportunity targets were accepted whenever aircraft were available in sufficient numbers. These delays were aggravated, over 13, 14 and 15 September, by the German counter-attack, which called for the effort of every available offensive aircraft to prevent the extinction of the bridgehead. In fact, until the situation was restored, the system never had a chance. It was possible for fighters in the beach "umbrella" to bomb occasionally at opportunity but the actual birth of the system in practice may be accepted as 16 September.

Ground Operations

Army Progress on D Day

'Salerno'
U.S. Mil. } Div.
Int. }

By nightfall, both the British 46th and 56th Divisions and the American 36th Division had won beachheads against continuous fire from the moment the landing craft drew in towards the shore. X Corps (Br.) supported by naval gunfire, had covered 3 miles to the fringe of Monte Corvino airfield and had patrols in Battipaglia. The Ranger Force on the left flank had landed unopposed at Maiori. The Commandos had met some

/opposition

opposition at Vietri sul Mare, lost it once, but regained it, established a beachhead and moved eastwards into the outskirts of Salerno, (1) which was occupied in force the next morning.

The American sector, still separated by nightfall by a dangerous gap of 10 miles, began in flat land by the coast, with the old Greek Temples of Paestum standing out clearly against foothills culminating in the peak of Monte Soprano. Much of the heaviest fighting in the succeeding days took place on these foothills and on those of Mount Eboli, which dominated the British centre. The Germans in this southern sector left the Temple of Neptune to be occupied by a U.S. medical unit, but from the terrace of the mediaeval watch tower machine gunners and snipers harried the men on the beaches until they were driven off, with some concealed tanks, by a handful of American infantrymen and shore engineers. Enemy tanks often pinned down landing parties for hours at a time; but in spite of all-day heavy and accurate enemy fire, the Allied line stretched by nightfall from Maiori to Agropoli. The guns on Hill 386, from which the Germans shelled the beaches, were silenced by naval guns. Capaccio fell at 1815 hours without opposition. On the American right flank the issue was still in doubt and the British front anything but stable. Troops which were to have been dropped near the mouth of the Volturno River were not there to fight on the flank, owing to the late cancellation in favour of a drop on Cerveteri and Furbara airfields (3) - also cancelled. They were badly missed.

A.F.H.Q.
G.2 Daily Report
Cabinet Archives.

/The Commanding

Italy - Vol. IV (1) Salerno
N.I.D.

The British, by night time, were in the outskirts of this ancient town, a Roman colony in the 2nd century B.C. and in the 11th century A.D. a pre-eminent seat of medical studies. Under the title Civitas Hippocratica it enjoyed fame equal to that of Paris (in theology) and Bologna (in law) until the end of the 13th century. The last occasion when it regained its freedom was in 1590: this occasion cost the citizens 80,000 ducats. The body of St. Matthew lies in the crypt of the Cathedral of St. Matteo.

In September 1943, Salerno was a minor industrial centre, a fishing port and an agricultural market for locally grown oranges, tomatoes, chestnuts, tobacco, olive oil and wine. Cotton and woollen goods, maccharoni and tobacco passed through its mills and factories; the local chestnut forests provided the bases for tanning and leather dressing; soap, glycerine, bricks and tiles were among its other products in normal days. Whatever the Germans had removed or discouraged, some basic production still remained, to help supply both the needs of the population and the troops, as well as to provide the important item of living and working quarters.

- (2) Operation Avalanche - Glider landings and paratroop drop.
- (3) Operation Giant Two.

The Commanding General's Situation Report

Signal M.A.113
Gen. Alexander
to C.I.G.S.
Refer A.H.B.
ID/12/46

On 10 September, the Commanding General reported that the landing appeared to be progressing well and all counter-attacks had been held. The next day or two would be the deciding period, when the Germans had had time to concentrate their forces. A serious handicap to build-up was felt to reside in the shortage of landing craft, so everything had to be poured into Operation Avalanche at the expense of Eighth Army and the forces landing at Taranto.

The Fighting in the Beachhead

A.F.H.Q. G-2
Summaries

Salerno
Mil. Div.
Washington.

Affairs continued until 12 September on very much the same lines as on the first day. German resistance remained stiff everywhere and the numerically inferior Allied divisions were still held under the fire of well-sited long range guns; but it could still be said at the end of 11 September that the Allies held the initiative, and were slowly extending the bridgehead in spite of local setbacks. The Fifth Army held the high ground in an arc from Campanella to Agropoli - 35 - 40 miles to an average depth of 6 to 7 miles. Only in the centre, in the Sele - Calore corridor, was the beachhead insecure; here a successful enemy attack on 45th Div., threatened to separate X and VI Corps. If this threat could be averted and the beachhead remained intact, Fifth Army would have a substantial base from which to build up its strength for further advances.

Allied Bomber Effort. 9 - 10 September

Light Bomber Effort against Enemy Transport on D Day

M.A.A.F. Op/Int
Summary No.201
A.H.B.IIM/A.36/
IF.

No.1 M.O.R.U.
O.R.B.

Of two attacks, both by twelve Bostons, on the same large road convoy moving westward towards Ajello, the first was unsuccessful. The second, five minutes later at 1610 hours also dropped 12.15 tons of small calibre bombs - but only set two alight. The course of the land battle gave rise to two movements of German transport: one N.N.W. from Salerno and another N. from Catanzaro and Rogliano, both to avoid encirclement. In the Catanzaro, Nicastro, Soveria, Cosenza and Poliano areas one hundred and twenty-three Kittyhawks with 8.4 tons of bombs and one hundred and seven Warhawks with 3.7 tons of bombs carried out eighteen missions against road transport, claiming to have destroyed ninety M/T and damaged over one hundred and fifty: the entire effort only cost two Kittyhawks.(1)

/Strategic

(1) Squadrons of Warhawks and Kittyhawks operating in this phase of the campaign will not be individually referred to, (as they were so numerous), on every one of the many occasions when they operated. Reference to the Order of Battle at Appendix 2 will remind the student that the Kittyhawks were on the strength of No.5 S.A.A.F. Squadron, and Squadrons Nos.3 (R.A.A.F.), 112, 250, 260 (R.A.F. and 450 (R.A.A.F.) the last five coming under No.239 Wing (R.A.F.) The Warhawks came from No.324 Group (U.S.), with its Squadrons No.314, 315 and 316 from No.57 Wing (U.S.), with Squadrons No.64, 65 and 66 from No.79 Group (U.S.) with Squadrons Nos. 85, 86 and 87.

Every possible mention will be made of the individual squadrons engaged. It must be appreciated, however, that absolute reproduction of every day's operations of a great and expanding air force, naming each individual squadron, would carry this narrative into many more volumes than the two allotted, as well as diverting the attention of the student from the actual significance of the operations themselves.

Strategic Bomber Attacks on D Day

A.A.F. in World
War II.
 Office of A.F.
 History U.S.A.F.

To carry out their role of interrupting communications, Strategic Air Force sent sixty-one Fortresses of the 97th and 99th Bomb Groups at 0930 hours to bomb Capua Bridge as replacement raid for the cancelled airborne operation. Direct hits on the bridge and rail approaches and destruction of, and damage to, plant, as well as to the town where troops were quartered, were reported for the expenditure of 172 tons of bombs. Cancelllo and Potenza Bridges were also attacked, the former by sixty Fortresses with 180 tons of bombs at 0931 onward for four minutes, and the latter by one hundred and thirteen Mitchells with 170 tons of bombs at 1017 hours. The latter mission lost an aircraft, but neither met any air opposition, nor did they hit either of the bridges at Cancelllo nor the one at Potenza, although almost every approach and yard received hits.

The Ninth Air Force, from bases in Cyrenaica, sent forty-one Liberators in follow-up raids over the Foggia Stallites Nos. 1 and 2, to hinder their bombers from operating against our shipping. They dropped 77 tons of bombs. The Germans put up unconvincing resistance with a mixed force of forty to forty-five Me.109s, F.W.190s, Me.110s, Ju.88s and a few MA.202s. Altogether our bombers claimed to have destroyed eight, probably nine more and damaged five. The German air effort here, as over the beachhead, had not yet crystallised into the clear pattern it was shortly to assume, when integrated with the violent counter-attacks which developed from 13 September and threatened to eject the Allies from their shallow holding.

The Night of D/D plus 1 Day and D plus 1 Day

N.A.T.A.F.
 O.R.B's

No.231, 236, 330,
 600 Wings
 O.R.B's.
A.A.F. in World
War II.
 Office of A.F.
 History U.S.A.F.

No.23 Squadron
 O.R.B's

From nightfall on 9 September onwards, the programme of attacks of road and rail junctions and bridges in the Naples area was continued, the aim being to block all lines in and out of Naples and the Salerno battle area. Fifty-one Wellingtons dropped 79 tons of bombs on Grosseto marshalling yards, three others dropped 1,220,000 armistice leaflets and many posters over Italy; eighteen Mitchells bombed Frosinone and thirty-one Mitchells bombed Grazzanise airfields, south of Rome, in hazy weather. The light bomber force supported the Eighth Army's slow advance in the Foot by sending twenty-seven Bostons and eight Baltimores to drop 25 tons of bombs on points on the German line of retreat near Cosenza and Castrovillari and a few Mitchells and Bostons on the Auletta road junction. The situation round Salerno was still very fluid during this night. Five Mosquitoes intruded over Viterbo and Grosseto landing grounds, and two others added their efforts to those of the thirteen Beaufighters of No.600 Squadron and the six of No.415 United States Squadron. These Beaufighters destroyed a Ju.88 over the Salerno Bay and probably a He.111 twenty miles N. of Naples.

Battle Summary
 Admiralty on
 Operations at
 Salerno
 A.H.B.IIK/18/30

During the afternoon of 10 September, about thirty German aircraft, including some F.W.190s, attacked the troops in the beachhead ineffectively. At 2030 hours a moderately large-scale German air attack developed against shipping in the Bay, followed by another between 0500 and 0545 hours. A large number of flares were dropped but the results were poor, although photographs may have been taken.

/The Problem

The Problem of Airfields and Landing Strips

Airfields and Landing Strips

Outline Plan of
Air Operations
para. 9 Pt.I.
A - 5/P.8(Final)
(A.H.B. IIM/A.36/
IF.)

According to the Air Plan, Monte Corvino airfield was likely to be in our hands on D Day and ready for use on that day or on D plus 1. Emergency strips might also be provided in the Salerno area by D plus 1. If the assault went well, Capodichino and Pomigliano D'Arco airfields in the Naples area might be in our hands by D plus 2 or D plus 3, and ready for occupation by D plus 3 or shortly afterwards. Aircraft would not be flown in to airfields whose defence was not assured and who were not stocked. On these assumptions a fly-in programme, (already given), was built up.

Monte Corvino Airfield

Report of O.C.
No.3202 Servicing
Commando - Air
Ops Avalanche/
Appx.
A.H.B./II.J.11/19

A reconnaissance of Monte Corvino airfield was made by the C.O. of No.3202 Servicing Commando, R.A.F. Finding it under shellfire, he decided to bivouac for the night in the neighbourhood, at a point ahead of our most forward troops. Next morning the Commandos occupied the airfields and commenced stocking fuel and ammunition. During the next four days, the only aircraft that landed for servicing were a few Seafires, for the airfield was under continuous shellfire and the Allied armies were involved in a situation hardening into crisis and so unable to defend Monte Corvino. The airfield was not, then, in the event, fully occupied until the morning of 10 September. It was retaken soon after by the Germans, fell into our hands again late on 11 September, but was unsafe for use until 20 September.

Construction of Airfield Strips

M.A.T.A.F. Report
on Operation
Avalanche
22 April, 1945
in M.A.T.A.F.
O.R.B.
Appendices.

This emergency had been provided for; it had been decided to send in one British Airfield Construction Group and two Companies of a U.S. Engineer Battalion, all under command of the American Deputy Chief Engineer, who had one British Air Liaison Officer attached to his staff. These engineers were to land immediately after the initial assault, with their equipment following hard behind; the plan assumed the construction of one field by D plus 1, two more by D plus 2, and two more by D plus 4, a total of five airfields in five days. As opposition was heavy and the advance slow, no mechanical equipment was landed in the British sector until the afternoon of 10 September, or in the American sector until the night of 9/10 September. One L.S.T. was torpedoed, with half a mechanical Equipment Sector aboard, which was eventually recovered, without any serious delay resulting.

Strip Construction Programme

Ibid and A.A.F.
in World War II
Office of A.F.
History U.S.A.F.

As the Army did not penetrate on D Day as deeply as planned, the engineers' reconnaissance parties reached on 9 September only one of the sites chosen, namely Paestum.⁽¹⁾ Work continued night and day from 10 September. Paestum strip, 1,300 yards by 50 yards, with P.L.S.,⁽²⁾ was operational 0600 hours on 11 September and was used that day by the first P.38s. Others in both sectors followed in rapid succession.

/Work

(1) See Map 2 for locations.

(2) Prepared Landing Strip.

Interview with
Gp.Cpt. P. Hugo
O.C. 322 Wing.

Work on Tusciano farmland site began at 1800 hours on 10 September, 2,000 yards from the Germans. A grass field at Monte Corvino was rendered operational for a while from 13 September. Sele and Tusciano were operational on 14 and 12 September respectively: Asa, a site in an olive orchard, on 16 September and immediately occupied by No.322 Wing; Capaccio on 17 September. Work was often carried on at a distance on only 1,000 yards from the enemy, and the fields when occupied incessantly fired on. Pilots reported a perpetual cloud of dust over the strips during construction. Communication between the Deputy Chief Engineer and the Commanding General Twelfth Air Force passed straight through the VI Corps Command Ship link: thus both Air Force and Army H.Q. were always up-to-date on the airfield strip situation. The use of some of these sites, which normally would not have been considered, depended on fine weather, which in the event ensued. It was, indeed, too fine - the dust never settled. Their comparative security, too, was welcome, (if surprising), only one local enemy raid being reported. Sometimes shells from both sides on the front line were passing overhead; but although the Germans photographed the strips, they delayed air attack on them until it was too late. After the crisis in the bridgehead, three more strips were announced as ready for operations - Serretelle on 23 September, Battipaglia on 25 September; and Gaudio later in October, (with P.S.P.), (1)

Monte Corvino was not actually in full occupation till as late as 18 September. Work had proceeded spasmodically on it, stocks had been dumped there and it was at that date actually ready for five squadrons, but as the enemy, just one mile away, still held it in range, nothing could be done but extend reconnaissance. Another site was found, but as the enemy still held on edge of this, it had no immediate value. All the Monte Corvino sites were bad. Wet subsoil, irrigation ditches and rough ground combined to render it a poor base: yet it was one of the primary objectives of the British division. The above paragraphs have shown the great disadvantage in which the Allies stood, when bases are considered.

Enemy Air Reactions to the Landings

Luftwaffe Tactics.

M.A.T.A.F.
O.R.B.

There were five attacks by small formations of F.W.190s and Me.109s on the beaches during the forenoon of D day. Thereafter, the fighter bombers joined the long range bombers in their anti-shipping offensive. Defensive fighting was abandoned; the enemy fighters and fighter bombers took every advantage of speed and cloud cover to strike swiftly. During the afternoon about forty German aircraft were observed in the area, never more than four aircraft together. The concentration of German fighters on these attacks left the air wide open for the Allied Close Support Forces to range ahead of the troops and confuse the enemy supply and reinforcement system.

/Failure

(1) Pierced Steel Planking.

Failure of German Fighters and Fighter Bombers to delay the Invasion

Although German resistance on the ground was proving stiff, the odds against the fighters and fighter bombers of the Luftwaffe were too great and their light attacks were quickly intercepted or broken up, few getting through. Their losses were low - two F.W.190s and a Fi.156 on D Day in the beach area. The temporary airfield at Scanzano just then discovered by Allied photographic reconnaissance had a brief life. Sixty-eight Marauders bombed it and its thirty occupant aircraft; another formation of thirty-five Marauders following soon afterwards and believed they destroyed four aircraft and hit the landing strip. This attack and the drift of the general situation discouraged the Germans, and after this, Scanzano faded from the picture.

German Air Tactics observed from the Fighter Control Ship

Report on
Operation
Avalanche by
Air Cdre.
Scarlett-Streat-
field, N.A.C.A.F.
A.H.B.IIM/A.45/
IGI.

From 9 to 10 September Allied fighters were controlled by U.S.S. Ancon and the A.A. ships. From the evening of 10 September, fighters were controlled by H.M.S. Hilary, which carried an R.A.F. complement, a filter and fighter operations room staff, a "Y" section, Signals Section, air lookouts, a Coastal Air Force representative and the Close Support Section of X Corps (Br.). The Beaufighter operations caused serious loss to night raiders and helped to render the accuracy of his bombing "deplorable". By day, it was noticed, the enemy relied entirely on Me.109s, F.W.190s and a few high altitude Do.217s. No multi-engined bombers were observed in use in day operations; the enemy attempted no day torpedo attacks. The hurried, and for the most part rather inaccurate, attacks by fighter bombers were low level or dive, low-level in the majority of cases.

Luftwaffe Activity 11/12 September

Ibid

During 11 September, the Germans maintained the total sortie figure of about one hundred and twenty reached the previous day. Whereas on 10 September formations were usually small, thereafter they found it wiser to fly in formations of ten Ju.88 or Do.217 bombers, escorted by four to six fighters; they made seven separate attacks on shipping. In one of these attacks U.S.S. Savannah was crippled by one of the new FX radio-controlled bombs.

Battle Summary
on Salerno
Operations -
Admiralty
Historical Branch
A.H.B.IIK/18/30

Appearance of the Radio-controlled Bomb

At 0945 hours she was steaming slowly out of the Gulf of Salerno. Overhead at 13,000 to 14,000 ft. what was believed to be a smoking aircraft⁽¹⁾ was sighted slightly forward on the /starboard

(1) Allied Air Capture Intelligence still knew comparatively little either of the FX, of the Hs.293, the "glider bomb" which was shortly to come into action in this theatre, and eventually replace the FX. It believed the FX to be a bomb without wings, but with fins slightly larger than normal, fitted with radio-controlled tabs. It was not then known whether or not the bombs had rocket attachments to give extra velocity, but it was deduced that they would have some trace or light to enable the aimer to follow them in the air.

Attacks with Hs.293's had been recently made on Allied Naval units in the Atlantic and fragments were being examined at the Royal Aircraft Establishment at Farnborough, who had issued a preliminary report on 7 September.

A.M.W.1.S.
Sept. 1943.

starboard side and on the same heading as the ship. The supposed aircraft began to skid violently from side to side, seemed to pull up and then execute a wing-over which brought it directly over the forward part of the ship: look-outs recognized it as a bomb, not an aircraft. It fell vertically at great speed, emitting quantities of smoke and a sound similar to that of a rocket and landed on top of Turret No.3. The bomb pierced the 2 inch armour plating on the turret top, the heavy slide that held the three 6 inch guns, passed through five decks and possibly out through the ship's bottom. The ship left the anchorage under escort and reached Malta safely. None of the ships' observers sighted the aircraft which launched the bomb. Later research proved that distant approach and release were part of the essential tactics.

Bomber attacks on Allied Shipping continued

The two main formation attacks of the day 11 September were by mixed forces, the first one of twenty Ju.88s and He.111s; the second of fifteen. They met with some slight success. Fighter bombers, in formations of four to ten, joined in the attack. The Allied air cover was discouraging, but attacks were persistent and cost the Germans nine aircraft this day, three on 12 September and six on 13 September. These were the first occasions in any theatre when the 21 cm. mortars, fired by the Mortar Staffel Me.109s, were used against our concentrations. Bombing was mostly low level: some dive-bombing was reported. Most of the fighters came from the Foggias, the fighter-bombers from Cisterna.

German Air Reconnaissance during the First Week,

Ibid

The fighting in the bridgehead caused a diminution in long range bomber reconnaissance over the North African Coast and bomber and fighter reconnaissance of Sicily, its harbours, the Straits and the Tyrrhenian Sea. The main effort was diverted to patrols of the battle area. Three to seven Ju.88s and up to twenty-five Me.109s covered this task. Only one Ju.88 was plotted over Oran. A token effort of thirty-one sorties in the week was flown by fighters intercepting our photo reconnaissance aircraft, especially in the Naples area. The effects of such interference were negligible.

Study of Luftwaffe Successes against Invasion Shipping

Before the narrative proceeds to the account of the big German counter-attack and the all-out air effort against it, note must be taken of a field of action in which the German Air Force, although numerically weak, achieved a measure of success. It is one uniformly ignored by Air Force records, if for no other reason than that it was the Navy, not the Air Forces or Army, that took the brunt of the German bomber offensive. It must not be supposed that the Allied Air Forces had things all their own way. Statements that the air war had been already won must be dismissed and consideration given to what actually happened.

/On 9 September

A.H.B.IIK/18/30
Admiralty Battle
Summary on
Salerno
War Diary of
German Naval
Staff, Italy
in custody of
N.I.D.(I.5.)

On 9 September H.M.S. Prince Albert and H.M.S. Prince Leopold were attacked by high level bombers, but escaped damage. H.M.S. Ulster Queen, controlling the Seafires, was temporarily put out of action. Of the total German sorties flown that day fifty-four were on bombing attacks against shipping. German claims were fantastically high and results poor. The next day, E-boats sank H.M. Destroyer Rowan and aircraft damaged the destroyer Flores. Ninety-two German bombers came over in two waves, again claiming high damage - twenty-three hits was their own version of far less serious facts.

The Disabling of U.S.S. Savannah

Ibid and A.A.F.
in World War II
Office of A.F.
History U.S.A.F.

On 11 September occurred the bombing of U.S.S. Savannah already described. Six minutes earlier a bomb had fallen close to U.S. cruiser Philadelphia. This hit on the Savannah on the forenoon was a very serious affair. It occurred during that period already referred to, when a part of the beach patrol failed to report, that is when the air defence had been weakened without warning, partly on the grounds of pilot fatigue. After the attack the Commander-in-Chief Mediterranean asked for an immediate increase of shore-based fighter cover and obtained it. At 1450 hours H.M. Destroyer Uganda was hit without warning by a radio-controlled bomb. Like the Savannah the Uganda had destroyers, three in number, to escort her in tow to Malta for repair of the serious damage suffered and to report sixteen dead. The bombardment forces were by now seriously depleted and reinforcements were essential. Forty minutes after the hit on the Uganda H.M. Destroyers Nubian and Loyal had narrow escapes from bombs.

Success of the Radio-controlled Bomb⁽¹⁾

Ibid

No immediate known defence against the new weapon existed. It was therefore, as can be judged by the results, a serious menace. Fighter defence could be and was extended, but the facts remain that the German bombers eluded our three-layer air patrols and inflicted damage with their remote control system. Their fighter-bombers in addition, scored hits during the day on some of our build-up craft. The Germans correctly recorded in their Naval War Diary that the Allies were evacuating shipping - their version of the departure of the crippled ships and their escort. Night brought no respite. In one raid U.S.S. Biscayne and the British coaster Lyminge were both damaged by near misses. Twenty-eight German bombers were over the fleets that night and went home to base reporting a destroyer and two M/Vs sunk, as well as other fictitious claims.

Temporary Respite from Shipping Losses

Ibid

12 September was the day that the Carrier Force retired, leaving twenty-six Seafires, who landed at 1430 hours at Paestum strip. Air raids continued during this day, but no serious damage was suffered by our shipping. German reconnaissance was active in the area, aircraft being plotted on night, forenoon, noon and afternoon flights. The German day effort was stepped up to one hundred and twenty-eight fighter, mortar fighter and fifteen ground attack sorties.

/The total

(1) Although the Admiralty realises the difference between the FX and HS.293 bombs, all its reports refer to both alike as radio-controlled bombs. The ships attacked were apparently unable to distinguish which type was used.

The total was maintained the next day, but fell off thereafter. The bomber units, too, had by now almost shot their bolt. The inevitable drop in serviceability that Allied Intelligence had foreseen began to set in from 12 September onwards.

Renewal of Luftwaffe Bomber Successes

On the morning of 13 September, between 0400 and 0500 hours a group of empty British hospital ships which had just arrived came in for the attention of the night bombers. The Leinster and the St. Andrew were unscathed, but the Newfoundland was hit, set on fire and abandoned. No tugs were available; she was sunk by our own gunfire. At 1530 hours on the afternoon of that day another attempt, nearly successful, was made against U.S.S. Philadelphia.

THE LANDINGS AT TARANTO AND SURRENDER OF THE ITALIAN FLEET

Operation Slapstick

The Landings at Taranto

Admiralty Battle
Summary.

While the Fifth Army was gaining a foothold at Salerno beaches and the land and ship-based Air Forces were covering its movements and the convoy ships, as well as sowing confusion at the enemy's key road and rail points, two important events elsewhere were taking place. Allied naval, ground and air personnel were being landed at the port of Taranto⁽¹⁾ and the Italian Navy was leaving harbour in the attempt to gain Allied ports, in accordance with the terms of the Short Instrument of Surrender. The time for the occupation of Taranto was now adjudged favourable by General Alexander. No German forces were nearer than 15 miles from the port; the German Air Force in Italy was fully committed to delaying the Allied landing at Salerno and the advancing Eighth Army in Calabria; the only German naval forces in the vicinity were a few torpedo boats and ferry barges. The channels were swept for mines as far as the harbour entrances. The cruisers and H.M.S. Abdiel loaded troops and equipment. After our forces had entered Taranto at 1750 hours, the bombing of targets in the Heel was discontinued.

Signal W.R.B/49
Air Command Post
to R.A.F. M.E.
Ninth A.F.

El Alamein to
the Sangro
F.M. Montgomery.

The harbour, thoroughly mined, continued to be dangerous until 12 September. Troops were ferried ashore. H.M.S. Abdiel was sunk with the loss of one hundred and forty-nine lives. After the Desert Air Force fighter escort had left, the first to land were a naval port party and elements of the 1st Airborne Div. (Br.). The latter were due to be quickly reinforced, then to advance on Bari and up the east coast, linking on their left flank with the Canadians coming up from Reggio. By 13 September they had cleared the Taranto - Bari

/road

(1) Operation Slapstick. The Allied Naval Force Z was under the Command of Vice Admiral A.J. Power, flying his flag in H.M.S. Howe.

road after defeating a German force on 10 September. Two Italian army divisions were already fighting with the Allied armies. The capture of Taranto ensured that the Allied build-up on the mainland would now be considerably accelerated and that Fifth and Eighth armies could have an independent axis of supply on the west and east coast respectively. Deliveries to the Air Forces would be correspondingly improved.

The Italian Fleet

Coastal Air Force's Watch over the Italian Fleet

C.A.F. ORB's
Appendices
AHBIDM/A.36/IF.

During the night 7/8 and during 8 September, Coastal Air Force covered all the approaches from westward, one of its main cares being the movements of the Italian Fleet. Five Wellingtons⁽¹⁾ covered the east and west coasts of Sardinia and Corsica, Cape Corso, the sea areas to the south of Sardinia, and also, (with the help of a Marauder of No.14 Squadron) Elba Island, the North Tyrrhenian and the approaches to Spezia, Genoa and Nice. Eight Marauders and four Baltimores covered the east and west coasts of Sardinia and Corsica and the approaches to Spezia, Genoa, Nice and Leghorn. While any anti-shipping strikes in the Tyrrhenian were ruled out because of the wide manoeuvres of our own naval units, these aircraft had a free hand in waters west of Corsica and Sardinia. Hostilities had not yet ceased and the Allies, like the Italians, had to maintain their bluff and supposed ignorance by acting normally. Clearly, the show of interest had to continue; the patrols therefore followed routine patterns.

Surrender of the Italian Fleet

O.R.B. Appendices
N.A.A.F.
A.H.B. II
M/A36/IF.
C.A.F. O.R.B.

The Italian Navy observed the terms of the Short Instrument of Surrender with rigour. As the Allied convoy approached Taranto it met two Italian battleships, three cruisers and one destroyer outside the harbour. Obeying the instructions given them, these ships proceeded to Malta. At 1715 hours on 8 September, Spezia harbour was photographed by M.A.P.R.W. aircraft. Three battleships and two cruisers were about to leave port. Two battleships had moved to a buoy near the harbour exit. The booms protecting other battleships and cruisers were open and tugs, with a battleship and a cruiser on their hawsers, had steam up. No changes were observed in Genoa harbour, until the next day, when it was clear that a considerable force had sailed. During 9 September four Baltimores and four Marauders of N.A.C.A.F. reconnoitred for Italian Fleet movements, and finding forces at sea, shadowed them. More photographs of Spezia revealed the departure of all major naval units, except a few which had been scuttled. During the day 9 September this force was sighted in the Straits of Bonifacio. Thirty miles W.N.W. of Maddalena a battleship was seen to explode and at 1615 hours one cruiser and four destroyers were seen circling an oil patch. The balance of the force, that is, two battleships, five cruisers and eight destroyers, steamed on. The happenings thus reported by Coastal reconnaissance aircraft were, in fact, an attack by German long range bombers, resulting in the sinking of the battleship Roma, (described three paragraphs hereafter).

/German

(1) Fitted with Mark III A.S.V. owing to the intensification of enemy jamming of Mark II A.S.V. in the North Tyrrhenian Sea.

Fuehrer
Conferences
on Naval Affairs
1943 (Admiralty
Publication).

German Command
 Document OKW/
 WFST/662108/43
 Report No. 18 of
 Historical
 Section (G.S.)
 Army H. Q. Ottawa
 in A.H.B. 6.

Special Interr-
 ogation Report
 Gen. Heidrich
 Hist. Sect. C.M.
 H. Q. 13 Nov. 1946
 see Report 18.
 Ottawa.

German Plans for the Capture or Destruction of the Italian Fleet

Hitler distrusted Badoglio and was sure, in late July, that he was intending, if he had not already begun, secret negotiations with the Allies. He therefore ordered the urgent preparation of four plans to forestall a possible collapse of Italian resistance. One of these included the capture or destruction of the Italian Fleet.⁽¹⁾ On no account was it to be allowed to escape and join the Allied forces. Closely linked with this operation was another,⁽²⁾ for the seizure by the German Army of key positions in Italy. Two divisions were considered the minimum essential for the investment of the ports of Genoa and Spezia.

Admiral Doenitz was unable in the time available to cover the Italian ports with sufficient troops. A major part of the Fleet was thus enabled to escape. The code word "Achse" was sent out between 2030 and 2100 hours on 8 September. The only locality where Operation Achse succeeded in its naval clauses, apart from the air attack on Roma, was at Bari, after advice of the Italian surrender. General Heidrich was ordered to seize the Italian merchant fleet at Bari, and, with the help of his engineer battalion, sank some 20000 tons of shipping before general confusion ensued.

Success of the Italian Fleet's Escape

O.R.B. Appendices
 N.A.A.F.
 A.H.B.
 IIM/A.36/I.F.

M.A.C.A.F.
 O.R.B. Appendices

Admiralty Battle
 Summary A.H.B.
 II.K/18/30

Apart from a number scuttled in port or in dock for repairs, and one cruiser and three destroyers seen by two Wellingtons entering Port Mahon in Minorca, and interned, a considerable fleet eventually assembled at Malta. Their movements had been followed, both by the Mosquitoes of No. 5 Photo Squadron and the Coastal aircraft mentioned, augmented by four Wellingtons on reconnaissance and two on shadowing duty. The course of the Italian vessels was covered by anti-U-boat searches by aircraft. After the German attack on the battleship Roma, the Italian force divided. By breakfast time on 10 September, two battleships, five cruisers and seven destroyers were N.W. of Bone; towards noon they made rendezvous, after having followed the course laid down, with a British naval detachment from Force H, and passed Bizerta en route for Malta. One destroyer put in to Bizerta, bringing with it the complete crew of a Wellington lost west of Bonifacio on the night 8/9 September. During 9 September and on following days, naval ships, submarines and merchant vessels of the surrendering fleet continued to arrive at Allied ports from Bone to Augusta.⁽³⁾

The Air Attack on the Roma

Ibid

Against these arrivals, whose possession it was hoped would now render possible the release of Allied naval units to the Far Eastern theatre, must be set the loss of two

/Italian

(1) Operation Achse, See Appendix J.

(2) Operation Schwarz.

(3) The total of Italian ships surrendered comprised five battleships, eight cruisers, a seaplane tender, twenty-two destroyers and forty-one submarines.

Italian destroyers to enemy coastal batteries and the battleship Roma to air attack. At 1545 hours on 9 September, Marauder M reported a high-level bombing attack, countered by high-altitude anti-aircraft fire from the Italian Fleet. At 1515 hours a direct hit by an F.X. radio-controlled bomb from one of the four Do.217s engaged was obtained on the Roma, which caught fire and sank. At 1631 hours a further attack was carried out, this time at medium level, by five aircraft. These were believed by Coastal Marauders to be Me.240s, but in actual fact were part of a force of Ju.88s, from Foggia and Viterbo. This attack did not prevent the onward progress of the ships. Half an hour later one of our Marauders engaged one of the Ju.88s, inconclusively.

The attacks on the Italian Fleet diverted the attention of the German long range bomber force from the landings on 9 and 10 September and probably drew off anything up to seventy-five bombers, although there is no evidence that they all operated. These operations were an additional proof, if any were needed, of the German ability to react swiftly and in strength to a crisis. The Allied Air Force, deeply committed to a struggle against superior land forces in the beachhead, were rightly adjudged as unlikely to switch fighters to intervene, although later, light air escort was provided for the Italian ships.

AIR PROGRESS IN THE ASSAULT PHASE

Air Operations

Air Cover over Beaches and Shipping⁽¹⁾

Operation
Avalanche
M.A.T.A.F. Report
21 April 1945.
Report of pro-
ceedings of
Force V. Rear
Adml. Force V
No. 318/218
23 Sept. 1943.
A.A.F. in World
War II. Office
of A.F. History
U.S.A.F.

The pattern of fighter cover continued over 10, 11 and 12 September, on much the same lines as on 9 September. On the morning of 12 September the Carrier Force withdrew with most of its Seafires. Twenty-six of them were flown off to Paestum air strip as reinforcements. Force H withdrew on 11 September, leaving eight Seafires and eight Martlets for H.M. Carrier Unicorn, to enable Force V to maintain its own fighter umbrella as well as continue patrols in the combat area. Four more Martlets were received from H.M.S. Illustrious on 12 September. Twenty-four Seafires returned to Bizerta after two days flying, relieved by Spitfires. After attaining two

/hundred

(1) The general development of the pattern of beach patrol was as follows. The first day's total of 796 sorties included 288 Spitfires (R.A.F.), 199 Invaders (A-36), and 309 Lightnings (P-38). On the second day 70 Spitfires (U.S.) came into the patrols; the R.A.F. Spitfire effort dropped to 126 and the A-36 effort to 119. The Lightnings stepped up to 326. On 11 September, R.A.F. Spitfires increased to 219, American Spitfires dropped to 59; the Invaders stayed at 118 and the Lightnings fell to 248. This alternate daily fluctuation is reflected again in the figures for 12 September. Spitfires (R.A.F.) fell off a little to 207, Spitfires (U.S.) rallied to 72; the A-36s dropped off to 107 and the P-38s reached to 302. Thus the first day's grand total had fallen from 796 to 641, 644 and rallied to 688.

Appendix II
M.A.A.F. File
"Lessons from
Avalanche"
A.H.B./II/J/
11/19

hundred and sixty-five and two hundred and thirty-two sorties on 9 and 10 September respectively, the Seafire contribution fell to one hundred and sixty on 11 September and in the forenoon of 12 September to fifty-six sorties. These patrols were very effective. For example, on 10 September they broke up or turned away over forty raids.

Reasons for Fighter Cover Fluctuations

Operation
Avalanche
M.A.T.A.F.
Report
21 April 1945.

Apart from the diminuendo of the Seafire effort due to accidents, it was found that many pilots grew very fatigued in covering such long patrols. They would have preferred four short trips involving the same length of time, or even longer, to two long patrols. The cockpits of the Invaders and Lightnings were larger and more comfortable than those of the Spitfires, but, on the other hand, their patrols were longer. Accidents were increasing rapidly owing to pilot fatigue. On the other hand, performance sometimes exceeded expectations. It was found that the Spitfires were able to enter the area ten minutes before patrol time and sometimes to increase the length of the same missions by a further ten minutes. Conclusions were drawn later that in future operations, they would be able to maintain a patrol of 30 minutes on such an operation at that distance, instead of 25 minutes; furthermore, that they could have maintained a ten-minute patrol as far as 220 miles from base.⁽¹⁾ The Army fell behind schedule with the delivery of 90 gallon jettison tanks. Anxiety was felt that the supply of fuel tanks would reach dangerous low levels. Monte Corvino could not be used. Fortunately the enemy air reaction was not considerable. The first day there was little reason for any jettisoning of tanks supplies proved ample. Lightnings and Invaders all had sufficient petrol for their long missions.

Beach Patrols 12 to 17 September⁽²⁾

Ibid

It is opportune here to follow up the narrative of the beach patrol effort from 12 September, (the first day of the development of German counter-attacks), through the day of /supreme

(1) On the assumption of these conclusions, an interesting case could be presented for a landing at Gaeta, north of Naples, instead of at Salerno.

A.A.F. in World
War II. Office
of A.F. History
U.S.A.F.

(2) Beach Patrol Effort (excluding a few Seafire sorties) 12-17 September inclusive

Date	P-38	Spitfire	A-36	P-40	Total
12	302	R.A.F. 107) U.S. 72)	107	-	588
13	250	R.A.F. 145) U.S. 77)	181	-	653
14	312	R.A.F. 123) U.S. 59)	237	55	786
15	323	R.A.F. 140) U.S. 72)	183	72	790
16	269	R.A.F. 38) U.S. 59)	70	-	436
17	219	R.A.F. 109) U.S. 12)	64	94	498

M.A.T.A.F. O.R.B.

supreme crisis, 14 September, to the date of stabilisation of the Allied front - 17 September. On 12 September, the total patrol effort, excluding Seafires, rose, the most notable increase appearing in Lightning sorties. Spitfire totals (U.S. and R.A.F.) were steady and Invaders down a little. The strain was evident on 13 September. The Invader effort rose. On 14 September, when the entire available weight of Air Force, Army and Navy was brought to bear, the total beach patrols were only one short of the figure registered on the day of the landings; Warhawks were brought for three days into the beach cover system. Thereafter, with the Germans back on the defensive, a big drop in patrol sorties is discerned. Monte Corvino airfield was missed badly.

Bomber Effort 10 - 11 September

O.R.B. Appendices

M.A.A.F. Sept. 1943

(A.H.B. IIM/
A.36/IF.)

M.A.A.F. Air

Intelligence

Weekly Summaries

(A.H.B. IIM/15/8)

Both air forces were now instructed to isolate the battle area. On 10 and 11 September, the Strategic effort was applied to the ground battle and concentrated on road junctions behind the enemy lines. Fortresses were out in strength on 10 September. Thirty-three of them dropped a total of ninety-nine tons of bombs on a variety of targets; Ariano inter-section and highway bridge, highways south of Benevento, Rocchetta San Antonio, Montelone Di Puglia and between Grotta Minarda and Ariano Ippino, also the railway bridge at Cancellio, all with some success. Another sixteen Fortresses, unable to locate their primary target, Vinchiatturo, dropped forty-three tons of bombs on bridges near Botano as well as on a Tiber bridge, without hitting the targets. Thirty-four more Fortresses made a much more successful attack with eighty-five tons of bombs on road and rail installations at Isernia, N.W. of Vinchiatturo, both situated halfway across Italy. Twenty-four Middle East Liberators of Nos. 98 and 376 Groups visited Foggia Satellite No. 3, bombing in weather conditions too poor for accurate assessment of damage caused by their forty-two tons of bombs. Opportunities for detailed observation were further reduced, because of their combats with a score of enemy aircraft, some of whom attacked for 25 minutes. This raid disturbed the movement of German fighter and fighter-bombers to the bomber base at Foggia already noted, but, unless maintained persistently over a period, could not seriously interfere with their operations. A Me. 109 was destroyed. German fighters and flak holed the Liberators.

The medium bombers on anti-communications operations were Mitchells and Marauders. Thirty-six Mitchells dropped forty-five tons of bombs on the road net at Castelnuovo. They were attacked by about ten Me. 109s of which they destroyed one half without loss to themselves. The same number of Mitchells visited an area whose name, in the following early year, was to recur with a sombre ring. These aircraft scored a heavy concentration of hits with forty-eight tons of bombs on the road junction N. of Cassino, a small town in one of the finest natural defensive positions in the world, on Highway Six leading north to Rome. The junction with, and surface of, the Capua road was also hit and the road leading into Cassino was cratered. This time it was the German movements which the cratering was to check. At the same time thirty-five Marauders were also dropping forty-six tons of 500 lb. bombs on Formia road junction on the West coast route. The only two missions that met with fighter opposition were those to Foggia and Castelnuovo.

205 Gp. O.R.B.

During that night - 10/11 September - the same work was extended. A few Liberators and Halifaxes of Ninth Air Force bombed Potenza rail junction. Formia was again visited, this time by forty-nine Wellingtons who dropped ninety-four tons of bombs without loss to themselves, and with good results. Two

/other

other night targets were opened up for the first time since the landings, this time in the line of the Germans retreating from Calabria. Corletto road junction was lit up by four Bostons. Incendiaries, falling short of the town, failed to set it alight, but the flares were well placed to guide twenty-two Mitchells to the target. 1000 lb. bombs, among others, were dropped. Auletta was the other road junction attacked. An exactly similar force from the same units were dispatched to bomb it. Here again, aiming was precise.

Armed reconnaissance, as well as attacks on the just-named two road junctions were features of the nights of 10/11 and 11/12 September. On the night 10/11 September thirty-three Bostons and eight Baltimores were out on armed reconnaissance over the Naples-Benevento, Potenza and Sapri area between the Fifth and Eighth Armies. Bostons, accompanied by Baltimores, bombed the road junction and stationary M/T at Avellino. Other Bostons bombed some M/T at Caserta, as well as the road junctions at Sapri, Auletta and Cosenza, (in the line of the Germans retreat from Calabria) leaving big fires behind them. The dropping of Armistice leaflets and posters over Italy by Wellingtons, as on most nights when weather permitted, continued, the Psychological Warfare Department concentrating on such urgent subjects as Rome and Italian resistance to the Germans.

While the Fifth Army ground forces were contending with stubborn resistance during 11 September, the bombers maintained these attacks against the German lines of communication. The important centre of Benevento could not escape notice and thirty-nine Fortresses added to the existing havoc there by dropping one hundred and four tons on the marshalling yards; Thirty-three Mitchells hit the road junction at Castelnuovo; thirty-six Mitchells attacked the bending road round Ariano. Two other vital road junctions on the supply route were attacked - Mignano by thirty-six Marauders and Isernia by thirty-five Marauders; the photographs revealing inaccurate bombing. None of these missions encountered any air reaction: the reason for this will be elaborated shortly when the activities of the Luftwaffe during those days are discussed.

Ibid

Bomber Operations Night 11/12 September.

205 Gp. O.R.B.
and A.A.F. in
World War II.
Office of A.F.
History U.S.A.F.

The latest photograph of Frosinone airfield revealed the presence of fifty small aircraft, twenty-six Ju.88s, four He.111s, five Do.217s and twenty-one Italian, transport and other aircraft. This offered an excellent target for ninety-six Wellingtons, who spent three hours bombing it with one hundred and sixty-four tons of bombs. A raid by sixty-eight Fortresses followed on the next day. They also did great damage, (although some of the aircraft originally present had left), with one hundred and fifty craters and rendered the landing ground virtually unserviceable with their one hundred and twenty-eight tons of bombs. The Wellingtons and the Fortresses destroyed eight aircraft and damaged nine. This was the last attack on an airfield until the night 17/18 September, as the critical ground situation called for more and more support for Fifth Army.

During this night - 11/12 September - Auletta road junction was well hit by twenty-seven Tactical light bombers. At Corletto, Bostons dropped flares and twenty-three Mitchells

/followed

followed in. Results appeared good. While mediums were attacking main road junctions, night movements were being closely watched ahead of the Eighth Army's advance and harried by the light bombers. Twenty-five Bostons and eight Baltimores of No. 3 S.A.A.F. Wing were out in the Sapri area on armed reconnaissance bombing and machine-gunning. Cosenza town was attacked by them and Sapri by Bostons, who created havoc among M/T. There were eighteen Beaufighters on patrol. One aircraft of No. 600 Squadron claimed a Ju. 88 near Salerno and another off Cape Palinaro.

Allied Bomber Operations in the Battle Area. 12 and 13 September

Air Intelligence
W.S. No. 44
AHB/PJ/43
N.A.A.F. O.R.B.'s
and Appendices.

A.A.F. in World
War II Office of
A.F. History
U.S.A.F.

The record of air operations in the battle area from 9 to 11 September revealed a pattern which was to hold until late on 13 September. Up to that time the Allied Air Forces, although putting forth a formidable effort, cannot be said to have been fully stretched. For at any rate a few days, the enemy airfields were judged as adequately reduced; a final attack was made on Frosinone airfield, south of Rome, on 12 September by a force of sixty-eight Fortresses, carrying one hundred and twenty-eight tons of bombs. The Germans took the hint and speeded up the evacuation already under way, to safer fields. Bombers now began to unload closer and closer to the bomb line. The same day nineteen Fortresses bombed the roads at Mignano and at Benevento. The next day sixty-three Fortresses disorganised the roads at Torre Del Greco and Sala Consilina, through which enemy reinforcements must move or traffic withdraw, dropping one hundred and thirty-five tons of bombs. The Mitchells were engaged on the same work without respite. On the day 12 September twelve of them dropped sixteen tons of bombs on the Colobrano/Corletta area, where the Germans were withdrawing before the Eighth Army, but were foiled by cloud; others bombed roads round Ariano (1) and Castelnuovo. The same night, others accompanied by Bostons again bombed the road complex between Potenza and Auletta, to prevent, as far as possible, the German elements in the south from reaching safety; a task only partially successful, since movement at night was very difficult to detect and the German ability to withdraw was greater than the Allied ability to overtake them.

The flow of supplies from Naples was hindered by attacks the same night by seventy-one Mitchells and Marauders who damaged the Pompeii road junction with their sixty-four tons of bombs. Twenty-four other Mitchells went back to Sala Consilina road and bridges, on the way north into Campania from Calabria. (This brings the record of the Mitchell effort up to the evening of 13 September). Castelnuovo, junction of the main roads from south and east, along the German retreat route, was put completely out of action on the night 12/13 September by sixty-five Wellingtons who dropped one hundred and fifteen tons of bombs. There was no flak and no encounters or losses. The Germans were using no night fighters at this period, but their bombers were out as usual and two fell to our Beaufighters.

'Invader' Bombing Operations 12 to 13 September

Ibid

In addition to the Invaders⁽²⁾ flying beach patrols, others were working in support of the two armies. Their effort,
/averaging

(1) The Ariano mission included the first recorded B-25G's in action in this theatre (4 in number on this occasion) using 75 mm. cannon.

(2) Mustang 'Invader'. The name 'Invader', invented by War Correspondents during the Tunisian campaign, was officially adopted. These Invaders came from No. 27 and 86 Fighter Bomber Groups.

averaging seventy-five sorties daily, began with attacks on M/T in the Potenza area on 10 September, followed by others on 11 September in the Salerno area, in the Potenza, Sapri and Corletto road areas on 12 September and a return to the Salerno battle area on 13 September. Results were good. On 12 September, for example, pilots claimed to have destroyed eighty-three and damaged fifty-nine M/T. Each Invader carried a bomb load of approximately 0.32 tons.

Comparative Aircraft losses from 9 to 13 September

Ibid

Considering the scale of Avalanche, both sides succeeded in keeping their losses in aircraft reasonably low in the first phase. From 9 to 13 September inclusive, German losses were four, eight, twelve, two and ten respectively; Allied losses were ten, five, five, nil and one aircraft respectively. The totals of thirty-six German and twenty-one Allied aircraft lost must be related to the disproportionate total of actual air forces engaged. It must also be borne in mind that as the days passed, airfields, with a large number of aircraft in various states, passed into Allied hands. By 1800 hours on 12 September, all the airfields in the Toe lay in our possession. In the Taranto-Brindisi area we held Grottaglie, Brindisi/Orazio, Lecce/San Donato, Leverano, and San Pancrazio, all in good condition, most possessing some habitable buildings, and Avetrano and Manuria, of minor value.

Summary of Air Support of Operations Baytown and Slapstick to 13 September

Air support for operations in Calabria up to 8 September as well as long-range cover for the convoy to Taranto on 9 September have already been covered: all the light, medium and heavy bomber attacks on points of communications, troops and transport between the two main battle areas have also been dealt with in detail up to 13 September. They have, it will have been noticed, tended to converge into a single problem, whereas the assaults began as three distinct operations. Great hopes were originally held of cutting off the German armies in the Boot. When these hopes died, everything was done to prevent them escaping. The Allies did not succeed in defeating them in the field, but captured, or denied the enemy the use of all the vital airfields in the South; this was a clear gain. The Germans, notwithstanding, retreated at their own pace, and substantial forces joined the Tenth German Army contesting the Salerno landings. The various air operations by bombers against airfields, roads, bridges, troops and transport affecting the joint Avalanche - Baytown fronts have been followed up to the close of 13 September.

Desert Air Force Tactical Operations

D.A.F.
O.R.B. and
A.A.F. in World
War II Office of
A.F. History
U.S.A.F.

A brief glance at Desert Air Force tactical operations will bring the story of the air effort up to the point of the big German counter-attack and the Allied airborne operations of 13 September and following days. On 9 September, a first light armed fighter reconnaissance by six squadrons of the Desert Air Force reported signs of a general enemy withdrawal at high speed from the Catanzaro zone. Columns along the coast roads towards Paola were attacked by formations from the two hundred and thirty Kittyhawks and Warhawks out that day over the battlefield and rear areas, ninety vehicles destroyed and heavy casualties inflicted. Spitfires escorted Operation

/Slapstick

Slapstick naval units as far as Crotone. Considerable M/T were accounted for. In the following days medium bombers carried on the chase. A few Spitfires and Kittyhawks from Sicily continued naval escort duties. For the next few days, owing to the diversion of supplies to Avalanche, Desert Air Force's support of the Eighth Army was curtailed. Fighters were switched to escort for bombers attacking lines of communication leading to Salerno.

Comparison of the Efforts of the Opposing Air Forces
9 to 12 September

The Allied air superiority was obvious to both sides. In addition to the Seafire effort already detailed, land-based fighters flew seven hundred and ninety-six sorties on 9 September, six hundred and forty-one on 10 September, six hundred and forty-four on 11 September and six hundred and eighty-eight on 12 September. Against these figures the German Air Force could only register eighty-two fighter and twenty-six ground attack sorties on D day, followed by a gradual daily increase until 12 September, when the maximum effort of one hundred and twenty-four fighter, eight mortar aircraft and fifteen ground attack sorties was attained. As soon as the assault was under way on the first day, all German fighter and fighter bomber units not already based in the Foggia area transferred there, a mass move towards co-ordination of striking power. German attacks the first day varied in character, reflecting both the apprehension as to the outcome of the local struggle, and the progress of the following moves.

The German close support forces,⁽¹⁾ it will be recalled, could muster at the opening of the assault some one hundred and forty/fifty aircraft, of which about one hundred were serviceable. These aircraft were used with great economy. Their low numbers and the far superior Allied air strength forbade the covering of all commitments; hence the poor cover for their ground forces and the Allied reports that they hung around the fringes of the land battle area, avoiding combat. The main weight of the Luftwaffe reaction was against shipping and disembarking troops, the latter tiresome but ineffective.

/The Ground

(1) German Close Support Forces serviceable on D Day were:-

III/S.K.G. 10	8	aircraft
II/S.K.G. 10	19	"
Stab. J.G. 77	2	"
I/J.G. 77	14	"
IV/J.G. 3	7	"
Mortar Staffel/J.G. 3	7	"
Stab. J.G. 53	0	"
I/J.G. 53	14	"
II/J.G. 53	11	"
Mortar Staffel/J.G. 53	4	"
III/J.G. 53	12	"
	98	

The Ground Situation

Position of the Eighth Army on 13 September

Eighth Army
Operations from
Reggio to Ortona
Hist. Section
Central Med.
A.H.B.JII/58/
3(A).

The Eighth Army was in no position to help directly the Fifth Army's stand against the German counter-attack of 13 September. For logistical reasons, its main advance had been slowed down. On 11 September Cotrone fell to the Canadians. British patrols were still near Belvedere on 13 September. The main Eighth Army elements had not yet joined up with the forces landed at Taranto. The Eighth Army advance acquired new momentum as from 14 September. The light elastic resistance met by them and the Taranto forces led to the conclusion that the vital combat zone was the Fifth Army area. In the south, only blocking and delaying forces were left. It will be clear from the positions given above that the Eighth Army could not on 13 September actively interfere in any action in the Salerno area.

Ibid and
"Operation
Victory" by
Maj. Gen. Sir
F. Guingand.

Major General Guingand, Chief of Staff of the Eighth Army wrote later:

"Some would like to think - I did at the time - that we helped if not saved, the situation at Salerno. Now I doubt whether we influenced matters to any great extent.

"General Clark had everything under control before the Eighth Army appeared."

On 9 September General Alexander had called on General Montgomery for speedy help for the Fifth Army. The first visible result had been the capture of Cotrone and its airfield. As the advance developed, so did the German demolitions. The enemy may have lacked aircraft; he was not short of mines, booby-traps and explosives.

Army Headquarters' Appreciations of general position
13 September

~~2219~~ Signal
M.A. 113
10 September.
Tactical 15th
Army Gp. to
War Office.

The next day or two would be decisive. The Allies were short of landing-craft, hence could hardly build-up fast enough. However, Avalanche enjoyed priority in everything, at the expense of the Eighth Army and the 1st Airborne Division. By the evening of 13 September, A.F.H.Q. summarised the situation as tense and still regarded the following few days as critical: they were indeed. Everything depended on the ability of Fifth Army to build up more rapidly than the enemy, a factor itself depending largely on the effect of the Air Forces' effort against enemy communications. Things were unfavourable in X Corps sector. 56th Division had been driven out of Battipaglia with heavy losses. 46th Division was maintaining its position in the passes, but was subject to infiltration from the north. There was no change on the Ranger front, but to conform with the front south of Battipaglia, the left flank of VI Corps (U.S.) had been withdrawn.

The Significance of the Corps Boundary

When British X Corps was hit on 11 September, the Sele gap remained wide open. General Clark therefore shifted the Corps boundary north of the River Sele, and made moves to bring American troops north and west of the river; during

/these

Ibid and
"Salerno"
Military
Intelligence
Div. War Dept.
Washington.

these moves the Tobacco Factory was the scene of two important battles on 11 and 12 September, for the possession of this excellent post of observation. By the end of 13 September, the Sele - Calore basin, the junction between the two corps, had become the point of least Allied resistance. A.F.H.Q. reported insufficient reserves to stage an offensive. Could the forces available even maintain a successful defensive action against the three divisions massing for attack? Meanwhile, Eighth Army was striving to push forward and relieve pressure on the Fifth. Eighth Army had sufficient landing craft to carry out small amphibious turning movements, but in the event these were not brought into play until long after the crisis had passed, - to be precise, on 3 October. On 13 September German armour began to move across the Battaglia - Eboli road to throw the Americans out of Persano.

Development of German Strategy

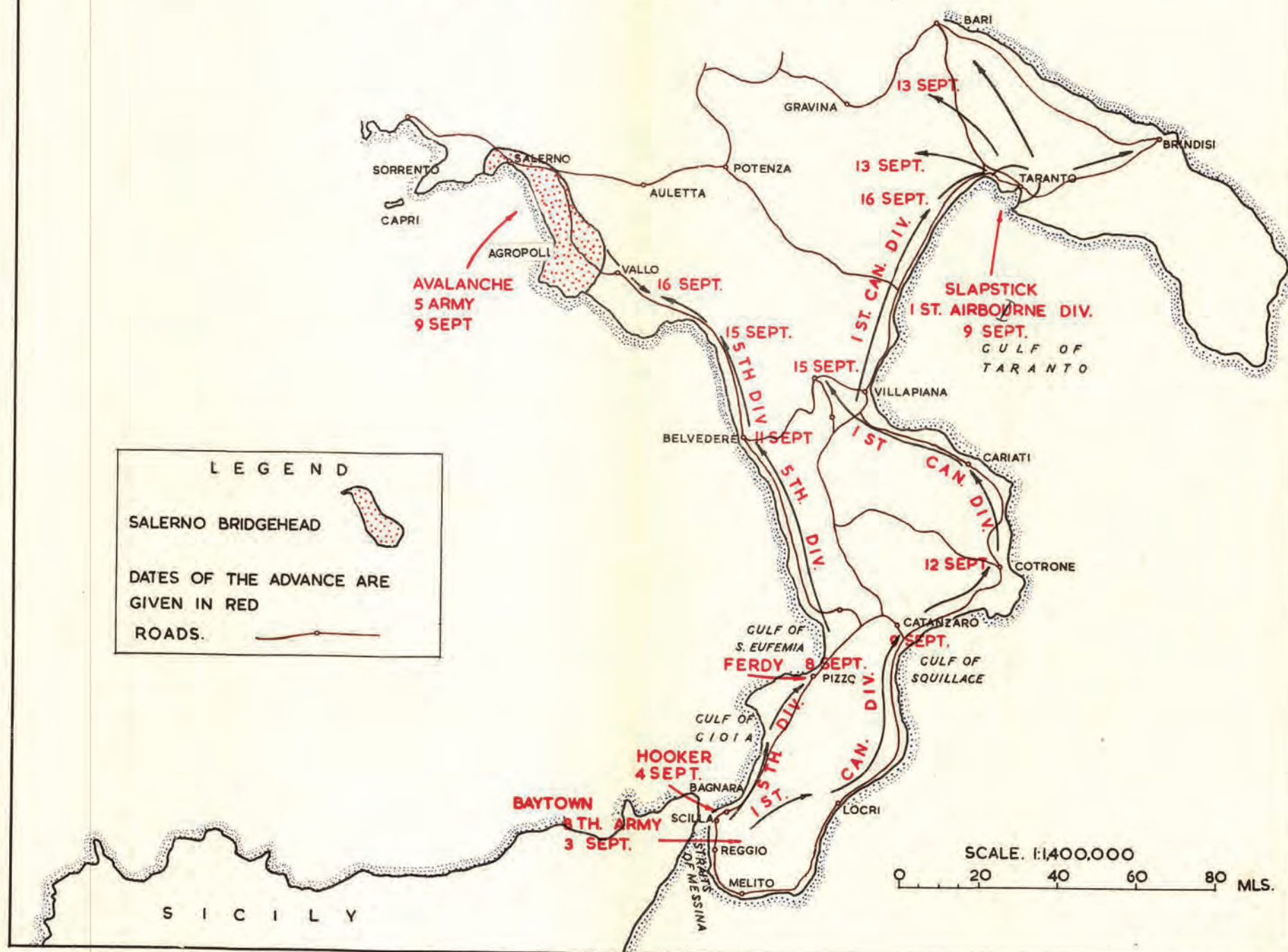
Meanwhile the three German divisions in the Salerno area were being reinforced both from north and south. The Rommel - Jodl plan for the defence of Italy, which stood at this time, envisaged a main line of defence some considerable distance to the north on the southern slopes of the Apennines, with protection against landings by motorised reserve troops. General Jodl himself had urged a concentration of forces in Southern Italy.

By the evening of 11 September, Kesselring, the German Commander-in-Chief, had taken stock of the situation; a captured Order of the Day issued to Commands detailed strong elements of one division to North Calabria to save supplies and one regiment to Foggia, their main air base. All other available forces were to be concentrated in the Naples - Salerno area, for only by throwing the Allies into the sea could any decisive improvement be achieved. This plan was adhered to in the main, but since every other consideration had to be subordinated to the resolve to crush the Fifth Army, 26th Panzer Division, then in N. Calabria, was thrown in too, piecemeal but entirely. 16th Panzer Division's battle groups were re-forming for defence, elements of 29th Panzer Division were already under 16th Division's Command. These two latter forces and the Herman Goering Division (drawn mainly from Luftwaffe personnel) were then in the thick of the fighting. Advance elements of 15th Panzer Grenadiers were already on their way southwards. LXXVI Panzer Corps, destined to take over the sector opposite the Allied right wing, were still at Contursi. The 26th Panzer Division were moving north from Sapri. The occupation of Rome and the suppression of local resistance was keeping 2nd Parachute Division and 3rd Panzer Grenadier Division busy, but the latter was soon to be thrown into the struggle.

All through 12 September the German forces were grouping for an all-out counter-attack. According to this plan, (1) motorised infantry of 26th Panzer Division and 15th Panzer Grenadiers Division would contain the Allied right and left wings respectively. The main effort was to be a drive down the centre, (still weak, it will be recalled), by two Panzer and one Panzer Grenadier divisions, with further Grenadier elements and tank reinforcements. The attack opened on the night 13/14 September, maintained its impetus for 24 hours, then collapsed. No close air support was either promised or provided, as attacks on shipping held priority.

/CRISIS

R.A.F. NARRATIVE OF THE ITALIAN CAMPAIGN
 ADVANCE OF THE EIGHTH ARMY 3 - 16 SEPTEMBER 1943



CRISIS IN THE BRIDGEHEAD AND AIR COUNTER-MEASURESMajor German Counter-AttackIntimations of approaching major Counter-attack.

'Salerno'
Mil. Int. Div.
War Dept.
Washington

The morning of 13 September opened quietly on land and in the Bay. The 29th Panzer Grenadier Div. was resting after its ejection of the British from Battipaglia: Allied troops were taking up new positions, 7th Armoured Div. was expected to begin landing the same evening. At 0725 hours Germans bridged the Sele north of Persano. About 0950 hours a warning from Fifth Army H.Q. arrived to the effect that the enemy might attack south-west from Eboli in the afternoon. During the forenoon, U.S. Infantry made some headway north-east of Persano, but were stopped in the woods in the Gratiaglia. One battalion was dangerously exposed in the Sele - Calore Corridor. Units on the American left flank were well dispersed. The Germans gathered to spring. Their tanks were on the Battipaglia - Eboli road at 1310 hours. At 1400 hours other tanks near Eboli opened fire. By 1530 hours the attack was in full swing.

The Opening Drive

Ibid

The opening drive uncovered the Sele River crossing at Persano. A battalion near Persano was struck from both front and rear. The main German force pushed down the lower Sele - Calore corridor. If they crossed the burned bridge a little way south they would at once threaten the rear Allied areas. An American attempt to recapture Hill 424, commanding Altavilla had to be abandoned. The German tanks pressed on, followed closely by Panzer Grenadiers, and heavy artillery. Nothing could stop them. An Allied battalion H.Q. was trapped; the situation, for a while, got out of control near Persano. The main pressure was maintained at this point until after dark, when, having pushed the Americans from the ground near the Tobacco Factory, surrounded units on the Tenuta road and driven a deep wedge into the Allied front, the Germans relaxed for the night.

Allied Counter-measures

Ibid

The Allied Commanders that evening made three decisions. These were, to speed up disembarkation of 7th Armoured Div., bring the 82nd Airborne Div. into the line and concentrate maximum air and naval power against the threat. Salerno port, opened on 11 September, was in working order for the unloading of tanks. The beaches were all in our possession and reasonably clear of air attacks and long range artillery shelling. Monte Corvino airfield was still unuseable, but Paestum strip was functioning and partially stocked up. There were serious gaps in the Allied line and points weakly held. Near Battipaglia a gap, at points 5 miles wide, was held only by reconnaissance units. The right flank of the American front, badly crippled, was held temporarily by field engineers and a few infantry. Reinforcements were now flown in by air.

/Allied

Allied Ground Operations during the Night 13/14 September

The Conquest of
Southern Italy
British Historical
Section, Central
Mediterranean.

The Allied front was too extended; orders were issued to pull back into the best possible defensive position, dig in and hold on. All through the night tired units worked to reassemble forces and fortify the line. The right flank was refused: the left flank made the best of mosquito-ridden terrain. The 36th Div. based a precarious line on La Cosa Creek, commanding with its guns an exposed plain the Germans would have to cross. The weakest spot, where the creek joined the river, was covered by tank destroyers, tanks and artillery. The night was relatively uneventful in the American Sector.

Facing X Corps (Br.) were the 29th Panzer Division. There were some thirty tanks in Battipaglia. These forces shelled Salerno that night. Tanks attacked for three hours on end, without breaking past the Coldstreams and the 9th Royal Fusiliers. This front was fully manned, as a break through north of Vietri was anticipated. While this situation was evolving, a small French force had landed at Ajaccio in Corsica.

Headquarters' Appreciation of the Position

Signal M.A.136 T
13 Sept. 1943.

General Alexander planned to visit the front with Air Marshal Coningham on 14 September, to reassure himself on the situation. General Montgomery had been told to push ahead to the rescue with all speed. The Allies were ahead of their shipping programme; another division should be ashore by 20 September. Our armoured divisions were beginning to land that evening. The entire 1st British Airborne Division had been disembarked in Taranto, but with six-pounders as its only weapons its value was still problematical. The whole of the 45th (U.S.) division was now ashore. It sounded reassuring, but the actual situation was very grave.

The Ground Battle on 14 September

"Salerno" American
Military
Operations
Intelligence Div.
War Dept. U.S.

German Naval War
Diary. (with
N.I.D. (1.5))

The aim of the Germans on 14 September was to exploit their success of 13 September and drive through by sheer weight to the sea. They opened with a series of armoured jabs, all held by the re-organised Allied units. Their losses in men and armour in the field, and as a result of bombardment by the Navy and Air Forces, severely handicapped them; they could not fill the gaps in their armoured strength. The Allied dispositions made during the night were effective. The gap between the British and American Corps was closed south-east of Battipaglia. Reinforcements were arriving and infantry reserves building up. Airborne troops had begun to function. The Germans, though temporarily halted, were in dangerous strength and held the initiative. Although at the end of 14 September, the Allies' condition had not worsened, it had not markedly improved and all-out air and naval offensive action had to continue all through the night 14/15 September and the day 15 September.

Continued German Air Attacks on Allied Shipping

Ibid.
Admiralty Battle
Summary.

Early on 14 September, plans were made to withdraw Fifth Army H.Q. to H.M.S. Hilary, H.Q. Ship and, if necessary, evacuate one of the two sectors, reinforcing the other sector with the same troops: but as the day progressed these moves were adjudged uncalled for. By 1400 hours it was clear that the immediate threat to the beaches had lessened. Unloading was resumed on a reduced scale. The beaches and harbour were,

/however

Appendix 8

however, at no time safe from air attack. U.S. reports say raids on the beaches were frequent and severe. The German Naval War Diary made little reference to these, placing more emphasis on anti-shipping attacks. On 13 September, twenty-nine fighter bombers had attacked the fleets. On 14 September, the total effort fell from about one hundred and twenty to about eighty-five. A few of these aircraft were encountered in the battle area; sixty-two sorties were flown against the ships. U.S.S. Philadelphia was nearly hit again by a radio-controlled bomb. The merchant vessel Bushrod Washington was hit and sank.

Full-scale Unloading Resumption on South Beaches

Ibid

By 0730 hours on 15 September, the Allied Naval Command felt the supreme crisis had passed and ordered the resumption of full scale unloading on the beaches of the southern sector. Salerno port was still closed; German shore batteries were shelling off-shore shipping. H.M.S. Valiant and H.M.S. Warspite put to sea for the night, but suffered twelve separate air attacks on themselves and their escort without any serious damage resulting. At the anchorage, a U.S. store ship was hit by a radio-controlled bomb and set on fire. An L.T.C. was badly damaged by a bomb and had to be sunk. Two more L.C.T's were hit at 0800 hours and at 1214 hours, the troopship Derwentdale was damaged by a near miss and had to be taken to Malta in tow.

Air Counter-MeasuresAir Operations Day and Night 13 September

No. 7 A.A.S.O.

War Diary

N.A.T.A.F. O.R.B.

Report on Air

Ops. Avalanche

N.A.A.F./A.5

N.A.T.A.F.

O.R.B./Appx.

A.A.F. in WorldWar II Office

of A.F. History

U.S.A.F.

During most of the day of 13 September, no reflection of the rising crisis was discernible in air operations, although, as has been mentioned, an attack was expected. The only direct close support was carried out, as before, by Invaders who flew armed reconnaissance sorties in the Salerno area, while others patrolled the area round Potenza, soon to fall to the Eighth Army. The bulk of the work of the Tactical bombers was against communications just beyond the mountain amphitheatre surrounding Salerno; thirty Fortresses were over Sala Consilina and dropped forty-seven tons of bombs, and twenty-four Baltimores dropped sixteen tons on Auletta; at night a few Liberators and Halifaxes from the Ninth Air Force continued to pattern by bombing Potenza. The beach-head patrol continued. There were still no fighters available for ground support escort missions; the air support control machinery turned for Tactical Reconnaissance and bomblane business only. The offensive effort in the immediate vicinity of the battlefield came from the heavy and medium bombers. Thirty-three Fortresses bombed the Torre Del Greco roads in the outskirts of Naples and believed they achieved blockages, although they did not hit the junction. Seventy-one Mitchells and Marauders were in the area, too, and met no air opposition while they dropped sixty-four tons of bombs.

There was a degree of urgency about the night's operations although, even then, the total bomber effort for the 24 hours was the lowest since the landings. Five bombers from the Ninth Air Force went back to Potenza; twenty-six Mitchells and Bostons went to San Severino with thirty-five

/tons

tons of bombs. The main object of the rest of the night effort was the prevention of enemy reinforcements from reaching the battle zone. Ninety-one Wellingtons dropped bombs over the roads east of Pompeii, which they tore up for a five-mile stretch with one hundred and sixty-four tons of bombs. The only interference came from a single Ju.88. Pompeii had no peace after they left, for twenty-three Mitchells, preceded by pathfinder Bostons, bombed the roads again. West and north of the battle area twenty-nine Bostons and eight Baltimores bombed M/T. But Battipaglia and Eboli, the two main portals through which German arms and men were flooding, and the corridor they had sliced down the pastures of the Sele and Calore rivers, were, curiously, left in peace until the next day.

All-out Air Effort to save Bridgehead 14 September

The Germans attacked again early on 14 September, with the objects of exploiting their two mile-wide Sele thrust, and driving through to the sea. The plans laid the previous night to save the bridgehead now came into play, including a maximum effort by the Navy and Air Forces. The bombardment by the Naval forces is dealt with in detail in the Admiralty Battle Summary on Salerno. It is sufficient here to note that it was prolonged, effective and in the fullest possible weight and helped materially to change the situation.

Summarising the air support by both Tactical and Strategic Air Forces on 14 September and the night 14/15 September, well over seven hundred sorties on bridgehead patrols, bombing and strafing attacks on targets of opportunity and fixed targets in the battle area by fighters and fighter-bombers and over twelve hundred sorties by bombers of all categories, were flown. Fighter bombers dropped a total of one hundred and fifty-nine tons of bombs. About two hundred bomber sorties were flown at night, the balance by day. By night-fall the German attack had lost its impetus and initiative, never to regain them. Every target in the day's effort was in the battle area, except Pescara marshalling yards, which were attacked by thirty-seven Liberators. The day missions were roughly divided into Army Support and Communications. Army Support work was the role of Invaders, Lightnings and P-40s: communications that of Fortresses, Mitchells, Marauders and Baltimores.

Tactical Air Effort 14 September

Beachhead patrols rose to seven hundred and ninety-five sorties, (only one short of the record of 9 September) and absorbed the best part of the available fighter force. Warhawks were included this day and the next. Battipaglia and Eboli towns had to be reduced. Forty-eight Mitchells laid a pattern over Battipaglia. Twenty-four Baltimores escorted by Warhawks bombed Eboli. Twelve Baltimores looked for M/T between the two towns; finding none, they bombed Eboli. Twelve other Baltimores, sent to bomb Eboli, failed to rendezvous with their escort, and returned. The weather was hazy, but cloud very high. Twelve Kittyhawks attacked a group of M/T on the Contursi - San Angelo reinforcement road, but did no great harm. Six Warhawks dropped bombs on some stationary M/T south of Teora. This was a day when the beach patrols extended their effort to participate in the land battle. Eighty-four Invaders engaged in opportunity bombing and armed reconnaissance.

/German

N.A.A.F.
O.R.B's/Appx.

No. 7 A.A.S.C.
War Diary.
A.A.F. in World
War II. Office
of A.F. History
U.S.A.F.

Ibid

German fighters appeared over the battle area. The Invaders destroyed two F.W.190s. Fifty-nine Spitfires, on battle area patrols, also ran into opposition, fighting inconclusively with eighteen F.W.190s and Me.109s. Of the total of over three hundred Lightning beach patrol sorties, many took part in opportunity bombing, dropping sixty-three 1000 lb. bombs and one hundred and eighty-three 500 lb. bombs, on M/T, road bridges and rail yards, and attacking Battipaglia, Auletta, Torre Annunziata, Avellino, Eboli and Campagna. They met a few German-piloted Italian MA-202s. The Warhawks in the beach umbrella system also attacked Eboli and Torre Annunziata. Mustangs from the beach cover bombed transport, receiving themselves considerable damage from flak concentrations. Meanwhile the disembarkation of the 7th Armoured Division was held up: enemy shells were falling into Salerno, including some from a 210 mm gun concealed in a tunnel.

Strategic Effort 14 September

Ibid

During daylight, the principal targets were troop concentrations in the Battipaglia - Eboli zone and the roads over which reinforcements must travel. At 0936 hours, fifty-eight Mitchells and at 1240 hours, thirty-eight Fortresses, bombed Battipaglia heavily. The Mitchells met some twenty-five enemy fighters, of whom they accounted for two without loss. Between 1222 and 1236 hours thirty-six Marauders and forty-one Fortresses obtained many direct hits on buildings, rails and roads between Battipaglia and Eboli. Eboli was progressively destroyed. The town, the underpass and railway were hit by sixty Mitchells at 1000 hours: barracks and troop concentrations were attacked in the late afternoon by sixty-two Marauders, who carpeted the entire hillside. In all, the medium bombers dropped one hundred and fifty tons on Eboli. The crossroad round the rail line to Potenza were hit by twenty Fortresses. To reduce the flow of men, ammunition and equipment to the front line, a considerable Allied bomber effort was thrust over the roads north-west of the danger-points. West of Pompeii and round Torre Annunziata, two forces of Fortresses, thirty-five and thirty-seven respectively, scored many hits on the road system. On the perimeter of the battle area, Avellino road junction and Auletta road junction and defiles were attacked by seventy Marauders; the San Severino road net was attacked in the afternoon by thirty-six Mitchells. Liberators of Ninth Air Force - whose heavy bombers had been transferred on 13 September to Twelfth Air Force, - hit the yards and roads at Potenza.

That night, the largest formation of night bombers ever dispatched in the theatre until that date, one hundred and twenty-six Wellingtons, dropped two hundred and thirty-seven tons of bombs on Battipaglia and Eboli, setting the areas well alight, without loss of aircraft. Photographs taken on 15 September revealed that the Battipaglia - Eboli road was still open. Eighteen barracks had been destroyed. Damage had been increased over the rail system; at Battipaglia, the Naples, Metaponte and Reggio lines were still cut, as were the roads to Naples and Rutino: the bridge was destroyed and the road to Metaponte heavily damaged: the marshalling yards were fast losing any clear outline. At Potenza, the railway viaduct leading to Battipaglia showed up as half destroyed and some roads as out of action and hard to recognise. At Benevento, the

/through

through tracks were blocked, likewise the road junction at Castelnuovo. The communications system revolving round Torre Annunziata had had most of its direct rail lines, as well as the highway, cut and blocked. Pompeii ruins had received slight damage, the first since 79 A.D.(1) Add to this picture the facts that at Capua the two road and one rail bridges were destroyed, and at Formia all through lines severed, the coast road hit; through roads at Cancellò, Isernia were now cratered into bottlenecks. It will be readily deduced that the flow of men and material for the German thrust had been considerably impeded by early 15 September. Results would have been even more effective had there been better training in mutual air - ground identification and the use of visual signals.

A.F.H.Q. Review of the Situation

N.A.F.370
14 September 1943

An evening signal reported that a German attack along the Sele River had gained ground and was being reinforced. The Eighth Army, still far away, could not influence the immediate situation. Tactical and Strategic bombers were working over-time in support of Fifth Army. More reinforcements from the 82nd Airborne Division were being flown in that night by Transport Command and the final regiment of the 45th Division (U.S.) was due the same day. 78th Division (Br.) due in Taranto, were to create a diversion in Fifth Army's favour. Replacements would be rushed in by sea. Parachutists were to be dropped behind the German lines.

Allied Night Air Operations to save the Bridgehead continued through the Night 14/15 September

N.A.A.F. O.R.B's
205 Gp. O.R.B's

The bombardment by battleships, including H.M.S. Warspite and H.M.S. Valiant, continued over 14 and 15 September and this factor played continuously on the changing situation. The air effort for the night 14/15 September was mainly notable for the Wellington raid already noted. Other night missions were also focussed on communications. Twenty-four Mitchells hit Eboli and thirteen Mitchells Controne, and sixteen Bostons Eboli. A few Liberators and Halifaxes from Ninth Air Force went back to Potenza.

Allied Air Support 15 September

No. 7 A.A.S.C.
War Diary.
T.B.F. O.R.B.
A.A.F. in World War II
Office of A.F.
History. U.S.A.F.

One hundred and seventy-four Lightnings swept the battle area in addition to their beach patrols and dropped seventy-seven tons of bombs. The Eboli area, still vital, was bombed by a total of one hundred and thirty-six Mitchells, Baltimores, Invaders and Marauders, who added havoc to an already difficult ground position by scattering M/T and troop concentrations. The road from Eboli to Battipaglia was again a priority strategic target. It was cratered and blocked in many places by thirty-six Marauders and fifty-six Fortresses in the forenoon, and the road out of Eboli to Camposele was damaged for half a mile by seventy-two Marauders in the afternoon. Thirty-six Fortresses and forty-eight Mitchells dropped loads on the roads leading from Naples into Salerno; the road junction just S.E. of Auletta was hit by Marauders. Strategic Air Force operated, as on the previous day, as a tactical air force.

The Tactical Air Force put in another crowded day. In addition to the attacks on Eboli town already given, troop concentrations E. of Altavilla and N. of Rocca D'Aspide and in this town, were well covered by thirty-six Baltimores and twelve Mitchells respectively, all escorted by Warhawks. Kittyhawks strafed columns of M/T moving from Lagonegro to Auletta and /patrolled

(1) The year when ashes from Vesuvius destroyed the city.

landing of the paratroops on the previous night had had a marked effect on the morale of the tired troops in the area. This night a repeat drop was carried out, known as Giant Four, the same in all essential details as Giant One (Revised). All but five of the one hundred and thirty aircraft detailed carried out their mission and returned. They dropped some one thousand nine hundred paratroopers and equipment, between 2345 hours and 0045 hours, from 600 feet, on to a Zone lit by paratroopers dropped by Pathfinders. The moon was full and visibility good. No enemy aircraft were met. They saw a vessel burning in the Gulf of Salerno. As they approached the D.Z., Allied A.A. fired on the 61st Group. After the firing of the Colours of the Day, the fire ceased. The bulk of the troops were dropped within 200 yards of the beacon, the farthest troops less than a mile and a half away, except for two aircraft which dropped their troops 20 miles to the north. Two thousand one hundred troops were loaded into trucks and conveyed to the front, one battalion before Agropoli, one by Oglianto and one by Capaccio. The following day, 16 September, motor patrols of the Regiment moved South to Sapri, where they met forward units of the Eighth Army. The beach engineers thrown into the firing line were relieved, and resumed their unloading, now three days behind schedule, while the hard-pressed 45th Division was withdrawn from the front line.

The same night another mission set out to effect a parachute drop of one battalion on a dropping zone five miles south-east of Avellino, a few miles behind the German lines. Their objective was the destruction of the railway and highway bridges over the river, which would disrupt the flow of German reinforcements. The Zone was the valley above San Michele: not all the route chosen was covered by photographs. Very short notice was given; it was not possible to set up all devices originally planned for Avalanche airborne operation near the Volturno River mouth. One pathfinder led the way to the Zone and in spite of enemy small arms fire, its crew set up their transmitters. There were considerable navigational difficulties, despite the moonlight, no guide ships and no airborne corridor, as originally planned. Forty aircraft dropped about six hundred paratroops. These, owing to the presence of mountains, were dropped from heights between 3,000 and 5,000 feet over a widely-dispersed area. Aircraft carried out their mission in immunity because all enemy radar stations had been bombed out of action. This force blew a hole in the main highway bridge, then took to the hills. By 8 October one hundred and eighteen men were still listed as killed, captured or missing.

Desert Air Force Operations

Desert Air Force Progress

The Desert Air
Force by
R. Fenwick-Owen
No.2/5 A.A.S.C.
War Diary

While the crisis in the bridgehead developed and passed, the Air Forces in the south were beginning to move into Italy. At 1410 hours on 13 September, the Station Commander's party of No. 239 Wing landed at Grottaglie airfield. The Italian Station Commander could promise no active support in the absence of material and in view of bomb damage. The party set to work to lay telephone lines, instal mobile radar and fix billets. The Desert Air Force was accustomed to moving in and operating on the same day. Aircraft and supplies followed and the first armed reconnaissances were flown on 13 September.

/During

During the next few days No. 244 Wing arrived by air and operations increased. The stay in the South was short-lived. The tide of operations enforced early moves to Bari and Gioia. Before long the latter's airfields accommodated Nos. 244 and 255 Wings and elements of No. 225 squadron and No. 1437 Strategic Reconnaissance Flight, as well as the Allied Press and Public Relations units. During and after the landings at Vibo Valentia, light bombers had staged a diversion; D.A.F. had flown four missions on 7 September against positions S.E. of Rosarno as a prelude to a ground attack. They had supported 231st Brigade as we have seen on 8 September, but thereafter targets in direct support became progressively fewer as the advance gathered speed, and it was not till 23 September, that they reappeared.

8th Army
Operations Reggio
to Ortona.
Br. Historical
Section. Central
Mediterranean.

The rapid movement of our ground forces threw up problems of administration and disorganised plans. A and B parties of D.A.F. were split until as late as 25 September, owing to German demolition of airfields and the bad weather. The Army Air Support Control No. 2/5 had to work at times with Army H.Q. and at times with D.A.F., as these two latter H.Q.'s could not always move simultaneously to adjacent areas. Great strain was imposed on the air support communication system and it was difficult for both D.A.F. and Eighth Army to keep up-to-date on each other's activities. The only Rover tentacle available functioned on the West coast axis, passing back valuable information.

No. 2/5 A.A.S.C.
War Diary.

When the Germans were concentrated north of Catanzaro, armed reconnaissance had accounted for ninety-five vehicles and damaged at least a hundred and thirty more. On 8 September, D.A.F.'s light and fighter bomber strength was reduced to six and seven squadrons respectively, so that additional air support for Avalanche could be provided. More fighter-bombers were detached for the same reason a few days later. By 15 September, D.A.F. squadrons, supplied by air, operated from Taranto bases in support of both Fifth Army and the units advancing on Foggia. Night bombing had been continuous.

Eighth Army Reports of D.A.F. Attacks on Allied Troops

Ibid

Ground movement being rapid, maximum reliance was placed on wireless communications. Accidents were possible under such conditions, where bomb-lines were fluid. The Central Mediterranean History of Eighth Army Operations mentions the following incidents. On 8 September, two attacks were made on our own troops - one as a result of our forward elements on the east road being out of touch with their formation and beyond the known bomb-line; the other as a result of a formation advancing quicker than anticipated, and only changing its bomb-line when the aircraft were overhead. On 1 October two attacks were reported on the Canadian Division well within the bomb-line. It was thought the bomb-line drill was of a low order and the use of ground-to-air signals not fully appreciated. Yellow smoke and flares were used by ground units and vehicles were supposed to be suitably and clearly marked. There was a Ground Strip Code and a coloured smoke system to show landmarks. Aircraft used white Verrey lights to forward troops to show yellow smoke, and green ones to H.Q.'s to display indicators, wagging their wings to express acknowledgement.

The Rover Tentacle with the Desert Air Force

Ibid and Air
Support in Italy
A.H.B. ILJ.1/115

The Rover Tentacle developed by D.A.F. and Eighth Army in previous campaigns, although in this phase only used on a small scale, was important. Historically viewed, it was the forerunner of the system of airborne fighter-bomber control universally

/adopted

patrolled the battle area, shooting up likely targets, which were in great profusion. Invaders roamed between Eboli, Avellino and Auletta, put out thirty-four M/T, and attacked M/T and gun positions between Salerno and Auletta, even as far as Potenza.

Enemy fighters were more in evidence now over the battlefield. The beach patrols encountered a formation of twenty F.W.190s and destroyed one. The other German fighter concentration met lost five F.W.190s. Other smaller formations of Me.109s were sighted, but avoided combat. Of seven Strategic missions, only one ran into German fighters. This was when a couple of them attacked the last element of a Marauder formation after the bomb run. The light and medium bombers of T.B.F. met no air opposition. The German ground forces had clearly achieved their success so far with little or no air support.

Airborne Operations

Sudden Change in Plans for Airborne Operations

Report of Troop
Carrier Command
Activities.
Vol. II by HQ T.C.C.
Sicily.
1 October 1943.
A.A.F. in World
War II. Office
of A.F. History
U.S.A.F.

Previous plans for airborne operations in support of the landings had been cancelled in favour of the plan for a drop on the airfields near Rome, (1) which in turn was cancelled. Plans as at 13 September included a drop at Avellino for the night 13/14 September (2) and a revised version of the Avalanche plan for an all-parachute mission in the vicinity of Capua, the latter designed to seize and destroy the Volturno crossings at Capua and delay the movement of the enemy across the river, (3) date undetermined.

On 12 September, Fifth Army asked if Giant one and Giant three could both be executed on the night 12/13 September. The reply was that Giant one could be executed on the night 14/15 September and Giant three on the following night. Late on 13 September, Fifth Army directed that Giant three be prepared for execution on call on or after 14/15 September, also that one parachute R.C.T. (4) be dropped on the beach south of Sele River in the zone of VI Corps that night - (13 September). The 504th Parachute Infantry Regiment, less one battalion, with one company of Parachute Engineers, dropped after dark south of Sele River. The same day, the preparation of the Avellino mission was ordered for execution on the night 14/15 September and glider and parachute personnel were ordered to sail from Licata, (Sicily), to Salerno. Plans were drawn up to follow the paratroop reinforcements with glider-borne troops, but reconnaissance revealed no suitable glider landing areas and nothing came of the plans.

/The Sele

- (1) Operation Giant two.
- (2) Operation Giant three.
- (3) Operation Giant one (Revised), first known as Giant.
- (4) Regimental Combat Team.

The Sele River Airborne Operation 13 September 1943

Ibid

Shortly after dusk three pathfinder aircraft, containing fifty paratroopers, took off from Agrigento airfield in Sicily. These and the following aircraft came from the C-47s and C-53s (Dakotas) of 52nd Transport Command Wing. The leading aircraft of this pathfinder element contained the leader of the pathfinder force, with paratroopers ready to take down a Eureka beacon, a 5G transmitter and a Krypton lamp.⁽¹⁾ The third aircraft contained local personnel, to protect the Dropping Zone while the main force was landing, and the second aircraft carried another Eureka and Krypton lamp. Each aircraft carried a handie-talkie⁽²⁾ for intercommunication between the three sticks, once landed. The brief of the trained personnel was to set up the Eureka beacon at all costs, and, if possible, the transmitter.

The three aircraft crossed the shore between the Gulfs of Salerno and Policastro along the valley of the Alento River. Ground signals were recognised dead on time; the first stick jumped, landed among the petrol flares and had its Eureka operating in three minutes. The second Eureka landed a little wide and came in as a valuable standby. The party was unlucky with its transmitter. The paratrooper's chute opened with a jerk, tearing loose from his legs the straps holding the kitbag container. The main forces' attempts to tune their radio compasses to a beacon on 1690 Kilocycles hence failed, but they triggered the Eureka beacon and came in homed on to it from all directions. Although they met no flak or fighters, the fact that enemy aircraft were in the vicinity made it essential to douse the flares after each group had passed over. One enemy aircraft circled overhead for half an hour, trying to find the frequency of the Eureka - Rebecca, but without apparent success. The drop was well-placed, with the exception of one company, who dropped 8/10 miles southeast of the D.Z. The main force, eight hundred strong, collected in one hour; they were packed in lorries and driven to a position near Albanella: In 24 hours they had prepared a strongly fortified position near Difesi Monti. Four days later this regiment made a night attack on Altavilla and captured it. The following night this operation was repeated and the full-scale Avellino airborne operation carried out.

Airborne Operations at Avellino⁽³⁾ and Sele River⁽⁴⁾

14 September

Report of Troop
Carrier Command
Activities.
Vol. II by H.Q.
XII T.C.C. Sicily.
1 Oct. 1943
A.H.B. List.
15/P. 21.
A.A.F. in World
War II Office of
A.F. History
U.S.A.F.

The 82nd Airborne Division and the troop-carrying aircraft were, after disappointment and delays, to come into action, although, in comparison with the original work planned for them under Avalanche, their role was secondary. The aircraft detailed for Salerno landings and Rome were still, until the drop of 13 September, idle: they might have been profitably employed on bringing in much-needed supplies for the Army and Air Forces on completion of the first landing strips. Troop Carrier Command were unable to do any of this work until after 15 September. The spell was now, however, broken. The

/landing

(1) An instrument designed to produce a blinding white flash of one second's duration, at five-second intervals, visible in daylight from 10,000 feet altitude.

(2) S.C.R. 536.

(3) Operation Giant Three.

(4) Operation Giant Four.

adopted with success in later phases of the campaign, which evolved through the stages of Rover, Rover David, Timothy and kindred systems. Rover Tentacles⁽¹⁾ could communicate either direct to the fighter-bomber wing or to the ground by W/T, or to the airborne fighter-bomber flight by Very High Frequency or High Frequency: briefing of aircraft in the air was, however, exceptional. The tentacle was a Rover in the sense that it could be switched from one brigade front to another, without interfering with normal air support communications. A wing would be affiliated to a Rover, as the arrangement likely to produce, and deal with the best and most numerous targets. The system created an intimate relation between supporter and supported. Especially in fast-moving battles was its worth to be proved; bomb lines were quickly adjusted, and the positions reported: the time for execution was cut down and Army and Air Force kept more exactly informed of each other's moves and needs.

RESTORATION OF THE ALLIED POSITION

Allied Operations

Situation at Close of 15 September

N.A.A.F./
S.A.S.O, O.R.B.
Appx.

General Alexander, on 15 September, commented on the happier, although not yet satisfactory, state of affairs in the bridgehead. The troops were tired, but in good heart. He had asked for early reinforcements. The air bombing⁽²⁾ and the ships' gunfire had been great morale raisers. The Germans had virtually broken contact with Eighth Army, in order to fling the troops from Calabria against Fifth Army: but beyond a certain date they could not ignore Eighth Army's advance. Reconnaissance elements of Eighth Army were now at Sapri, with patrols forward, and by 16 September the whole of 5th Division (Br.) was concentrated in the area Lagonegro - Sapri - Maratea.

German Naval
War Diaries,
Sept. 1943
(with N.I.D.I. 5.)

War Diary of
Tenth Army
G.M.D.S. 42803/1
(Captured German
Document.) See
Report No. 18
Army H.Q. Ottawa.

It is clear from the entries in the German Naval War Diaries of 16 September that the Germans admitted the failure of their big counter-attack. The ships' fire and air attacks had caused grievous losses, which were so serious, it was pessimistically stated, that they were bound to lead to a gradual reduction of their striking power. The attack would not be renewed unless the entry into battle of reinforcements from 1st Parachute Division turned the tide and led to a breakthrough. In the late afternoon of 16 September, the Commander of the Tenth Army recorded too, that his attacks, although well-equipped and carried out with spirit, had been unable to reach their objective, owing to the fire from naval guns and low-flying aircraft, as well as to the slow, steady advance of Eighth Army. It was essential to withdraw from the battle

/in order

(1) Also known as F.C.Ps or Forward Control Posts.

(2) While the battle was raging, representations had been made for the retention of the three Wellington Night Squadrons due for return to U.K. on 15 September. The Combined Chiefs of Staff decided that, in the critical situation ruling, they could be retained for Avalanche temporarily, subject to a review of the situation on 20 September 1943.

in order to occupy good defence positions before the intervention of Eighth Army.

Patrols of Fifth and Eighth Armies met at Valle Di Lucania on 16 September. Soon the Allied line was to stretch unbroken from sea to sea.

The Commander-in-Chief on Air and Naval Support at Salerno

A few days later General Eisenhower summed up the major lessons learned at Salerno, for the benefit of the Combined Chiefs of Staff. His signal is important, for it is accepted that he endeavoured at all times to view combined operations as integrated efforts, not as sums of sharply - divided exercises of arms. During the critical period, he said, every item of available force, including land, sea and air, must be wholly concentrated in the support of the landing until troops are in a position to take care of themselves. This most emphatically included the Strategic Air Force. Before the landing the enemy build-up was proceeding to a point on which he might overwhelm the land forces capable of being launched against him in the critical beachhead phase; this had been the cause of grave doubts as to the wisdom of the operation. The single element justifying adherence to the plan, had been the knowledge of our complete command of the sea, with the ability to support our forces with heavy naval gunfire, and command of the air, with the ability to pour the full power of the entire Air Forces on an enemy seeking to destroy our landing troops. During the days of crisis, even the night bombers had contributed markedly to the effort of sustaining our hold on the beaches. Without the concentrated use of naval and air strength, we could scarcely have hoped to prevent the enemy from driving our forces back into the sea. Even given sufficient ground forces to break through the defensive coast of a beach line, a critical period would ensue, during which their actual ability to sustain themselves would depend on overwhelming air and naval cover, during build-up to safety level. Normal missions of naval and air units would have to be suspended during this short and critical period, to produce effective power. These views had been constantly supported by all his Commanders-in-Chief. As soon as he had fighter-bombers and Lightnings based on the mainland he could begin to advance.

N.A.F. 376
21 Sept. 1943
A.H.B. 1/D/12/46

A.A.F. in World
War II. Office
of A.F. History
U.S.A.F.

Air Reinforcements - Needs and Fulfilment

The Supreme Commander suggested to the Combined Chiefs of Staff the value of a blow by bombers from the United Kingdom against lines of communication in Northern Italy and requested the return to the Mediterranean of the three groups of Liberators which had operated there in July and early August. Both suggestions were approved and carried out promptly by the air forces in the United Kingdom. On the night 16/17 September, three hundred and forty R.A.F. heavy bombers and five Fortresses bombed the yards at Modane in an effort to close the northern end of the Mt. Cenis tunnel. At the same time Eighth Air Force dispatched eighty Liberators and five hundred and forty-four personnel of the 44th, 93rd and 389th Bombardment Groups (H) to the Mediterranean. These aircraft began operations on 21 September and continued to operate for N.A.A.F. through 1 October, most of their operations being against lines of communications in north and central Italy.

The Supreme Commander was also concerned that his air forces might not be able to continue operations on a scale necessary to ensure the success of Allied arms. The twin invasions had called for an actual employment of the air forces
/far

far in excess of planned employment. He felt that to reduce the scale of the present air effort might be disastrous; the air force was being depleted by attrition, and would be further reduced by losses of crews through completion of combat tours, especially rapid in the Mediterranean, where excellent flying weather and the constant demands of land campaigns frequently permitted a crew to complete its fifty missions in from four to six months. These facts were cabled to General Marshall, but no immediate reinforcements were forthcoming, partly because other theatres were even shorter on replacements than the Mediterranean and partly because with Avalanche and Baytown secure it was anticipated that the pressure on N.A.A.F's fighters would be reduced. Washington planned, however, to increase the minimum replacement rate from 15 per cent to 20 per cent (Troop Carrier crews from 7.5 per cent to 10 per cent), effective on 1 January 1944.

Allied Air Effort from Night 15/16 to 17 September

Ibid

The pattern of close support continued to the end of 16 September, spreading gradually to the perimeter of the combat zone, switching from the night 16/17 September through the day and nights of 17 and 18 September, to attacks on enemy air bases. The phase of consolidation of the bridge-head closed on 17 September. Operations by the Air Forces up to that date will now be recorded.

Fighter and Bomber Operations from Night 15/16 to the Close of 17 September

N.A.A.F. Report
on Avalanche.
No. 7 A.A.S.C.
War Diary.
No. 205 Sqn.
O.R.B.
A.A.F. in World
War II. Office
of A.F. History
U.S.A.F.

Another strong force of Wellingtons returned to the battle area on the night 15/16 September after a week of quasi-tactical operations by Strategic Air Force; this time, one hundred and twenty-three of them turned to the further destruction of the railway at Torre Annunziata and bridges and roads round Pompeii, dropping two hundred and forty tons of bombs. The following night, owing to the continued menace of attacks on our shipping, they opened the blitz on enemy air-fields with a raid by eighty-four aircraft on Cisterna/Littorio field. Roads already heavily punished between Eboli and Ponza were revisited on the night 15/16 September by Mitchell, Boston and Baltimore formations, a total of seventy-seven aircraft operating. The next night the same formations went to Caserta, where they bombed a road block, as well as M/T and ammunition dumps, and Benevento, where they hit railroad bridges. On both nights, small formations of heavy bombers from Cyrenaica attacked Potenza. (1)

/On the

(1) Statistics of N.A.T.A.F's effort during the Assault Phase are given at Appendix 10.

On the day 16 September, (1) with the Eighth Army gathering momentum, Potenza came again into the picture and was bombed, this time by thirty-eight Liberators, who dropped seventy-four tons of bombs. Direct Army Support was provided by twenty-four Baltimores and twenty-five Mitchells. The former bombed troops streaming south from Contursi and the latter the battered Eboli landscape. One hundred and eighty-four Lightnings were on punitive expeditions over the Avellino area, sweeping as far as Lioni, Corvino and Eboli. Many hits on M/T and dumps were scored in response to Army calls. Heavies and mediums worked further from the hub of the fighting, as the tension diminished on 16 September. About one hundred Fortresses raided the roads and railways at Benevento and Caserta. The Mitchells divided; most of them - one hundred and twelve - bombed Isernia and Capua: a few others, in company with Bostons, added touches to the scarred Eboli - Contursi road. Marauders went further afield, twenty-seven to Mignano, twenty-seven to Formia. There were seventy Invader sorties over the Eboli/Serre area. The Supreme Commander cabled to the Combined Chiefs of Staff that the work of the air force continued to be superb.

Ground support was given lavishly the next day by seventy Invaders and one hundred and eighty-four Lightnings, who filled in the gaps caused by the switch of the bombers to anti-airfield raids. The Invaders dealt with gun emplacements, M/T and factories at Battipaglia and Serre, trains and roads at Nola and bombed Sarno, Solofra and Campagna. There were some Mitchells, too, in the area between Eboli and Auletta. All these sorties, were carried out without serious opposition. The expenditure of ammunition and bombs was very high, often to the limit, and results, as was confirmed on the spot by ground observers and later when the Allied armies advanced, very satisfactory. The beach patrols continued their routine. Eighteen Mustangs of No. 111 Observation Squadron were now engaged on Tactical Reconnaissance work for the Army. A few Spitfires escorted Dakotas bringing in supplies and men, and evacuating wounded from Paestum strip.

Enemy Air Operations and Re-Organisation

The Disabling of H.M.S. Warspite

Admiralty Battle
Summary on
Salerno
Operations
A.H.B. IIK/18/30

On 16 September the Luftwaffe scored another important success in Salerno Bay. At 1410 hours H.M.S. Warspite was proceeding towards the northern area of Salerno Bay to continue /her

(1) Build-up of Tactical Squadrons on the Mainland to 16 September

Monte Corvino was not fully operational until 20 September. Small elements of 31st Fighter Group began sporadic use of sections of it from 16 September onwards, but the Group did not complete its move-in until 22 September. Initial build-up was on the landing strips, on the following schedules:-

12 Sept.	Tusciano	Five Sqns. No. 324 Wing R.A.F.
13 Sept.	Paestum	Eight Sqns. 33rd Fighter Gp. No. 111 Observation Sqn.
16 Sept.	Sele	Fifteen Sqns. 27th Bomb Gp.
	Asa	Twenty-three Sqns. No. 322 Wing R.A.F.
18 Sept.	Capaccio	Twelve Sqns. 86th Bomb Gp.

The night fighters of No. 600 R.A.F. Sqn. moved on to Monte Corvino 26/27 September.

Report by C.O.
H.M.S. Warspite.

bombardment, when she was attacked by ten F.W.190s. No sooner had one been shot down, when the true object of the bluff appeared. Without any radar warning, three radio-controlled bombs appeared almost overhead at 6,000 - 8,000 feet. Their parent aircraft was sighted at about 20,000 feet. These bombs dived vertically on the ship, which could take no avoiding action because of the congestion in the adjacent waters. Two bombs narrowly missed, but one hit her, penetrated to No.4 boiler room and burst. Five boiler rooms were flooded. Warspite managed to proceed slowly on her starboard engines until 1500 hours, when the last boiler room filled with water and all steam failed. Two U.S. tugs took her in tow and six destroyers escorted her to Malta; the sum total of units disengaged from battle thus reached a serious level. In spite of moon, there were no night attacks on the formation, which was covered by Spitfires the next day on its way to Malta. The rest of the naval units escaped damage from other raids the same day, on 17 September; the British cruiser Orion and the U.S. battleship Philadelphia were both narrowly missed.

Actual Allied Shipping Losses compared with German Claims

German Naval
War Diary.
Sept. 1945
(Custody of N.I.D.
(1.5.)).

Fliegerkorps H.Q. claimed the following successes against Allied shipping up to 1800 hours on 13 September: five transports, one heavy cruiser, seven landing craft and seven small craft sunk; six transports, one cruiser, three unidentified warships, two destroyers, one escort vessel and three landing craft probably sunk. The truth was that up to that hour only one tug, one L.C.T. and one hospital ship had been actually sunk. The summary of actual casualties to Allied ships up to 20 September, the date accepted by H.M. Admiralty as marking the close of Avalanche, are given at Appendix 13.

N.A.A.F. Air
Intelligence
Weekly Summaries.
A.B.H. IJ. 15/8.
N.A.A.F. ORB.
Appendices.

Goaded by the Luftwaffe's successes against shipping and with the object of nipping any integrated air effort in the bud, the Allied executed an all-out operation over a period of three nights and two days. It opened with a night attack on 11/12 September by nearly one hundred Wellingtons on Frosinone, followed by a day attack on 12 September on the same airfield by sixty-eight Fortresses. After a delay caused by the demands of the bridgehead crisis, the operation was resumed on the night 16/17 September, when eighty-four Wellingtons started fires on Cisterna/Littorio airfield near Rome. On the day 17 September, a mass attack began on the Roman base system. Ciampino North and South were attacked by fifty Fortresses and again, on 18 September, by thirty-seven Fortresses. Pratica di Mare was smothered with the bombs of one hundred and thirty-four Marauders and Mitchells on 17 September. At night again, sixty-four Wellingtons went to Cerveteri fighter base, setting fire to hangars and aircraft. A few Mosquitoes intruded near Guidonia and Ciampino. Viterbo, an active bomber base, was put out of action by a day attack by seventy-two Fortresses. The other main bomber base, Foggia, housing the majority of the Ju.88s in the South, was visited the same day. Nearly one hundred Lightnings swept over Satellites 3, 7, 10 and 12 during the morning. They lost six of their number, but did heavy damage, destroying, to the best of their belief, nineteen Ju.88s, and ten single-engined aircraft, as well as damaging many Ju.88s. The Germans were not so concerned at the damage as our claims would suggest, claiming that their excellent dispersal took

/the sting

the sting out of the attack. Nevertheless the prospect for the Luftwaffe was grim. Attacks such as this one and the growing threat of the Eighth Army's advance, forced a retreat. Battle Unit Foggia withdrew on 19 September, and on 25 September the long range bomber evacuation was complete. Naturally, during this period, operations over Salerno were effectively reduced.

Ibid

New Dispositions of the German Bomber Forces

The new picture of the lay-out of the German long range bomber force must be appreciated so that future operations may be seen in perspective. Groups I and II of K.G. 76 moved to Istres in Southern France. Groups I and II of K.G. 1 moved to Northern Italy, and at the end of the month, back to Germany, to rest and refit. Groups I and II of K.G. 30 moved to Piacenza and Villafranca respectively. Group III of K.G. 54 moved north to Bergamo. The disorganisation caused by these wholesale moves not only removed the threat to the Allied shipping off Salerno, but rendered the bomber effort over the whole of October negligible.

Ibid.

New Dispositions of German Close Support Forces

German Strategy
Br. Hist.
Section Central
Med.

The Allies had by last light 17 September established their bridgehead. Reinforced, they turned to attack. German strategy, while foiled of its aim of ejecting the Allies from Italy, had at the same time achieved successes beyond its hopes, and was to consider revising the original plan to fall back to the Pisa - Rimini line. Certain re-dispositions of its close support and fighter forces would have to be made if the small air force at their disposal was to be preserved. This was not to be easy, in view of the Allied air offensive and German plans to cover the evacuation from Corsica. The period of reorganisation lasted from 16 to 28 September. The close support force bases were too near the front line and within range of air attack. Half the fighter forces were moved on 16 September to the Rome area, where they were at once bombed out. Two groups of J.G. 53 suffered badly and had to be transferred to the Lucca area to re-form. The remaining Group - No. I - went to Rome; the Geschwader H.Q. was set up at Lake Albano, and Padua and Mantua prepared to function as main bases.

Group I of J.G. 53 was given the remaining aircraft of Groups II and III/J.G. 53, as well as those of Group IV/J.G. 3, who went back to Germany to rest and re-fit. Group I of J.G. 77 moved to Viterbo. Groups II and III/S.K.G. 10 moved to Aquino between 18 and 28 September. Thus I/J.G. 53, I/J.G. 77 and II/S.K.G. 10 were the only forces left to cover the dual tasks of supporting the Army in Southern Italy and escorting the long range bombers. Their new bases were at extreme range from the front; they could not therefore give any appreciable support to the troops. Already under strength, the machinery was still further strained by the diversion to the cover of the Corsican evacuation.

THE CAPTURE OF SARDINIA AND CORSICA

Air Operations
against Sardinia
July to Oct. 1943
R.A.F. Med.
Review No. 4.

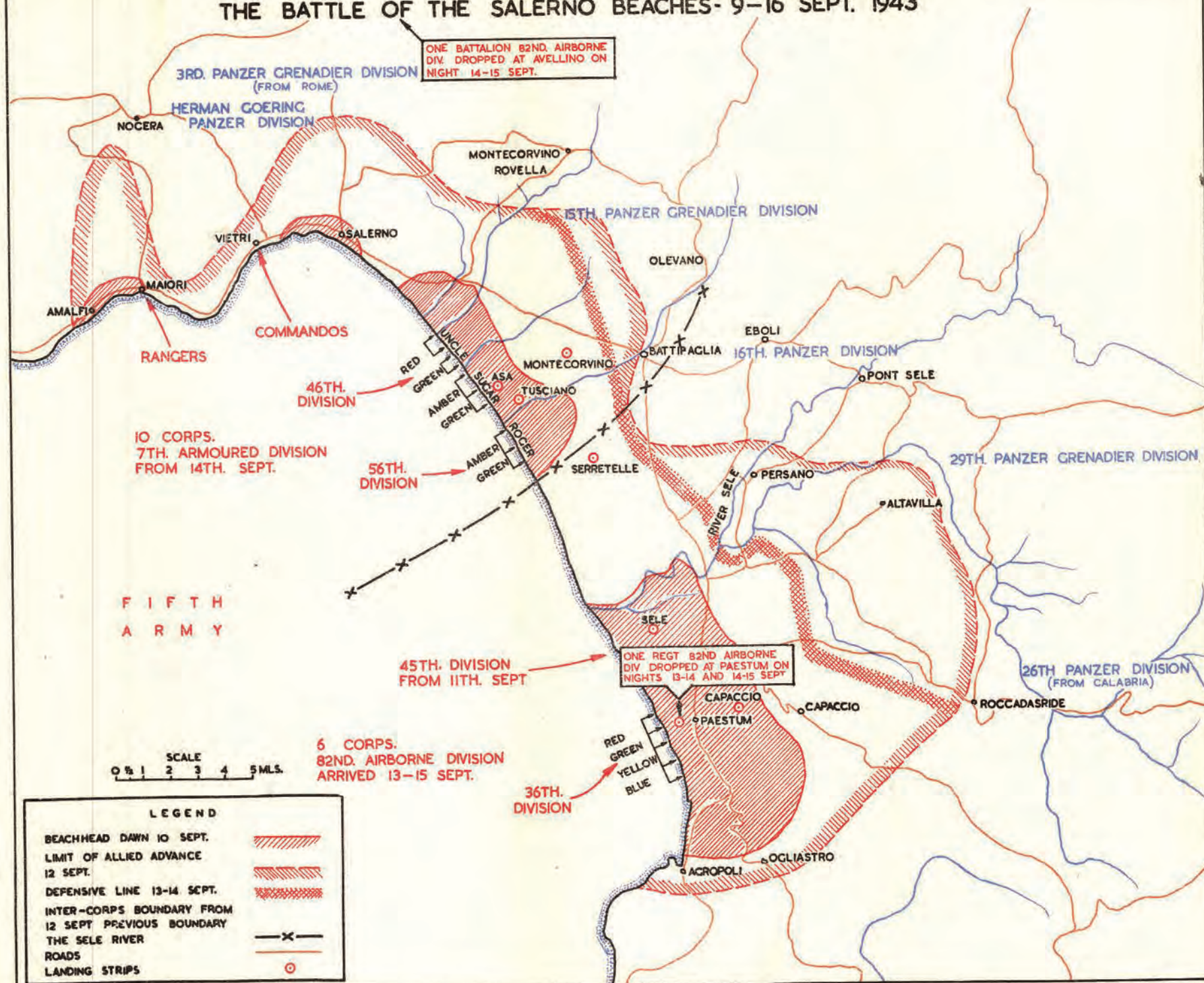
Sardinia and Corsica

N.A.A.F. Air
Intelligence
Weekly Summary
No. 44
A.H.B. II/J. 15/8

The sooner the two island bastions on the left flank of the Allied attack on Italy were reduced, the better. In German hands they were a threat by air and sea to our progress. Conversely we needed them ourselves as flank air and sea bases, Corsica in particular as a build-up base for an ultimate landing in Southern France. Since the close of the Sicilian campaign, Allied Intelligence had kept as close a watch as

/possible

R. A. F. NARRATIVE OF THE ITALIAN CAMPAIGN THE BATTLE OF THE SALERNO BEACHES- 9-16 SEPT. 1943



possible on events, through reports of photographic reconnaissance and armed reconnaissance by Warhawks of the Strategic Air Force over Sardinia, agents and other sources.

German Evacuation of Sardinia

Ibid

N.A.A.F. O.R.B.'s.
A.M.W.1.S.
Aug./Sept./
Oct. 1943.

A.F.H.Q.G-2
Reports.

On 17 August there were about sixty-five Me.109s and F.W.190s based in the northern half of Sardinia, but as time passed this force diminished, in the latter stages putting up no opposition to the Warhawk offensive. German fears that the main Allied attack might fall on Sardinia were disproved by Avalanche: on 9 September the decision was made to evacuate from Sardinia into Corsica, and from thence, yielding progressively to pressure, to Italy. Bonifacio and Ghisonaccia airfields in Corsica were prepared for the reception of the Sardinian units. Fliegerfuhrer Sardinia moved his Battle H.Q. on 10 September to Ghisonaccia, taking with him forty-four aircraft.(1)

On 11 September all Sardinian airfields were reported as demolished or in course of demolitions, but aircraft operated that day, not against Allied units, but against Italian. Many Italian airmen were still biding their time for a chance to join the Allies. Some burnt their aircraft rather than surrender them to the Germans. A big escape effort was staged for 11 September. Some sixty bombers and twenty fighters took off for Sardinia, hoping to find the Germans evacuating. The Germans intercepted them, shot down seven bombers and ordered fighter action against grounded Italian aircraft on Sardinian airfields. The Germans used Sardinian airfields for the last time on 15 September. They did what they could to spoil what they had to leave, ploughing up airfields and destroying all aircraft they could not fly out. On 17 September, evacuation was completed. Air photographs taken two days later of Olbio/Venefiorite field showed forty-seven newly-destroyed aircraft, including forty believed to be Italian fighters. It is not known whether these were shot up during the German operations mentioned above or destroyed by their Italian crews. That Corsica was the stepping-stone to a general retreat to Italy was also indicated by photographic cover of the ports of the two islands. Through August into September, shipping began to concentrate in La Maddalena.

P.R.W. Reports

Allied troops and officials landed on 17 September to find that two Italian divisions of the three garrisoning Sardinia had refused to join their compatriots of the third division, evacuated to Corsica with the Germans.

The Attack on the Germans in Corsica

O.R.B. Appendices
N.A.A.F.
A.H.B.IIM/A.36/
IF R.A.F.
Mediterranean
Review No.4.

It was reported from Corsica that, since 11 September, Italian troops, assisted by French patriot forces, had been fighting the Germans there and held control of Ajaccio and a large part of the interior. The Germans held Bastia, Bonifacio and the south-eastern areas. Men and materials moved from Sardinia into Corsica through La Maddalena; air photographs were taken of Bonifacio, showing considerable activity by 'F' boats and Siebel ferries. On the night

12/13

(1) 26 of II/Schlacht Geschwader 2, 6 of 4 (H) 12 (short range reconnaissance staffel, veterans of the Desert War), 12 of III/J.G.77 (fighters).

12/13 September a small force of French Commandos were put ashore near Ajaccio, went into action and took over the airfield. The joint forces (increased up to 26/27 September, to six thousand and four hundred troops) were increasingly successful and by 21 September held half the Island. On 26 September the French occupied Ghisonaccia airfield.

Luftwaffe Cover for the German Evacuation of Corsica.

Ibid

In the case of Corsica the Germans planned and carried out another tactical triumph, in spite of energetic Allied interference - the systematic evacuation by air and sea of twenty-five thousand personnel and over six hundred tons of material between 16 September and 3 October. To effect this, drastic movements of the Air Force were carried out. ~~To effect this, drastic movements of the Air Force were carried out.~~ All available fighters in Italy were transferred to the Pisa - Grosseto airfield area, thus almost totally denuding the Naples - Foggia air bases and leaving the troops in the battle area without support. These fighter forces, added to other small formations still left in Corsica, and all available forces of transport aircraft (mostly Ju.52s) - were concentrated under one command and operated exclusively on the evacuation. On 22 September the situation still allowed day air transport, which continued without pause. There were only ten fighters and four ground attack aircraft then based in Corsica for operations. On 24 September, Officer Commanding Air Escort was asked to speed up air transport by Luftflotte 2 (the German Air Command Italy). This was impossible, but some improvement was effected by reducing the distance of flights. Aircraft now flew from Corsica to Campiglia and, from 25 September, on to Cecina, transferring the main dispatch effort to Borgo.

The new tasks of Fliegerfuhrer Corsica were defined on 22 September. They were, to supervise air lifts and reception of transport; support the narrowing Corsican bridgehead; reconnoitre Corsica and control the island's flak operations. The move of German fighter and ground attack units proceeded daily. On 24 September, Fliegerfuhrer Corsica transferred his Battle H.Q. from Ghisonaccia to the Pisa area and was renamed Fliegerfuhrer Luftflotte 2. Officer Commanding Air Transport was subordinated to Luftflotte 2 the next day. Ghisonaccia airfield housed its last Ju.52 on 25 September. From then on till the end, they used Poretto and Borgo. From 29 September, a continuous German fighter patrol⁽¹⁾ was maintained over the sea area on both flanks of the main route from Corsica to Leghorn, in view of the danger from Allied war-ships and aircraft.

Allied Land and Air Operations in Corsica

Ibid

The Germans made thrusts into St. Florent, Levie, Piedicroce and Zona, but soon evacuated the two first-named. French and Italian forces, working in excellent accord, took

/Zona

(1) At 28 September 1943 units, under command of Luftflotte 2, covering the evacuation were:- at Grosseto - II/S.G.2 and

- I/J.G.53

at Cecina - I/J.G.77

in Lucca-Pisa area, II and
III/J.G.53

(awaiting aircraft)

at Metato - III/J.G.77 and
4(H)12

Another Fighter Geschwader - II/J.G.77 armed with Macchi 205 was moving into the Pisa area.

205 Gp. O.R.B.

Zona and Vezzani. On 21 September, twenty Liberators bombed Bastia harbour successfully: the same night seventy-five Wollingtons revisited it, starting fires visible from 70 miles on the return flight. Beaufighters were out intercepting air transport formations. On 23 September twenty-seven Beaufighters carried on the watch. One of their formations returned, claiming eight destroyed out of a formation of forty Ju.52s. Another patrol, running into seventeen Ju.52s, shot down twelve of them without loss. When the Luftwaffe switched to Borgo airfields, they were at once bombed by Mitchells. British L.S.T. landed tanks and a G.C.I. set at Ajaccio. French Spitfires, based at Ajaccio, patrolling over Bastia on 29 September, shot down four Ju.52s and two Arado 196s and the next day increased their score by one Me.323 six-engined transport, three Do.217s and one Ju.88 in the same area. These were their first combat operations under command of N.A.A.F.

Other Allied formations had been concentrating on the mainland terminal, Leghorn. On 21 September, newly-arrived U.S. Liberators made their first attack from North-west Africa. Thirty-two of them hit small craft and harbour installations at Leghorn. Later, on 22 September, as the evacuation process had not been stopped, Mitchells bombed and shot up shipping off Corsica. On 25 September they attacked Bastia/Borgo airfield, but failed to render it unserviceable. The last air attack on Bastia was made on 4 October. The active German surface craft were constant targets for U.S. cannon Mitchells, (1) attached to Coastal Air Force for anti-shipping strikes. During the week ending 24 September, a destroyer and many small craft were hit.

The land forces exerted increasing pressure on the dwindling German Zone. On 2 October, the G.O.C. German Armed Forces in Corsica ordered the final evacuation of the island and intensified day and night air transport. By 2100 hours on 3 October, the finale had been reached: the last forces took off from Marmi Di Luri, twelve miles north of Bastia. The next day French forces entered Bastia. By this time all the large Italian islands, including Pantelleria, Lampedusa, Sicily, Corsica, Capri, Ponza and Iroccida were free of the enemy. Elba, small, but of considerable tactical importance, remained in German hands until mid-June 1944.

Summary of Chapter 4

This chapter has covered the landings on the Italian mainland at three main points and shown how, without the principle of full tactical surprise, these were achieved, and how the main beachhead at Salerno was saved, by a narrow margin, from disaster. Sardinia and Corsica on the left flank fell, by contrast, easily into Allied hands. Various factors in this critical period, such as the Italian surrender, conspired to make the enterprise a searching ordeal, but the various difficulties were overcome, sometimes by sheer ingenuity, and it can be said at this point that the Allies were, for the time being, established ashore. The next problem was to collect these scattered elements and establish a coherent front.

/Commentary

(1) B-25. Gs. Their method of attack was for four aircraft to approach the selected vessel simultaneously. Cannon attacks were made at a height of 100 feet at about 5,000 yards range, aircraft then closing in to 1,500 or 1,000 yards before a swift break-away.

Commentary

Facts emerging from the general situation seem to be, firstly, that the Allies were not in sufficient concentration in the Salerno area to meet the determined and well-equipped German thrusts, although they had some foreknowledge through Intelligence channels of the shape of things to come. Secondly, it was not until late on 13 September that the facts of the crisis was signalled to General Montgomery, whose forces were temporarily halted round Catanzaro to enable them to regain wind and bring up supplies. Thirdly, too great reliance was placed on the capacity of the Air Forces to isolate the German armies (which they failed to do) and too little effort concentrated until it was almost too late, to destroy the enemy by joining more intimately in the land battle. Both Army and Air Force commanders were still doubtful, after the Strategic air support at Aderno in Sicily, (the results of which took days to clear up) as to the immediate tactical benefits of concentrated air support close ahead of one's own troops, although one and all were agreed on the tonic effects on the ground troops of the visible and audible presence of our own aircraft taking the offensive. Whatever the Air Forces achieved up to late on 13 September, they certainly did not prevent the Germans from both preparing and executing a highly dangerous, mathematically timed, elaborate and impressive attack, which shook the Allied system to its foundations.

/Chapter 5

S E C R E T

- 169 -

C H A P T E R 5

EXTENSION OF THE BRIDGEHEAD AND THE
CAPTURE OF NAPLES

ESTABLISHMENT OF A FRONT IN ITALY

Summary of Allied Progress 17 September to 1 October 1943

Ibid and History
of British and
Dominion Forces
Operations in
Italy. C.M.F.

The patrols of Fifth and Eighth Armies met on 16 September. Thereafter the Eighth Army moved rapidly up into position, in the centre and east of the country on Fifth Army's right flank. On 17 September, in the course of this movement, Fifth Army struck. The Germans were caught while preparing to withdraw to meet the Eighth Army threat. The enemy salient in the Sele-Calore corridor was erased: ruined Battipaglia and Eboli fell on 17 and 18 September respectively. Against very stern opposition, the Army pushed through the hills towards the Naples Plain, by way of the pass at Cava dei Terreni. On the Fifth Army's right flank, determined thrusts regained Altavilla, Albonella and Acerno, pushed up Highway 7 and on to Avellino (which fell to the Americans on the night 29/30 September), and towards Benevento. Once through the passes south of Nocera, the British X Corps swept down to Pompeii across the Vesuvius Plain, to enter Naples on 2 October and pass through to the next German defensive line, along the banks of the Volturno River. In the South, 1st Airborne patrols had entered Bari on 14 September: Potenza fell on the night 19/20, Barletta on 25 September, Foggia on 27 September, and its airfields, and Manfredonia (later to become the principal oil port for Strategic Air Force) on 28 September. The two Armies consolidated their combined front at this point.

Ibid and M.A.T.A.F.

Report on Salerno Close Support by Allied Air Forces 18 September to 2 October
21 April 1945

A.A.F. in
World War II.
Office of
A.F. History
U.S.A.F.

Of the two operations in aid of the ground forces by Tactical Air Force over this period, the attack on enemy fighter and bomber bases has been dealt with. The results were satisfying; two hundred and seventy enemy aircraft had been photographed as destroyed or disabled, and confusion sown in the already fluid state of the Luftwaffe's organisation. The second operation, co-ordinated with Tactical Bomber Force, aimed at setting a ring of road blocks round Naples and the German forces. Tactical Bomber Force continued to operate from Sicily, except for 47th Bombardment Group and No.232 Wing, who moved to Grottaglie and Brindisi respectively on 27 September to support Eighth Army. This force - (T.B.F.) - habitually carried out the bombing of enemy communications and supply, airfields, marshalling yards and troop concentrations.

The two main tasks of Twelfth Air Support Command were the provision of cover over shipping and direct army support. As more landing strips became available in Italy, it was progressively possible to take greater advantage of our air superiority; fighters and fighter-bombers joined more closely in the land advance, rendering it more easy of accomplishment

/by

by their constant attrition of the enemy's strength and dislocation of his system.⁽¹⁾ By 25 September the greater part of the U.S. and R.A.F. fighter units were operating from mainland airfields.

The Weather in September and October 1943

Ibid

Air operations in September 1943 were on an intenser scale than was possible for many months to follow. Already signs of worsening weather were clear to read. From 18 September, cloudy conditions, with thunderstorms over the sea, spread slowly southwards over the peninsula. At first, much of the cloud was above 8,000 feet. Then from 25 September, showers grew heavier and cloud base fell to 2,000 - 3,000 feet at times over many of the battle areas. From 26 September on through the end of October, it was usually cloudy, often showery with some thunderstorms. There was mostly low cloud at 3,000 feet and medium cloud at about 8,000 feet. Only six days in October were fair or fine. The limitations imposed by the weather affected air operations; but the bridgehead had been established and a general, if slow, advance launched while the weather was kind.

The Armies' Advance in Detail

Conquest of
Southern Italy.
Br. Hist. Sect.
Central Med.

In the Heel, Eighth Army Canadian forces linked up on 17 September with elements of 1st Airborne Division, entered Gioia and pushed on to Potenza and Molfetta. The Fifth Army's attack developed first in the U.S. sector. Here, after reducing the big salient between the Sele and Calore rivers, Persano, Albonella, Battipaglia, Eboli and Controne were taken. Forces had increased, thanks to feverish unloading activities and the relative immunity provided by fighter air cover over convoys and beaches. By 19 September, three U.S. infantry divisions, one airborne division, two British infantry divisions and one armoured division were ashore at Salerno.

X Corps (British) gathered strength while the Air Forces softened-up the roads to Naples. A slight advance north of Salerno was made; X Corps entered San Cipriano. Gradually the Germans lost all the commanding positions north and north-east of Salerno and withdrew to the outskirts of Avellino. A breakthrough was eventually achieved on 28 September, when armoured units pressed through the pass at Pagani and entered the Naples plain; they then occupied Castellamare, Pompeii and Angri; over on the right flank Avellino was reached and San Angelo captured. Further south the great prize of Foggia was captured by the Eighth Army on 27 September. Not only was it an important road and rail junction, but its airfields would be invaluable. In the east of Italy, the enemy was retiring behind demolitions; by 28 September his line ran Manfredonia - Foggia - Melfi.

/AIR

(1) Total sorties for the period were:-

- (a) Tactical Bomber Force. Day 541. Night 171.
- (b) Desert Air Force. Fighters 1,958. Fighter-Bombers 961. Tac/R 273.
- (c) XII Air Support Command. Fighters 1,864. Fighter-bombers 1,346. Tac/R. 180.
- N.A.T.A.F. Losses (operational) 22 destroyed
- " Claims " 6 destroyed

AIR OPERATIONS SUPPORTING BREAKTHROUGH TO NAPLES PLAINTactical Air Operations 18 - 28 September in Support of the Armies' Advance

No. 2/5 A.A.S.C.
War Diary.
No. 7 A.A.S.C.
War Diary.
A.A.F. in World
War II. Office of
A.F. History
U.S.A.F.

More support could be given to the armies as the situation grew more fluid and aircraft were able to operate at short range from mainland bases. When the crisis died down, the beach and bridgehead patrols were reduced in strength, although they were usually well over the two-hundred mark daily. On 18 September, the S.A.A.F. Lightnings ceased their attachment to T.A.F. and reverted to their normal roles, as escorts to bombers and on armed sweeps. The Warhawk contribution to the patrol increased. Most of the Spitfires continued on patrol. The speed of Eighth Army's advance was such that relatively little close air support was called for. The German retreat was swift, planned and needed no urging. On the left flank and in the central sector (gradually being filled in) the Air Forces were active day and night, unless weather prevented full-scale operations. Up to 21 September, targets for fighter-bombers were plentiful; thereafter day movement diminished, a sign of their efficacy.

The tide of fortune was definitely on the turn in the western battle area on 16 September. In support of VI Corps, on this and the following day, four hundred and forty-four U.S. Lightning, two hundred and fourteen U.S. Invader, and one hundred and fifty Kittyhawks (R.A.F.) sorties were flown. They ranged over the whole battle area, attacking gun positions, mobile and stationary M/T, tank dumps, bridges, rail stations and troops in concentration. The small towns where the Germans were precariously based, Eboli, Battipaglia, Contursi, Auletta, Campagna, Serre, Olevano, were given no rest. British X Corps was still standing up to savage German counter-attacks and their relief was great when Allied aircraft, over and ahead of them, swept over Nocera, Cava and Calabretto. Both crews and ground observers reported some excellent results. The Lightnings reported having sighted one hundred and fifteen enemy aircraft on 16 September - mostly Me. 109s and F.W. 109s. This was not possible in view of the limited German strength, but it is a fact that at this period fighters were for a short time directed into the land fighting.

No. 7 A.A.S.C.
War Diary.

No. 7 and No. 2/5
A.A.S.C.
War Diaries.

As the days followed, the catalogue of targets denoted the rally and advance. On 19 September, from morning to nightfall, Invaders, Warhawks and Kittyhawks were over Pescopagano, Andritto and Avellino; the next day over San Angelo, while Tactical bombers attacked Avellino, then through 21 on to 28 September, over Nocera, San Lucia, Mercatello, Montella, Pagani, Capua, the Avellino-Benevento road, Melfi, Sarno, Cambrelle. By 24 September D.A.F. Spitfires had switched from Fifth to Eighth Army support; they escorted fighter-bombers and patrolled Foggia landing grounds. D.A.F. fighter-bombers were over the Avellino-Foggia area the next day, with Spitfires and Kittyhawks, but saw little ground movement. South of Rome there was heavy traffic. In the Formia-Fondi and Volturno River areas some four-hundred M/T were reported, generally headed N. and W. Convoys were unloading at Formia, and there was boat activity at the Volturno rivermouth. The Germans were circumventing a road blockage by using coastal craft. There were fires in Naples, the harbour was crowded with sunken craft, and demolitions were evident.

/Weather

Weather was poor from 26 September and the tactical air effort suffered accordingly. The Germans took advantage of this situation to expedite both day and night road movement. On 27 and 28 September, weather allowed forty Invaders to range over San Severino and on 28 September seventy-four Invaders, Kittyhawks and Warhawks supported the ground forces between Benevento and Termoli (on the east coast): in Fifth army sector flying was virtually impossible.

Strategic Air Plans 18 - 28 September 1943

On completion of the counter-air force operation early on 19 September, new plans were developed for the employment of the Strategic bombers. There was one small ground support mission on 18 September when Fortresses bombed the road and rails between Salerno and Avellino. After a day's rest, the main force of bombers concentrated up to 24 September on bridges, road junctions and other bottlenecks north and east of Naples, with the first object of enabling a ground breakthrough by X Corps, by creating a net of road blocks round the main body of the German forces opposing them. The result was not to surround them: but it did, by hindering ingress to and exit from the blockaded area, whittle down their supplies and choke movement. The two main areas so restricted were, firstly, along the line of the Volturno River and secondly, along the Formia-Mignano road to the north.

Strategic Air Force creates a Ring of Traffic Blocks

The block in the Volturno area called for the greater effort. Road and rail bridges at Cancellor/Arnone near Capua, San Martino, Amorosi, Ponte and Grottaminarda were bombed with varying success by Marauders and Mitchells. Benevento and its bridges received most attention. In five attacks, nearly 250 tons were dropped by a total of eighty-nine Wellingtons, thirty-three Fortresses and thirty-four Mitchells. Up to 1 October there were ten attacks on Benevento. The second Formia area line was dealt with from 20 September onwards. The road was already blocked when the operation began here. On 20 September sixteen Marauders attacked it and on the night 22/23 forty-six Wellingtons went in; on 22 and 24 September the hook in the road at Mignano, on the main road leading south from Cassino, was choked by Marauders.

Photographic Intelligence was plentiful and re-assuring during the week ending 24 September. It revealed the confusion and subterfuge forced on the German traffic system by debris at Formia, Caserta, Benevento and Castelnuovo. At Lagonegro, Avellino, Capua and north of it, and at many other places, the approaches to the bridges were blocked by craters. Rail bridges at Formia, Pescara and elsewhere had cuts in their approaches and were useless until repaired. Cloud cover prevented any extensive air photography for the next week, but useful evidence of the effective nature of much of the Allied Air operation did show up. What bridges had not been affected by it were blown by the retreating Germans, who were photographed placing charges. The rail bridge from Benevento to Cancellor was shown as demolished and the lines cut lower down.

/Other

A.A.F. in World
War II/Vol. 2
Office of
A.F. History
U.S.A.F.

Ibid

No. 205 Sp.
O.R.B. and Appx.

Other Air Operations 18 - 28 September

On the night 18/19 September T.A.F. Bostons and Baltimores and U.S. Mitchells concentrated attacks on roads in the Salerno area. Small-scale, continuous attacks by day and night were made in sympathy with the fluctuating ground situation; by night, light bombers reconnoitred the roads leading to the front. Missions were flown over all the key points, now familiar to the reader. Warhawks and Mustang Invaders continued to give close support. The effort fluctuated with the gradually deteriorating weather.

Report on Air
Operations.
Operation
Avalanche
N.A.A.F. A.5

Air Liaison officers with the ground forces have recorded how the visible presence of our own fighters and bombers over the assault area raised morale to an extraordinary degree. The fact that Strategic Air Force was attacking communications in the back areas, that Coastal Air Force was somewhere at sea protecting shipping, that reconnaissance aircraft were bringing back information and photographs, meant little to the average soldier compared with the sight of our own aircraft manoeuvring above him. With the reduction of enemy air bases it was natural that more fighters and fighter-bombers could join the land battle.

A.A.F. in World
War II.
Office of
A.F. History
U.S.A.F.

During this period, Strategic bombers began to range further afield. On 17 September the Ninth U.S.A.A.F. sent forty Liberators to Pescara, an important port and rail centre high up on the east coast. They scored direct hits in daylight on the rail bridges, destroyed the rail junction and left big fires and explosions, without encountering enemy aircraft or flak. Thirty-five of them returned the following day to extend the damage. American day attacks were continued on 20 September with a flight of eighteen Liberators to Castelfranco Veneto at Venice. Ten Me.109s attacked them half-heartedly. Running into a solid front, the Liberators went back to Pescara area and bombed the marshalling yards and an adjacent airfield. The new N.A.A.F. Liberators turned, after their initiation over the Corsican evacuation lane, to long-range missions over Italy. On 24 September fifty-four of them attacked Pisa, crucial rail head on the west coast line. Aircraft of all the three new Groups (44th, 93rd and 389th), cut the main line to Florence and the coast and created havoc in the yards, on lines, roads and installations; they also hit the garrison at Pisa. The previous night two forces of Wellingtons were over Pisa area lighting great fires in the marshalling yards and covering the /entire

15 AG/C/175
21 Sept. 1943.

(1) The tactical situation on 21 September was as follows:- Fifth Army had just advanced VI Corps northwards, following up the German withdrawal, which pivoted like a wheel on the Salerno Peninsula; V Corps was re-grouping, in preparation for the approaching attack already recounted. Eighth Army was halted in the Potenza area, having made contact with Fifth Army on the left and V Corps on the right; it was essential for them - it was stated - to pause after the rapid advance, while the administrative "tail" of the fighting troops could be brought up and a new axis of supply established through the Heel ports. On 18 September V Corps H.Q. had landed at Taranto. On 19 September the 8th Indian Division landed there, too. On 22 September a special force under command of H.Q. 78th Division and including elements of that division and of the 4th Armoured Brigade, was due to land at Bari for operations against Foggia. On 21 September the 1st Airborne Division were on the line from forward of Bari to near Matera, in contact with the 1st Canadian Division.

entire dispersal area of Giusto airfield, leaving seven aircraft burning. The next day the airfield was practically empty of serviceable German aircraft.

For the next week heavy bombers were virtually at a standstill, weather hampering all operations except on two days: medium bombers concentrated on the Volturno River bridges. On 25 September ninety-two Fortresses bombed Bologna marshalling yards and a few others bombed the rail bridges at Bolzano. Several other Fortresses who failed to find Bolzano, bombed Verona marshalling yards. The only really expensive mission was the Fortress raid on Bologna, when bombing was carried out through a hole in the clouds and weather was bad everywhere. To add to their difficulties about a dozen Me. 109s interfered. Ten Fortresses were missing. Flak was heavy and accurate. The Germans were pulling back for a stand along the Volturno river and in the central massif. The fall rains were heavy and both bomber and fighter operations limited. There was, fortunately, not the immediate need for strong close support. While the attack on the Corsican evacuation proceeded, a minor effort, without much success was launched against bridges on the reinforcement routes in the Benevento, San Mauro, Piana, Vinchiatturo, Cancellio and Castelnuovo areas.

Allied Plan for Exploitation after Bridgehead secured

Allied Strategy
Br. Hist. Sect.
Central Med.

The Quadrant Conference at Quebec had communicated its main conclusions concerning the Mediterranean to General Alexander on 18 September. He now knew what forces were to be at his immediate disposal. Those already foreseen would remain unchanged. Seven divisions were to be withdrawn to U.K., to be progressively replaced by French divisions. Bomber strength was to be reduced by some one hundred and seventy aircraft by December 1943; there was to be a considerable withdrawal of troop-carrying aircraft, assault shipping and craft. These then were the considerations on which the plan of campaign of 21 September was drawn up.

General Alexander gave his next objects as:-

"the seizing of certain vital areas which contain groups of all-weather airfields, ports and centres of road communications. On these firm bases the armies can be regrouped, reorganized and balanced, and from them strong offensive operations can be developed, to destroy the German forces in the field."

The advance was divided into the following phases. Phase I (Salerno-Bari), to ensure build-up at Salerno, the concentration of Eighth Army in the Potenza area, and V Corps about Taranto-Brindisi; to ensure Taranto, Brindisi and Bari and build up air forces in the Heel. Phase II (Naples-Foggia), to secure Naples, Foggia airfields and road complex. Phase III (Rome-Terni) to secure Rome and the Tiber, its airfields and the road and rail centres here and at Terni. Eighth Army was to use east coast ports. Phase IV, to aim at securing Leghorn, perhaps Spezia, Pisa area airfields, Florence and Arezzo, entrances to the Po Valley, possibly the mountains north-east of Florence and at Rimini. This phase, until it was known where the Germans intended to stand and what the balance of the opposing forces would then be, was problematical. It was his intention, also, to stage small but hard-hitting amphibious operations and to employ a portion of the 1st and 82nd Airborne Divisions to secure key points in the enemy's rear. The possibility of a seaborne operation from Corsica against the

/Genoa

Genoa area was foreseen. Such was the Allied strategic concept in the field at 21 September. It was soon to change in detail in sympathy with German strategy, which, as will shortly be seen, altered radically before crystallising.

Phase Two of the Allied Plan of Campaign

Fall of Naples 1 October

'Salerno'
Mil. Div.
Washington.

Foggia fell to the Eighth Army on 27 September and soon the whole Gargano Peninsula had been overrun. On 28 September, armoured units entered the plain of Pompeii. After a German night counter-attack near Pompeii had failed, our armour crossed the river into Sarno and Pompeii; fighting continued all night. Progress from there to Naples was slow, hindered by resistance and demolitions, now grown in German hands to the dimensions of a major weapon. Avellino fell on 30 September to the Americans, the 26th Panzer Division and the Hermann Goering Division retiring. In the East, Melfi, Ascoli, Lucero, San Severo and Troia were occupied. In bad weather and across minefields and other traps, X Corps, led by 7th Armoured Division, advanced through the small coast towns of Torre Annunziata and Torre del Greco. At nightfall on 30 September units of X Corps were on either side of Mount Vesuvius; at 0930 hours on 1 October, the King's Dragoon Guards entered Naples, finding it clear of the enemy, but not of his handiwork. Previous Allied air raids had put most of the harbour installations out of action; the Germans had scuttled ships at the quaysides and sunk obstacles in the harbour. But their destruction of the harbour areas had not been thorough; by 3/4 October the first Allied shipping was being handled.

Total Allied Sorties for September 1943

Ibid

The narrative having reached the fall of Naples, the largest city yet captured by the Allies since the opening of hostilities, it will be timely to glance at the total Allied bomber, fighter-bomber and fighter sorties during the month of September, in relation to their objectives and the air forces co-operating. Not only will these figures, given at Appendices 11 and 12 serve to check changes since the preceding months, but they will serve as a marker, wherefrom to measure the growth and changes of the Air Forces' effort from that time onwards.

Appendix 11 gives an analysis, by country and objectives, of operations by bombers and fighter-bombers against Italy, Sardinia and Corsica. Practically the entire resources of N.A.A.F., Malta and Eastern Air Defence of Middle East Command were thrown into the preparation and execution of Operations Avalanche, Baytown, Slapstick and their corollaries. There were minor diversions towards the end of the month against the German capture of Cos and Symi Islands and softening-up of Leros, (all in the Aegean), but Italy was the major target, involving the majority of M.A.C.'s offensive and defensive forces. Looking into the details of these statistics, it will be noticed how prominent are the totals of effort on Army Support, communications and airfields. Useful comparisons between the relative weight of the R.A.F., U.S.A.A.F., and French A.F. may be made. Whilst the great weight of

/bombing

bombing kept all three elements of M.A.C. fully stretched, the fighter effort statistics at Appendix 12 will show up the needs of local area defence, escort, shipping attacks and searches, as well as direct support of the landings.

Decline in Luftwaffe Attacks on Assault Shipping

Ibid on
Admiralty Battle
Summary on
Salerno. A.H.B.
IIK/18/30

The last serious air effort to hold up unloading was on 17 September when H.M.S. Orion and U.S.S. Philadelphia were both missed by radio-controlled bombs. The general situation, as has been seen, enforced a policy of re-distribution and economy on the Luftwaffe. What few units remained in range of the front supplied indifferent close support to an army slowly growing accustomed to fighting without it. The main Allied naval units withdrew from the area on 20 September, on which date H.M. Admiralty treats Salerno operations as terminated.

There were small formations of Ju. 88s and Do. 217s active on the nights 16/17 and 17/18 September, although no attacks were reported. Beaufighters claimed two Ju. 88s and one Do. 217 the first night and two Ju. 88s the next. On the night 18/19 September a few Ju. 88s, acting as night fighters, attacked a Boston formation over Naples Bay and were thought to have destroyed one. The same night, fighter-bombers bombed one of the Monte Corvino fields on which we had, by then, a precarious hold. Again, the next day, Monte Corvino was attacked by small formations of German fighter-bombers; in the Bay, a few half-hearted efforts against shipping were made; but the initial enterprise was over; no damage was done. 20 September was quiet; at night a couple of Ju. 88s flew over, without attacking.

Decline in German Fighter Interception during September

Ibid

After the big raid on Foggia on 7 September German fighter interception of our bombing formations declined. From 14 to 25 September, none were encountered by Strategic aircraft and only a few by Tactical bombers and fighter-bombers. The moves responsible for this poor effort are now known to the student, who will have noted that towards the end of the month the re-action of some ten to fifteen fighters to the Bolzano raid, although slight, suggested that the Germans had no intention of neglecting the main routes from the rest of Europe into Italy. Later, as will be seen, large forces of protective fighters gradually assembled in southern Germany, Austria and Hungary and round north Italian targets. Drops in service-ability and strength owing to the erosion of combat played their part, but, notwithstanding, then, as later, the flow of aircraft and crew reinforcements from base and factory to the campaign area was fairly steadily maintained.

/Captured

Captured Aircraft

The advance of the army and the occupation of airfields had produced a sizeable booty in enemy aircraft. By the end of September, eight hundred and thirty-two enemy aircraft in various states of serviceability had been collected. Four hundred and ten of them were German types, ⁽¹⁾ the balance Italian. The largest prize was taken at Foggia, with Vibo Valentia, Taranto and Monte Corvino airfields figuring second, third and fourth respectively.

Summary of Chapter 5

Without the advantage of tactical surprise, the beachhead had been stormed, won, almost lost, established and extended. The landing in the Toe had been the means of opening up the South to the Eighth Army and to Airborne and Indian reinforcements. Italy had been eliminated from the war, three of its best ports (Naples, Bari and Taranto) and two first class airfield complexes (in the Naples and Foggia areas) were in Allied hands. Heavy casualties in men, aircraft and other equipment had been inflicted on the enemy. The whole face of the future of the war in Europe had been radically changed.

Towards the accomplishment of these things the Air Forces had made a vital contribution. By their progressive offensive against Italian targets they had brought home to the war-weary Italians in the way most calculated to impress, the determination of the Allies and rendered the capitulation realisable. They had nullified German air reconnaissance, protected the assembly and convoying of the invasion fleets, the assault troops landing and establishing a beachhead. Under their cover more than two hundred thousand troops, one hundred thousand tons of supplies and thirty thousand motor vehicles had been landed. They had, with the Navies, played a major part in stopping the counter-offensive of 12 - 15 September, had helped the Allied ground forces to regain the initiative and had begun to blaze the way for an advance northwards. They had interfered with enemy reinforcement and withdrawal, cut his communications, broken up his strong points, dumps and concentrations and crippled, although not eliminated, the small but formidable Luftwaffe.

The balance of air effort should be noted. Of the total sorties the U.S.A.A.F. contributed about two-thirds; of the total tonnage of bombs dropped it was credited with rather more than seventy per cent; of enemy aircraft destroyed in aerial combat U.S.A.A.F. crews claimed two-thirds. The Allies had lost around one hundred and fifty aircraft; another ninety-nine had been damaged. Old methods of direct ground support had been scrapped before the landings in Italy; new methods based on the independent employment of air units and the reference of all decisions involving joint operations to command level, were beginning to show good dividends, although the machinery was in time to undergo several changes for the better.

Among the many advantages arising out of the success of Avalanche, Baytown and Slapstick, the following are noteworthy. The elimination of Italy had struck a heavy blow at German prestige, ending the need for a large Allied fleet in the

/Mediterranean

(1) This total included 143 Ju.88s, 12 Do.217s, 122 Me.109s, 47 F.W.190s, 30 Me.110s and 30 Ju.52s. Most were damaged in some degree.

Mediterranean and thus releasing units for the Pacific, and forcing the Germans to replace the twenty-five Italian divisions in the Balkans. The acquisition of the Foggia air base extended the range of Allied bombers by some 400 miles. It was now possible to bomb targets in the Balkans, Germany, Austria, Hungary, including Ploesti oilfields, the Danube supply route and the Wiener Neustadt industrial complex, to co-operate with the Red Army advancing on Rumania and Bulgaria and to join the Combined Bomber Offensive.

The occupation of Sardinia and Corsica would give the Allies flank sea and air bases, opening up Northern Italy and Southern France to our fighter-escorted medium bombers. German forces on the Russian front would have to be drawn on. Now that the Mediterranean had become virtually an Allied sea, that the air threat to France and Germany had been doubled, the invasion of Southern France could be planned and a cross-Channel invasion became more feasible.

It had been made clear that such an assault as Avalanche could only be assured of success if the whole available weight of Army, Navy and Air be applied to the problem in the inevitable first phase of crisis. Air support from carriers had paid good dividends and remedied the handicaps imposed by long range considerations. The success of the radio-controlled bomb was similar to that achieved by all new weapons that enjoyed the factor of surprise; urgent research and counter-measures would have to be undertaken.

The Allies' main object at this time, apart from the elimination of Italy as an opponent was to contain the maximum number of German divisions in Italy, (1) so as to reduce German resistance on the Russian Front, and, when the time arrived, on the Western Front. They hoped, therefore, that the Germans would stand and fight, instead of withdrawing to the Po plain. They were for some time to come to dance to the tune the Germans played, since the rate of withdrawal still depended on the decisions of the German High Command. The crisis in the bridgehead had proved an almost exact balance of combined forces. Land forces on the defensive on favourable terrain, with a minimum air force and a small naval force could inflict heavy casualties on larger ground forces supported by overwhelming air and naval strength, and still dictate the tempo of the ground operations. In the event, the German High Command decided to contest every inch of Italian ground. It was to become a campaign of attrition for both sides.

The Allies had barely passed over from the defensive to the offensive, were adjusting themselves to a strange environment of imponderables, with forces whose full potentialities were still untried, against an enemy whose desperate will-to-war was not yet fully realised.

/CHAPTER 6

(1) Trident Conference. C.C.S. 242/6 Memo by C.C.S.
25 May 1943.

C H A P T E R 6

THE VOLTURNO AND SANGRO BATTLES FOR THE WINTER LINE

CHANGE IN GERMAN STRATEGY

Improvement in German Outlook

Report on a
Meeting of
German and
Italian political
and military
representatives,
Bologna
15 August 1943
Translation of
document found
among Mussolini's
private papers
AHB/IIJ.1/58/7

In mid-August, the German plan of campaign in case of an Allied landing, based on an over-estimate of Allied strength and a gloomy view of Italian collaboration, was on the following lines: Their plan for the disposition of their sixteen divisions, including the four they had evacuated from Sicily, put eight in Northern Italy under Rommel, two near Rome and six in Southern Italy; the two latter forces were to be under Kesselring. In principle, the Germans intended to defend the line of the Apennines from Massa Carrara to Pesaro, (the later Gothic Line) though if the Allies were able to attack this in great strength they would withdraw to the Po. If, however, the Allies showed little strength, the Germans were to attempt to hold a line Grosseto - Monte Amiata - Perugia - Ancona. Finally, if circumstances and relative strength were particularly favourable, an attempt was to be made to stand south of Rome on the line Gaeta - Isernia - Vasto.

German Strategy
Brit. Hist.
Section C.M.
AHB/II.J.11/58/7

After the Allies had established their bridgehead, and the tension had relaxed to some degree, the German outlook improved. They had done better than hoped. Morale, affected by a series of defeats and withdrawals, was adroitly improved by an inversion of terms. On 18 September, General Von Vietinghoff issued an order of the day to the Tenth Army, congratulating them on their victorious failure to reach the sea and destroy the bridgehead, and on their splendid evacuation of Corsica. Although the hard core of long-service German veterans saw through the verbal jugglery, their morale remained high and their discipline and traditions transcended personal grievances, lack of air support and distrust of the Nazis.

Decision to stand South of Rome

Ibid

The Germans decided to stand South of Rome, pooling the two armies - Group B, at present commanded by Rommel in the North - and the Tenth Army - Kesselring's Command - in the South. The general situation gave some cause for complacency. Outside Italy the British occupation of the Dodecanese Islands of Kos, Leros and others was in process of liquidation by air assault. Yugoslavia could be held by the available forces. Armour from Northern Italy was to be sent to Russia in exchange for mountain troops. Rommel held the North of Italy under control. German formations in the theatre considerably outnumbered the Allies and the terrain decisively favoured the defensive; the whole of the area between Rome and Naples, except the northern and southern ends of the Volturno Plain, was mountainous and offered on the east coast a continuous series of river lines. Winter weather would reduce the effect

/of air

Captured German
Documents
Report No. 18
Army H.Q. Ottawa.

of air superiority, hamper operations, and deter the allies from sea-borne landings. The Germans could and would stand south of Rome, thus maintaining the front, retaining Rome with its high prestige value, and reassuring the troops. A series of defence lines finishing at the so-called Gothic Line from Massa to Pescara was to be systematically prepared. The first of importance, to which No. 76 Corps was ordered to withdraw, was the Bernhard Line, still to be built up and developed. Hitler told Kesselring that it was to be decisively defended and that an attack was to be made on Foggia, to destroy the enemy there, then an advance as far as Brindisi. In general, as little ground as possible was to be conceded. He promised fresh troops and increased air support; but the attack on Foggia was never carried out.

Why the Germans abandoned Foggia

After the fall of Potenza on 22 September, Foggia had immediately fallen under the threat of attack. A breakthrough to this great air base was to be prevented at all costs. In the event, 1st Parachute Division was unable to cope with the situation and withdraw in the face of armoured pressure. They destroyed all important installations and left on 27 September. The reasons for their action were the vastness of the area, its unsuitability for the paratroop type of fighting, as well as the facts that the Division only numbered one thousand three hundred men at the time and that they were short of explosives. The plan for the Winter Line had by now become known to the Commanders and it may be safely assumed that the Divisional Commander wanted to save his troops for a stand on more favourable terrain. A month before, the Luftflotte Command had shrewdly realised that any Allied occupation of Apulia would soon render the Foggia air base untenable. Preparation already under way for the reception of heavy bombers on North Italian bases had been intensified accordingly and extensive defence and dispersal works in concrete would, it was hoped, convert these airfields into Festungen (fortresses).

The Volturno River Positions

The decision to stand south of Rome was characteristically made by Hitler; yet the stand on the Volturno River could not be indefinite without reinforcement. The Winter Line, stretching roughly from behind Vasto to Minturno, based on the east coast on the River Sangro, and on the west coast on the Garigliano River, was therefore decided on and prepared. The western sector was backed by the trackless Aurunci Mountains and the massif of Monte Cairo: in the central sector were the high Abruzzi peaks, with few and easily defensible roads. No danger was foreseen from operations by the Eighth Army in the eastern sector where the rivers would hamper them. That the first stand in the West was to be on the Volturno River positions was already evident to air reconnaissance. Meanwhile, the fears of the Germans regarding sea-borne hooks soon proved justified, for on the night 3/4 October, their left flank was turned by a seaborne attack on Termoli.

ALLIED LANDINGS AT TERMOLI

8th Army
Operations
Reggio to Ortona
Br. Hist. Sect.
Central Med.

Position of Eighth Army at 1 October 1943

The administrative crisis predicted to follow a too rapid advance from Calabria broke on the Eighth Army by mid-September. General Montgomery modified his intention of pushing rapidly forward, until his Army was thoroughly re-organised, limiting operations for a while to thrusts by light forces, to avoid a major engagement.

/Implications

Implications of the Transfer of Strategic Air Force to Foggia

Ibid

The original plan had been to take Rome early in the campaign of 1943 and establish Strategic Air Force on Rome airfields by the end of the year. This proving impossible, the occupation of Foggia airfield complex became inevitable. When eventually Strategic Air Force moved in, it would, it was considered, amount to a commitment of one division.⁽¹⁾ This would have to be faced, but would handicap Army strategy. Another heavy demand to be allowed for was shipping space, and labour for the transport and installation of Pressed Steel Plank and other material, essential to the conversion of the Foggia fields into all-weather bases.

Memo S.D. and T
15 Army Gp.
1910/40/G. (SD)
25 Sept. 1943.

Adriatic Objectives

Ibid
(8th Army
Operations)

The Germans were beginning to reinforce their Adriatic flank: their next stand should be on the River Sangro, where they were already seen by air reconnaissance extending defence works. Eighth Army was to attack, take Pescara - Avezzano lateral road and reach Rome in about ten days. In the event Rome was not reached until June 1944. LXXVI Panzer Corps withdrew intact to the low mountain region 30 miles north and west of Foggia. Fifteen miles further lay the next objective - the Termoli - Campobasso road. Demolitions made the going heavy, but rain was the worst enemy, for it bogged the ground and turned streams into torrents.⁽²⁾ The River Bifurno had next to be crossed: 3 miles away, stood the small town of Termoli, important tactically and for its harbour, defended by a small battle group from the 1st Parachute Division. It will now be seen how, by combined land/air/sea operations, Termoli was taken and a bridgehead established, in spite of bitter opposition.

Air Operations leading up to the Termoli Landings

Ibid
No. 2/5A.A.S.O.
War Diary
Oct. 1943.

There was now a Rover tentacle on each of the two divisional fronts and these operated to some degree, although not fully so, until the later Sangro battles. On 1 October, in foul weather, U.S. Warhawks bombed and strafed German reinforcements moving down the Campobasso - Isernia road and destroyed forty vehicles. On 2 October, U.S. Warhawks and Kittyhawks with escorting Spitfires, flew armed reconnaissance missions over the main roads in front of the Canadian division advancing towards Termoli, claiming forty-five vehicles destroyed or damaged.

The Initial Landings at Termoli

Conquest of
Southern Italy
Brit. Hist. Sect.
Central Med.

The Divisional Commander of 78th Division decided that it was now opportune to use the Special Service Brigade, held for the conduct of short term outflanking movements from the sea. A surprise landing in Termoli itself was to precipitate the German withdrawal. Ample close support was planned for

/3 October

(1) In practice, owing to the increase in the size of S.A.F. and additional equipment, it amounted to a lift of two divisions.

(2) For the effect of weather on the Italian terrain the admirable paintings of Mr. Edward Seago should be studied.

3 October, when the division was to press forward across the Biferno River and reinforce the landing party.

The Special Service Brigade sailed from Manfredonia and landed a mile west of Termoli, at 0215 hours on 3 October, captured Termoli at 0800 hours and met Allied patrols from the south. During the day they extended the bridgehead, wiping out Battle Group Rau, the parachutists. Soon after midnight 3/4 October, the 36th Brigade from Barletta landed. The Germans quickly reinforced the area during 3 October with a battalion of the 26th Panzer Division and before long the odds against the bridgehead included a ratio of fifty tanks against two, with rain and river preventing reinforcement. Allied Naval units bombarded the area, creating a temporary diversion.

Captured German Documents. Report No. 18 Army H.Q. Ottawa.

Termoli of Major Tactical Importance to the Germans

The Germans felt it of the utmost importance to destroy the British at Termoli. The 16th Panzer Division would have reinforced the local forces earlier, but for an unfortunate piece of petrol hoarding on the part of the Quartermaster. The inquest held after the German defeat revealed both this fact and proof of the poor employment of artillery by Major General Sickenius, who was relieved of his post. The obstinacy of the British troops caused the utmost anxiety as far up the scale as to Hitler. To him and the High Command, this was no mere delaying action.

Air Support of Termoli Bridgehead Operations 3 - 6 October

No. 2/5 A.A.S.O.
War Diary.
No. 1 M.O.R.U.
Eighth Army
Operations
Br. Hist. Sect./
C.M. AHB/II.J11/
58/3(a).

From 3 - 5 October air support of the bridgehead operations was patchy. Although much was planned, intermittent violent rainstorms and cloud broke up its continuity. The Isernia area was recognised as the danger spot and on each day, while the ground grew more like a quagmire, M/T - mostly on the move - was attacked with considerable success by Warhawks, Mitchells, Kittyhawks and Spitfires. Ground observers confirmed much destruction of enemy transport, but the work was not continuous by day and impossible at night; reinforcements poured across Italy; by 5 October the situation was so bad and confused that our bomblines were brought back a few miles. On 6 October the storm broke and the bridgehead forces were faced with the prospect of liquidation. The bulk of 16th Panzer Division switched from the West, aided the counter-attack designed to destroy the landing forces. The pressure of the enemy troops, aided by small formations of fighter-bombers who bombed the harbour and troops for two days on and off, gradually reduced our perimeter, within which tired troops were fighting without their armour. Bridging was in short supply, and the river swollen.

At 0635 hours on 6 October, the Luftwaffe opened the day's proceedings with a low-level attack on Termoli. By soon after dawn, enemy tanks and infantry, using San Giacomo as a pivot, were within half a mile of Termoli and the sea. At this point the Air Forces came to the rescue and lent such aid to the ground forces that an Allied plan to capture San Giacomo, the hub of the enemy attack, succeeded and the main threat was neutralised. It was the opinion of the Army that the Air Forces had, by the end of the day, so seriously interfered with the heavy enemy movement from the Southwest that what was meant to be a decisive blow never materialised.

Altogether thirty-four missions were flown by the Air Forces, mostly against troop movement and tanks. Tactical Air Force claimed eighty-four enemy vehicles destroyed and one hundred and thirteen damaged. Whatever the actual score was,

/it called

it called forth an enthusiastic message from 78th Division to D.A.F:-

"Many thanks for the terrific effort you have put up today; jolly good show!".

D.A.F's contribution included twenty-two armed reconnaissance missions. The enemy put up five small fighter-bomber missions during the day, but owing to the presence of our Spitfires achieved little.

Opposition round the perimeter weakened suddenly; the enemy pulled back towards Campobasso. Even though the heavy rain the next day held down our aircraft, the point was gained and the enemy forced slowly back on to the defensive. Two things were now clear; the Germans' determination not to be hustled back and their readiness to accept serious losses in adherence to plan, and the demonstration of another successful Allied amphibious operation, won - like Salerno - by a very narrow margin and by an integrated effort in sufficient weight by all three services.

Ibid

Air Operations in Support of Eighth Army's left Flank

The Canadians moved westwards across the Foggia plains, from the vicinity of the historic battlefield of Cannae, towards Baselica and across the Fortore River, supported by Tactical bombers and D.A.F. fighters and hampered by demolitions, mines, blown bridges and bitter opposition from rearguard artillery. The enemy, by 8 October, was pulling back in this mountain sector, but it was not until 12 October that Campobasso was captured: a halt was called. Indirectly this front had been assisted by the bomber attacks on Isernia and Campobasso areas already described.

Resumed Air Attacks on Convoys by the Luftwaffe

Ibid

Before entering the period of the attack on the Volturmo positions by the Fifth Army, reference must be made to the revival of an old method in German air strategy, and the opening of a new threat against Allied convoys. Reconnaissance and other intelligence sources told the Germans that continuous and increasing traffic was bound to pass along the North African coast.

Ibid

The evacuation in September of Sardinia by the enemy made it no longer practicable for reconnaissance Ju.88 aircraft based in Italy to cover the Algerian coast and the sea area between Sardinia and the Balearics and had the effect of increasing the importance of South of France bases, from both the long range bomber and reconnaissance viewpoint. The transfer of I/F.122(1) to the Eastern Mediterranean at the end of September left I/F.33 the only long range unit in the South of France responsible for reconnaissance of the Western Mediterranean between Gibraltar and 8 degrees East. A considerable proportion of the sorties in October were short-range security patrols in the N.W. Mediterranean and in Sardinian and Corsican coastal waters. It had been observed

/by Allied

(1) Gruppe I of Fern-Aufklärungs Geschwader No.122.

by Allied Intelligence that the number of shipping reconnaissance flights along the convoy routes West of Cape Bougaron was increasing. An average of three to four Ju.88s of I/F.33, based at Montpellier, were out daily, mainly on dawn to dusk patrols over the general area of the N.W. Mediterranean and occasionally on night reconnaissance.

From data supplied by this unit, a more offensive strategy than had held for some time was planned and put into operation, based on the desire of the Luftwaffe to find useful employment for the torpedo bombers of K.G.26 (whose He.111s and Ju.88s had made little contribution to operations off the Italian coast during September), and for the Dornier 217s of K.G.100, whose crews were to be given opportunities of testing their new radio-controlled bombs in attacks on convoys at sea. Dusk was considered the most advantageous time for attack, as although light enough for bomb and torpedo aiming, it was unfavourable to fighter tactics.

Convoy Attack at Dusk on 4 October

Ibid

Although no 'Y'(1) information was available during the whole day, a German aircraft was picked up by Airocobras, at 0840 hours, flying at 16,000 feet, making use of cloud cover. Fighters were vectored on to it, but because of poor Radar height reading (of which more later) 10,000 feet too low, it escaped with slight damage. At 1744 hours, about one hour before the attack, the convoy was reconnoitred by a Pathfinder, which passed information to the incoming main force of twenty Do.217s (with Hs.293 glider bombs) and twenty-five torpedo bombers - He.111s - and a few Ju.88s. A section was scrambled over Oran and an unsuccessful attempt made to alert the section over the convoy. A blue warning was passed to the convoy. The convoy was covered by four P-39 (Airocobra) aircraft of No. 3/6 French Squadron. At 1850 hours, two of them were to the north, heading west, when they were called by Sector Control. Reception was poor and the message not understood; but they sighted two waves of Do.217s coming in at about 15,000 feet, and attacked, destroying two of them and probably a third. Two more Airocobras were airborne at 1840 hours for routine relief and made sightings on enemy aircraft, but had no success.

The Dorniers always flew high, the torpedo bombers low. Allied ground Radar detected the attack by the first Do.217s at roughly 60 miles from the coast. Although well tracked both in plan position and height, the estimation of numbers was poor, only three aircraft being reported for an actual formation of fourteen. Radar did not detect the low-flying torpedo bombers. R/T was weak and fighter interception uncontrolled. The weather was fine. The main attack came at 1855 hours, at dusk, in two waves - (one of fourteen Do.217s, out of twenty airborne) which came in from the northwest at 15,000 feet in formation and lost height in the approach, and one of twenty-five mixed He.111s and Ju.88s carrying torpedoes, which came in at sea level in four V formations. The convoy was now off Cape Tenez. The Airocobra attack upset the Do.217s, who had some success with their Hs.293s, and ship's A.A. accounted for an He.111. The torpedo bombers hit nothing, but glider bombs(2) hit four

/merchant

(1) Signals Intelligence.

(2) Equipment for launching the Henschel 293 glider bomb was being built in to the Dornier 217 aircraft. There were at the time fifty to sixty of these aircraft at Mediterranean bases and Bordeaux using this weapon.

merchant vessels. One had to be sunk by Allied gunfire, two were damaged but brought into Algiers and one, although damaged, proceeded with convoy. On 9 October, another force, this time of fourteen Do.217s and twenty-nine He.111s, were airborne against a convoy, but were forced by bad weather to return to base before reaching it.

OPERATIONS ON THE VOLTURNO

Allied Strategy after the Fall of Naples

A.F.H.Q. Directive The next object of the Allied Forces was to secure air
to 15th Army Gp. bases in the Rome area, and to establish the Strategic Air Force
26 Sept. 1943 on those bases; thereafter to maintain pressure on the German
forces remaining in Northern Italy. The relative priorities
to be accorded to the movement of the Strategic Air Force and
ground forces on to the mainland were to be decided by the
Commander-in-Chief, who pointed out that planning should allow
for the essential operational requirements of Strategic Air
Force. Foggia had supplanted Rome as the strategic base.

Fifth Army Plan of Operations, Naples to Volturno

Fifth Army
Operation
Instruction
No.5(2)
2 Oct. 1943

Locally, it was essential to build up as soon as possible a defence line round Naples, its air bases and dock installations. This meant driving the enemy from his positions along the north bank of the western reaches of the Volturno River, and securing the Allied right flank by occupying Benevento. General Clark's instructions directed Fifth Army to continue its advance to the Isernia-Venafro-Sessa line, with VI Corps on the right and X Corps on the left along the sea, the coastal plain and the ridge between the lower valleys of the Volturno and Garigliano Rivers.

Tactical Air Support of Fifth Army Advance to Volturno River

A.A.F. History
Vol.2/Sect.3
Office of Air
Force History
U.S.A.F.

Conquest of
Southern Italy.
Brit.Hist.Sect.
Central Med.
No.7 A.A.S.C.
War Diary.

The next phase in air support was dual: firstly, the fighters and fighter-bombers were to pave the way for the Army's advance: secondly, the heavy and medium bombers were to attack the three main roads on the German reinforcement routes leading to the front; these were the roads through Terracina and Formia, (Route 7), the road through Arce and Mignano (Route 6) and the road through Isernia. This programme was broken in continuity owing to frequent bad weather. On 4 October, increased German road movement, mainly in a north-easterly direction, from Fifth to Eighth Army front, in the Isernia area and along the road south of Avezzano was reported. Between 2 and 12 October, on which latter date the first Allied troops crossed the Volturno River, the pattern of the Tactical air effort followed, when weather allowed, the lines laid down. It is clear, however, that bad weather, which accounted for a reduction of effort to negligible proportions over one half of that period, took the weight and sting out of the air plan, as well as compelling postponement of the Volturno crossings.

Patrols went on as normal whenever possible. Tactical Reconnaissance was only possible on four days, denying us knowledge of enemy dispositions. Invaders were out strafing M/T near Cancelli, Terracina, Frosinone and Venafro up to 7 October, when these activities were halted. The most consistent of the bombing activities was the role of Mitchells who, on six days and one night, bombed road and rail systems,

/beginning

beginning with Benevento and working in turn over Capua, S.E. of Ceprano, N. of Teano, Alfadena, Cascano, Vairano, Vairasco, Alife and S.E. of Minturno: some missions were abortive. As units reached the river positions and prepared to cross, gun positions and troop concentrations became the targets, for what few Mediums could operate. Communications on the nets connecting VI Corps and the Support Control were still very poor. Gradually the name of Cassino was creeping into Allied calculations; we note, therefore, an attack by three Bostons on the night 10/11 October on troops there, and abortive sorties on 11 October by twenty-four Baltimores, who were compelled by bad weather to return. These Baltimore squadrons began on 6 October with the bombing of Guglionesi and on 9 October bombed a Headquarters and M/T at Palati. Again on 10 October two squadrons went back to Guglionesi. On 12 October, the night on which the first troops crossed the river, Warhawks and Kittyhawks renewed attacks on gun positions, which had been impossible for two days past. Airfields in Fifth Army area were now in such poor condition that Desert Air Force placed a Kittyhawk Wing at their disposal.

Strategic Air Effort up to the Crossing of the Volturno

Ibid
and 205 Gp.
O.R.B.

The second part of the air programme was largely carried out by Strategic mediums, which operated on six days only. From 3 to 12 October inclusive, (1) Mitchells, Marauders, Lightnings and Bostons bombed communications on points other than Isernia. As the days passed the following targets, some on several occasions, were all attacked; the bridges at Castel Volturno, Piana, Arce, Mignano; roads and defiles at Mignano, Terracina, N. of Capua, Vairano, Formia, Cascano, Teano, Ciamproso, Casiano, Piedimonte, Rome and Terracina. The spells of bad weather affected the effort; night bombing by Wellingtons was only possible against targets closely affecting the battle on four nights. The Army was particularly pleased with the attacks on gun areas N.E. of Capua on 9 and 10 October. The concerted action, broken up by weather, was valuable, but indecisive.

Heavy Bomber Effort during Advance to Volturno

Ibid

Fortresses went in turn to Pisa marshalling yards, and Bolzano bridge and marshalling yards twice, then switched to Greek targets. Wellingtons sent a force of forty-six aircraft to bomb Civitavecchia and eighty-seven to Formia roads and railway. A successful raid on Grosseto airfield (2) on the night of 5/6 October by fifty-one Wellingtons destroyed and damaged fighter aircraft who had put up stronger than usual opposition: on the night 10/11 fifty-two Wellingtons bombed the Terracina roads. Mestre marshalling yards, just north of Venice, like those at Bologna and Pisa, were put out of action for a considerable period. The through line down the west coast to Rome was blocked at Civitavecchia. Wellingtons helped to soften up enemy positions early in the period with a thirty bomber raid on Grazzanise bridges, (on the Volturno line) on the night 1/2 October, and the next night on Formia. There were no heavy bomber daylight raids from 9 October to 12 October, owing to bad weather. Wellingtons had two crews for each aircraft and all losses were promptly replaced.

/German

(1) 169 Mitchells, 190 Marauders, 33 Lightnings, 19 Bostons.

(2) Also being prepared as A.L.G. for long range bombers.

German Fighter Opposition, 2 - 12 October

Ibid

Up to 8 October, most of the Allied heavy and medium bomber missions met no fighter opposition, but in the North formations of twenty-five proved fairly aggressive, mostly in the Verona area. On 4 October, Fortresses were engaged by some twenty fighters before attacking Bolzano. On 5 October a group of Fortresses met twenty-five/thirty fighters just after the bomb run over Bologna. The next day, Fortresses, approaching Mestre, were attacked by some twenty-five fighters. Elsewhere, air opposition was negligible or nil. The Germans were evidently selecting specific formations as targets, lacking sufficient air defences to meet all the extensive Allied air offensive operations; but they were reorganising. During the latter half of this period, about one in six of our medium and heavy bomber formations met fighter opposition. Over the battle area, German fighter operations fell off until 13 October. By 14 October photo coverage showed about one hundred enemy fighters clustered within a radius of 55 miles from Terni. The next day transfer of all flying units of Luftflotte II had been taken over by Fliegerkorps II (at Viterbo).

Volturno River a Major Obstacle

X Corps Operations
Br.Hist.Sect/CM.
A.H.B./ILJ.11/58/
4(A)

The Volturno River^{was} from one hundred and fifty to three hundred feet in width in the Fifth Army sector: it was anything up to six feet deep in mid-stream. The current at this time, after daily rains, was swift and the stream swollen. All bridges had been demolished; Bailey equipment had to be used as there were no fords. The high flood bank on the northern side, twenty feet high as against twelve on the southern, gave the enemy a considerable advantage, making it difficult to give supporting fire to the assault. The enemy covered the plain from Massico ridge eight miles north of the river. Facing X Corps were two divisions, 15th Panzer Grenadiers and Hermann Goering; facing VI Corps were 3rd Panzer Grenadiers and elements of 26th Panzer Division. Local numerical odds were slightly in favour of the Allies.

The principal points of crossing were chosen as Castel Volturno near the mouth, Grazzanise, Capua and Triflisco: Capua would be the most difficult crossing. An amphibious tank landing at the river mouth was planned. There was to be naval gunfire support. Fifth Army was to obtain an intensive air bombardment on both Corps fronts, selected by the Corps themselves. Two diversionary operations in the enemy rear were planned, then cancelled on the strength of reports that the Germans were in too great strength. The first was the drop of a parachute battalion of 82nd U.S. Airborne Division in the Sessa area: the second a small amphibious landing on the beaches north of Mondragone. It was rightly anticipated that the actual banks would be held and covered by light forces and that the main German strength would wait, in reserve, and make a powerful counter-attack. It took up to 22 October - ten days fighting of 'unparalleled ferocity' - before the line of the Volturno was held.

The Crossings of the Volturno

Ibid

Since 6 October, Allied troops had been on the south bank. It was planned to cross at Triflisco on the night 9/10 October and at a point in X Corps sector on the following night.

/Owing

Owing to foul weather the attack was switched to the night 12/13 October. 56th Division tried to cross at Capua and was driven back. 7th Armoured Division staged a diversion at Grazzanise, but failed initially to cross. 46th Division crossed and was established by dawn, without having yet taken Cancellor, their objective. Tanks, landed at the river mouth, reached them by noon 14 October. After fierce German counter-attacks during 13 October they reached their first objectives.

Air Support for Volturno Operations 12/13 to 16 October 1943

Ibid

No.7 A.A.S.C.

War Diary.

A.A.F. in World

War II. Office

of Air Force

History U.S.A.F.

On the night 12/13 October, forty-six Wellingtons attacked Civitavecchia rail bridges to hinder reinforcements and supplies from reaching the battle area. The weather improved on 13 October and a useful day's support was achieved and heavy damage done to roads, two squadrons of D.A.F. Kittyhawks assisting. Marauders bombed Alife on the U.S. front, to disrupt communications and Mitchells bombed road junctions and the railway at Sessa Aurunca to hinder reinforcement of the threatened Capua area. Forty-eight Baltimores bombed road junctions and buildings behind the German lines and the coastal route.

Direct support to the Armies was given by Kittyhawks and by light and medium bombers. Mustang A-36s attacked tanks, troop and M/T concentrations menacing our crossings. Warhawks and Kittyhawks, turning from a target under 10/10ths cloud, picked up a camp and tanks south of Sansalvo and attacked trains north of Pescara with success. Accumulating cloud over the western battle area made all air observation, photography, Tac/R and Arty/R difficult. At night a few Bostons straffed the Formia - Venafro and Vasto - Agnone areas. The Luftwaffe threw a handful of fighter-bombers into the Volturno battle, losing two to the Spitfires.

Communications were favoured as targets on 14 October, while Fifth Army dug in on the north bank and prepared to cross higher up. On this and the previous night, 13/14, Wellingtons bombed the Orbetello railway and the bridge and rails south of Talemone. Weather was worse on 14 October and several missions returned with their bombs. Ahead lay one of the worst winters in living memory. Terni marshalling yards and Giulianova South bridge and tracks, and rolling stock at San Fiano Romano were bombed by Fortresses. An increase in enemy fighter-bomber attacks was noticeable. Thirty-six Liberators went to bomb bridges near Porto San Giorgio, but finding the targets closed in by cloud, went to Pescara to increase the chaos. That the Germans were sensitive in this area was clear by the opposition put up by forty/fifty enemy fighters based in the area, including captured Italian RE.2001s and ME.202s. Only two ME.109s were claimed as destroyed. Mitchells (escorted by Lightnings), and Marauders, were all unable to complete their missions owing to very bad weather. Very little direct support could be given, for the same reason, difficult as was the plight of some of our ground formations. A few Spitfires and Mosquitoes managed to carry out tactical reconnaissance of the front-line areas, giving the Army a great advantage over the enemy, whose reconnaissance was weak.

Gradual Establishment of the Bridgeheads

Ibid

On 15 and 16 October, weather and the general position began to improve and the Army changed its plans. The Americans across the river had pressed on into the mountains, but the British were held up at Capua. The corps boundary was changed; during the night 14/15 October Guards crossed the American bridge at

/Triflisco.

Triflisco. In the afternoon of 15 October, more troops moved west along the north bank towards Capua. During the day 15 October it became clear from reconnaissance that a considerable enemy withdrawal was in progress. Despite heavy fire and rearguard actions, Monte Grande was seized by 17 October. The British succeeded on 16 October in, at last, crossing west of Capua; they had built a bridge by 19 October, on which date it could be claimed that vital stretches of the river were clear and more or less firm, deep bridgeheads established.

Air Support of the Volturno Bridgehead 15 - 17 October 1943

Ibid

On both 15 and 16 October, Invaders made seventy-two sorties on bombing and strafing missions, attacking rail yards, buildings, roads and vehicles in the rear areas. Airfields were not overlooked: thirty-nine Wellingtons bombed Marcigliana and Casale fighter-bomber airfields and Invaders strafed Cisterna airfield on 16 October, destroyed a He.111 bomber and damaged two others on the ground. The last remaining Mortar Staffel remaining in Italy was wiped out.

Main reference
as above.

Medium bomber missions proved abortive on 15 October owing to cloud, but were more fortunate on 16 October, when a total of one hundred and thirty-two U.S. Mitchells, Baltimores and U.S. Bostons attacked the same critical areas leading to the bridgehead; at night Bostons were out on armed reconnaissance of roads running from south-east of Rome to the bomb-line. By 17 October supplies, men and armour were pouring over eight bridges. The final objectives had not by any means been reached and it was unfortunate that air was unable to accentuate the speed of Allied movement. Flying was almost reduced to a standstill on 17 October, except for a few sorties by U.S. Invaders and U.S. Bostons. This was one of those periods when air superiority was largely fictional.

No.7 A.A.S.C.
War Diary
No.1 M.O.R.U.
O.R.B.

Bad weather had prevented the air factor from being decisive in this first crossing of a major river obstacle. It had however, been partially successful. Enemy air attacks on the crossings, stepped up to six on 15 October, had been successfully countered and standing patrols over the river provided at the request of the Army. The interference with enemy concentrations in the rear areas undoubtedly played a valuable part, although the only evidence in black and white available here are general admissions by captured staff officers.

By no means all of our missions were successful; not only was the visibility poor, but the internal structure of support was still in a formative stage, the later high degree of precision unattained, and exact knowledge of the relation of bomb-load to target still unevaluated. Air Liaison Officers had not yet been appointed to all fighter-bomber groups. Misunderstanding of function, delays on poor and overcrowded telephone lines resulted sometimes in delays of several hours between the Estimated Time of Arrival given to formations and the actual time of attack. Tac/R broadcasts to Corps were not always getting through on time. Another factor sometimes of importance was the density in spots of German flak. On 16 October, for example, XII A.S.C. refused to accept a fighter-bomber mission called for on Dragone on account of the volume of flak in that area.

/Direct

M.A.A.F. O.R.B.'s Direct Ground Support 18 - 31 October

M.A.A.F./W.1.S.

No.7 A.A.S.C.
War Diary.

On 17 October large forces had crossed the river and were approaching high ground. The Germans still held long stretches of the river bank, especially round Capua; and higher up, in the American sector, contested the river bitterly. The main Allied forces moved on systematically towards the Barbara Line and the Garigliano River, while in Eighth Army area, once the Termoli - Vinchiatura road was cleared, the troops, aided by Desert Air Force, were to tackle in succession the Trigno and Sangro River positions. Maps 4 and 5 should be used as guides from this point. The slow advance of the Fifth Army during the latter half of October was supported, in spite of unfavourable weather, by all the resources of Twelfth Air Support Command. But for this aid, progress might well have been negligible.

LUFTWAFFE ACTIVITIES IN OCTOBER 1943

Increase of German Air Effort in the Battle Area

A.M.W.I.S.
M.A.A.F./W.15

No.1 M.O.R.U.
O.R.B.

No.7 A.A.S.C.
War Diary

In spite of setbacks, the flow of German fighters to the Italian bases went on. On 15 October, the fighter and fighter-bomber effort suddenly rose, concentrating on the Allied crossings. In some days in mid-October, from one hundred to one hundred and twenty fighters and up to thirty fighter-bombers were out on offensive missions in support of the Army. On the morning of 15 October between 0800 and 1000 hours, sixty-four plus fighter bombers were reported as operating against bridges and communications near Capua and over the upper Volturno valley. Spitfires met forty Me.109s near Capua, at the same time sighting twelve others in the area. At 1500 hours another formation of eight Me.109s was engaged near Capua. Again the next day, three formations, consisting of twenty F.W.190s, twelve Me.109s and thirty Me.109s respectively were intercepted in the Volturno area and others sighted. Few of these formations seemed anxious for combat. In the two days 15 and 16 October, the Allied fighters claimed to have destroyed nine Me.109s and two F.W.190s, as well as damaging others; not a surprising result in view of the wide numerical margin of the Allied air strength. Bad weather, lack of experienced crews, the bombing of their airfields, low serviceability and the need for strict economy of aircraft conspired to reduce the German battlefield effort to negligible proportions, after the busy week ending 18 October.

Long-range German Bomber Raids - 12 and 21 October

Ibid and Rise
and Fall of the
German Air Force
(Air Ministry)

CAF/S.15/Air
17 Dec. 1943
Appendix B to
Air Staff
M.A.Q.A.F. O.R.B.
December 1943
A.H.B.IIM/A45/
1(a)

It is futile to look for any rhythm in the operations of the long range bomber force based in Northern Italy and the South of France; the general situation had no form for the Germans to work upon, except for the constant factor of Allied convoys; their own recent change of strategy brought with it a feeling of uncertainty in air affairs. Many tempting targets were available, but it was seldom that the opportunity was taken. There were, however, three occasions during this period worth recording. The first was on the night 12/13 October, when a force of twenty Ju.88s and a few Do.217s made a low-level attack in twos and threes on Ajaccio harbour, without damaging anything. Flares, ten high explosive bombs and two incendiaries were all they were able to drop. Allied anti-aircraft fire, not yet in full strength, scored no hits and no night fighters were in the area: the time was well chosen. Long range bombers began to move in small groups from S. France to N. Italy.

/Bomber

Bomber Raids on Naples and the Volturno Bridges

Ibid

The day and night of 21 October were notable for three long range bomber strikes. The first, on an Allied convoy at dusk off Algiers is recorded in the next sub-section. At 1900 hours the same day, a force of twelve/fifteen bombers, approaching Naples from the N.E. and S.E., dropped about ten bombs on the harbour. Most of their bombs fell in the water and along Bagnoli water-front; the only hit was on a gun emplacement, the crew of which suffered casualties. The same night, twenty-five/thirty bombers attacked the Allied bridges across the Volturno, across which the main forces were still pouring, with negligible results.

Another fruitless attack was made on Naples on the night 23/24 October by some twenty Ju.88s, the only success being the setting on fire of a vessel. Tactical and Coastal Beaufighters shot down three of the raiders and anti-aircraft fire accounted for another. "Window" foil was dropped to confuse the defences. Although ninety bombers were airborne not more than a quarter reached the target, a fact reflecting the generally poor performance of the bomber crews at the time. The deplorable bomb-aiming will also be noted.

Convoy Attack off Cape Tenez - 21 October 1943

C.A.F./S.15/Air
17 Dec. 1943
A.H.B./2M/
A45/1a

The Luftwaffe always selected eastbound convoys for preference, as likely to contain the greatest potential in men and equipment. During the day 21 October, westbound convoy Ribband and eastbound convoy Untrue were approaching a point off Cape Tenez. Although not reported by Allied Radar, German aircraft sighted Untrue off Oran in the early morning and reported its position. Radar, however, picked up another German aircraft at noon, which was reporting the position of Ribband off Cherchell. Fighter interceptors were laid on but made no contact, owing to confusion of hostile and friendly tracks by ground control. By dusk, both convoys were in the Cape Tenez area. At 1800 hours, in fine weather, two German Ju.88 Pathfinders dropped flares. A section of the four escorting Airocobras sighted them and destroyed one aircraft. Between 1830 and 1900 hours the main attack was made, in two waves. The first wave was reported by the convoy as low-flying and consisting of twenty-six aircraft - Ju.88s and He.111s. - It used torpedoes only and did all the damage, sinking two merchant vessels and damaging an L.S.T. Ground radar made no contacts with this first wave; it experienced interference (doubtless from enemy apparatus) and was practically useless over the sector in which Ribband convoy (the one selected for attack) lay. The convoy vectored patrolling fighters on to the first wave, and saw them destroy a He.111 and probably another. A third Heinkel was sighted, but failing light compelled the Airocobra to return to base at 1840 hours. Three Beaufighters, fitted with Mark VIII A.I. were at this time under the control of the Cape Tenez Radar Unit for the protection of the more important eastbound convoy, but, with the attack developing on the westbound convoy, they were ordered to proceed to this latter on free-lance patrol, as the area was beyond the scope of Radar Control by Cape Tenez. The second wave of the attack was picked up at 70 and 60 miles respectively, as two groups of three plus and six plus respectively. Judging by the average ratio of under-estimation

/the second

the second wave probably numbered about twenty-five aircraft. On account of their greater height they probably employed radio controlled bombs, although in this case no direct evidence has appeared. The convoy laid an effective smoke screen and used anti-jamming devices, which may have been to some extent effective in nullifying the efforts of the second wave. The convoy A.A. shot down an aircraft, bringing the total claims to five certain plus one probable, roughly ten per cent of the enemy force.

Debut of Italian Air Force (Allied)

A.A.F. in World
War II
Air Hist. Gp.
U.S.A.F.

Italian Air Force Macchi 205s escorted U.S. Lightnings on 16 October in an attack on enemy merchant vessels in the Levkas Channel in the Adriatic. Since the surrender, Italian pilots had been training in N.A.A.F., but their actual participation in operations had to await a formal Italian declaration of war on Germany - 13 October - as well as a decision by Allied Forces Headquarters on their employment. A.F.H.Q. decided, early in October, that five squadrons of fighters, one each of bombers and torpedo bombers, two of seaplanes and half a squadron of reconnaissance aircraft were to be used, with the majority of their operations directed to support of the Italian armed forces and the Balkan partisans, as couriers and for air/sea rescue. I.A.F. aircraft were serviced by their own specialists, some of them men of long experience.

Failure of the Luftwaffe in October

These, and a previously recorded convoy attack were the most spectacular of the Luftwaffe's efforts in October in Italy, apart from their successful cover of the Corsican evacuation. After the all-out fighter-bomber effort of 15 and 16 October the general effort declined to insignificant proportions in the Army areas. The majority of our bomber and fighter-bomber missions, both day and night, proceeded at will, only a few meeting organised air opposition, and that on a low scale and in specific areas of concentration. The uneven texture of this opposition revealed differences in equipment, most of it in a low state of serviceability, shortage of experienced crews and the general paucity of German air strategy. It indicated, too, a growing sensitivity to attacks on industrial targets outside Italy and on the main arteries, such as the Brenner Pass and the Lombardy bridge system, feeding the whole Italian field of operations. It also proved that they were seizing every opportunity of conserving and building up.

On the other hand a strengthening and hardening of the policy relating to flak defence was revealed by progressive photographic reconnaissance. The Allied sections concerned proceeded wisely to bring the German flak order of battle up-to-date and to maintain it so. The Germans decided at this time to set up a reconstituted Italian Air Force and allotted it certain airfields in Northern Italy. No great hopes were pinned on its potentialities, but it was foreseen that, like other satellite Air Forces, it might relieve the Luftwaffe of some of its routine responsibilities - for example in the Balkans.

Luftwaffe Organisation in Northern Italy

Von Pohl Series
of Interrogation
Reports A. 592

At the end of October, H.Q. Luftflotten-Kommando 2 was at Abano, (near Padua) where it remained until May 1944. H.Q. Fliegerkorps II was at Merate (N. of Milan) and the Feldluftgaukommando XXVII (formerly Luftgaukommando South) which

/was

was responsible for ground organisation and supply, at Treviso. Details have been given of the forces under command of Fliegerführer Luftflotte 2 based in the Rome area. The rest of Luftflotte 2's fighter force⁽¹⁾ were placed under control of Jagdfliegerführer North Italy (Oberst Von Maltzahn) for the defence of the Po Valley.

Fighter control organisation in Northern Italy had four fighter control stations, - (Jaegerleit - Stande), namely West, at Pinerolo near Milan for control in the western industrial zone; Süd at Bologna, Ost at Triscesino near Udine, for control against Allied formations flying into Germany; and Mitte, at Verona, for control against attacks in the Brenner area. For liaison between Northern and Central Italy two further stations were built at Viterbo and Siena. The General Commanding Flakartillerie Süd had his H.Q. at Bologna: flak in the southern operational zone was controlled by No.22 Flakbrigade, with H.Q. near Rome.

ALLIED AIR STRATEGY AND ORGANISATION

Three Major Problems

A.A.F. in World War II. Office of Air Force History U.S.A.F.

With the Allied Armies well-established on a single front and advancing, and the Air Forces moving in and taking an increasing share in the land battle, a unique situation had arisen, which both created new problems, with implications stretching far beyond the battle area, and accentuated older problems. None were more likely of easy treatment for the fact that the Allied Air Forces contained several distinct national elements,⁽²⁾ with individual traditions. The main problems were, firstly, the co-ordination of the strategic operations of air forces operating against the interior of Germany from Western Europe and the Mediterranean area; secondly, the unification of air command in the Mediterranean theatre; and thirdly, the build-up of the Air Forces on the mainland of Italy.

Potential Role of Italian Bases in the Combined Bomber Offensive

Marcus 914

23 July

Waltz 78 26 July
D/Cas File

"Bombing from Italian bases"

A.H.B. ID/4/75

D/A.C.-in-C.

File J.B./2015

A.H.B.IIJ.1/90/10

A.A.F. in World War II

Vol.2/Sect.3.

Chap. 17.

Before Salerno, the British Air Ministry and Mediterranean Air Command were convinced that a powerful bomber force should be built up on Italian bases, either in the Rome area or in Northern Italy. When the hopes of a rapid advance disappeared, the principle was still firmly maintained, only Foggia became the base. The British Chiefs of Staff were not convinced that the groups could be based, maintained and operated as effectively in Italy as in the U.K. The British air point of view was based on these considerations. At Quebec it was pointed out that the strength of the German fighter force, the reduction of which was a pre-requisite to the invasion of France, was increasing in spite of all that Bomber Command could do. The Chief of Air Staff felt it a vital objective. Further, it would be of great tactical advantage to add the weight of a sustained offensive from Italy against the German

/system

(1) II/J.G.77 at Lagnasco, III/J.G.77 at Isola San Antonio, II/J.G.53 at Pontedera, III/J.G.53 at Reggio Emilia.

(2) The Allied Air Forces now included British, American, French, Yugoslav, Italian and Greek units.

system, for it would force a weakening of the elaborate ground and air defences of the Western Zone and the construction of a new system to face the new threat from the South. This would, in the face of their serious manpower and material shortage, place a heavy, increasing strain on the German capacity to resist. In addition, many new targets so far invulnerable would be open to attack. The whole Allied air strategy and the potential success of Overlord operations against Europe, he held, could only be enhanced by the establishment of a strong bomber force in Italy. Removal of the overriding priority of anti-submarine measures freed the air forces for combined action. Many of the units of the Ninth Air Force had been transferred to Twelfth Air Force and the balance to U.K. It was held in certain American quarters, in particular by General Arnold,⁽¹⁾ that any dissipation of forces which would weaken our bomber offensive against Germany was a bad thing. While the advantage of two air fronts were clearly seen, it was felt that there should be one Commander in charge of the forces engaged, whether operating from U.K. or Italy.

The Concept of a Single Commander of Allied European Bomber Forces

Ibid

This latter theme was widely discussed with corollaries, such as shuttle bombing and loan or temporary accommodation of forces from either theatre in the other's field of action. The differences of weather cycles over the western and southern bases, as well as over enemy targets, were examined. Some were convinced that the interposition of an additional authority between the two theatre commands, and the Combined Chiefs of Staff and the delays in effective action which would result, would render materialization of the concept impracticable. The principles of co-ordinated attacks and shuttle-bombing were, however, agreed on and these eventually came to pass, albeit on a very limited scale. A single Commander of European Bomber Forces was appointed.

Unification of Air Command in the Mediterranean.

Minutes of
Conferences on
Re-organisation
of M.A.C.
La Marsa, Oct. 43
A.H.B.MED/ME
4.6.1943
Bundle 6.

At the M.A.C. La Marsa Conference which opened on 1 October, concrete proposals for a simplification of the ponderous system of command in the theatre were examined by local Allied senior officers and Air Ministry representatives. A compromise was accepted in principle, which amounted to an amalgamation of the existing H.Q., M.A.C. and H.Q., N.A.A.F. In view of its political and military importance, Middle East was to remain an A.O.C.-in-C's Command (and Malta an A.H.Q.), but as a whole was to cease to operate as an autonomous area.

The administrative controls of units of Twelfth U.S. Air Force and R.A.F. units were to be through their respective

/national

(1) He modified his opinions later and became a prime mover in the creation of the 15th Air Force.

ACMT. 47
23 Oct.

national channels. Air operations were to run under joint Anglo-American control.⁽¹⁾ No administrative action affecting operations was to be taken without consultation with the respective Commanders of the Strategic, Tactical, and Coastal Air Forces. All air elements in the Mediterranean were brought under operational control of the Air C.-in-C., M.A.A.F. It was suggested by M.A.C. that the new Command be called Mediterranean Allied Air Force, partially on the grounds that the term "Command" had a different meaning for the Americans and the new title would both be acceptable to them and cover the strategic situation. The suggestion was accepted, but the new structure did not come into being until the close of the year.

State of Heavy Bomber Airfields in October 1943

ACMT /S.501
A.C.P. M.A.C.
to Air Ministry
15 Oct. 1943

By mid-October the move of bombers to Italian bases was behind schedule, partly because of delays in landing airfield engineers and material, and partly because of changes in priorities. Air H.Q. was to have been set up at Foggia, but at this time Foggia was still described as a "shambles" and Bari was chosen, near 15th Army Gp. H.Q. Unfortunately A.F.H.Q. was at Naples; it was, however most important for the A.O.C.-in-C's H.Q. to be near most H.Q.s and the Strategic Air Force. One hard strip was being made and four fields, all grass, were in use, at least one of them always useable in the heavy rains. There seemed no hope of getting the medium bombers on to Italian soil that month; a difficult case, this, for they were nearly out of range of their special targets.

/Discussions

(1) Plans for Build-up of Air Forces in Italy

ACMT.72
22 Oct. 1943

The proposed build-up for Italy was as follows:-
Regarding Twelfth Air Support Command and Desert Air Force units, the plan was for thirty-three squadrons of single-engined fighters, six squadrons of fighter-bombers, four and one-half squadrons of reconnaissance and tactical reconnaissance aircraft. Of Tactical Bomber Force units, there were to be eleven squadrons of light bombers and eight squadrons of medium bombers: of Coastal Air Force, six squadrons of twin-engined fighters and two squadrons on general reconnaissance. As regards the Strategic Air Force, it was proposed that by 1 November the following forces should be based in Italy:- three squadrons of single-engined fighters, nine squadrons of twin-engined fighters and twenty squadrons of medium bombers; by 1 December, twenty-four squadrons of heavy day bombers, two squadrons of heavy night bombers and nine squadrons of medium night bombers. There were to be four squadrons of photographic reconnaissance aircraft by 15 November and, after 1 December, sixteen squadrons of troop carriers. Sicily, Sardinia and Corsica were all to play a part in time. The temporary aim was, two squadrons each of single-engined fighters and twin-engined fighters and a squadron of night fighters in Sicily. Sardinia would accommodate a squadron of single-engined fighters and five squadrons of torpedo-bombers and A/S/V aircraft. There were to be two squadrons of French single-engined fighters on Corsica. The whole would amount to one hundred and seventy-four squadrons.

Air Staff Note on Discussions were already afoot as to the desirability of the Recommended building up a powerful strategic bombing force in Italy. The Build-up of U.S. over-riding considerations, if heavy groups should be allocated Heavy Bombers in to the Mediterranean, were those of airfield capacity and the U.K. and ability to maintain the aircraft through Italian ports: Mediterranean another was an adequate supply of petrol. Theatres.

7 Oct. 1943
D/CAS. File
A.H.B. ID/4/75

Minutes of
Meeting at H.Q.,
N.A.T.A.F.
29 Sept. 1943
TAF/113/ORS

Airfield Construction in Italy⁽¹⁾

It was decided on 29 September to construct six all-weather fields at Foggia, two in the Salerno area, three in the Naples area and to extend Pomigliano. Foggia could produce six Bomber airfields. Actual immediate requirements exceeded this programme. T.A.F. needed two at Salerno, four near Naples and six at Foggia. S.A.F. needed three in the Heel and eight to ten at Foggia. C.A.F. was to pick up airfields as T.A.F. evacuated them. T.A.F. was to remain in the Naples - Foggia area, until Rome area became available. S.A.F. was to move in to Foggia until it had been evacuated by T.A.F. and would probably not go north of Bologna. The contemporary excessive optimism is still noticeable here.

Minutes of
Conference B
at H.Q.
15th Army Group
12 Oct. 1943.

Enough Pierced Steel Planking, voted the most economical and rapid method of permanent construction, was available for the construction of twelve airfields, all to be capable of extension to 2,000 yards, for use by Heavy Bombers. That the responsibility for the maintenance of the Air Forces by the Army was a heavy one, can be gauged by the figures given at 12 October, of twenty-six thousand and five hundred personnel and five thousand two hundred vehicles of D.A.F. and T.A.F. in the Foggia area alone. Airfield requirements were both modified and extended at a Conference of Army and Air Force representatives on 12 October. Up to seven fighter and five bomber bases were required in the Rome area and six fighter and five bomber bases in the Pisa area, all by T.A.F. S.A.F. increased its bid to fourteen/seventeen fields. Manfredonia was settled on as the port of entry for bulk aviation spirit, and D.A.F. obtained priority for airfields in the Pescara area.

/Theatre

(1) Order of Battle of Air Forces on Italian Bases, at 20 October 1943

TAF/105/ORG
20 Oct. 1943
A.H.B. 14.4.47/4
S.6275/ORG/87a.

By 20 October considerable air forces were already operating from Italian mainland fields. Desert Air Force had four Wings of Spitfires and P.40s and two Groups and a Squadron of P.40s on Foggia Main and Satellites Nos. 1 and 3 and a Spitfire Wing at both Triolo and Palata. Twelfth A.S.C. had, under the control of 64th Fighter Wing, a Group of Spitfires and a Squadron of Tac/R Mustangs at Pomigliano; a Group of P.40s at Paestum; a Group of A-36s at Capaccio, and another at Serretelle, (all the latter three were strips); a Wing of Spitfires and half a Squadron of Tac/R Spitfires at Capodichino and No. 600 Beaufighter Squadron at Monte Corvino. Tactical Bomber Force had a Group of Bostons at Vincenzo; a Wing of Bostons and Baltimores at Tortorella, a Wing of Baltimores and a Wing of Bostons at Brindisi. No.216 Group had a Squadron of Dakotas at Bari and the Coastal Wing No.322 was at Gioia. There were two A.O.P. Squadrons, acting as Artillery Spotters under the operational control of Eighth Army, (Nos.651 and 654), both flying Austers, and two A.O.P. Squadrons with Fifth Army.

Theatre Requirements in Operational Aircraft

Review of M.A.C.
Target Force.
Air Command Post
2 Oct. 1943
S.6275/ORG/57a.

At a conference between M.A.C. and Air Ministry on 2 October, the Air Ministry target, to be known thereafter as the M.A.C. Target Force, was thoroughly analysed. It was an excellent opportunity to contrast the approach of the Air Ministry, struggling to maintain its global outlook, with the more personal, more urgent outlook of the Commander engaged in a local struggle. The resistance put up by M.A.C. to the return of landing craft and aircraft loaned to them had already been taken to heart by the Combined Chiefs of Staff and no doubt by others. It was therefore a time to define the term "target force". A target force is the Air Staff of Air Ministry's appreciation of the air forces required to meet the likely trend in the strategical situation, by theatres. A.M.S.O's department have, then, to relate target forces to the estimated production of aircraft and the availability of personnel, and so to produce Expansion Programmes. The Air Staff target for the R.A.F. as a whole was strictly limited by manpower and aircraft production, but the allotment to each Command might be varied.

The Air O.-in-C's request for a fifth Squadron of Liberators could only be met if the R.A.F. allocation of these aircraft from U.S.A. could be increased during conversations due in November. He was unsuccessful in his appeal for medium bomber squadrons of a twenty aircraft establishment. It was recorded that, in the theatre, Mitchells were preferred to Marauders and that Baltimores were unpopular in a long range bomber role, as they were operationally ineffective, uneconomical and a technical embarrassment. Four squadrons of General Reconnaissance Day Fighters were due for transfer to India later and the total of squadrons of this category was to be reduced by six in March and five in June, 1944. Strategical Reconnaissance was being carried on with A-36 Mustangs, borrowed from Twelfth U.S.A.A.F., who could no longer support the commitment. A few P-51 Mustangs were needed, to carry on with until the normal flow began in 1944.

Speaking of fighters generally, the A.O.C.-in-C. considered that two-thirds of this total fighter force should be equipped with medium low altitude aircraft and one-third high altitude. Experience had proved that fighter squadrons were employed more and more in support of the land battle at a relatively low altitude. More Mustangs and less Tempests were needed. The Spitfire flow of one hundred a month might prove inadequate. Why not re-equip more Hurricane Squadrons with Spitfires? The Americans intended, but had not yet formulated a detailed order, to withdraw fifteen fighter squadrons from the Mediterranean, nine to U.K. and six to China.

Organisation &
Expansion of
U.S.A.A.F. in
Mediterranean
D/CAS/E/18B.
12.1.1944.
A.H.B. ID/4/139.
La Marsa
Conference
24.9.1943.

The Beaufighter prospect was anything but good. Middle East gave up a squadron to India in mid-October. Five squadrons were required in all, two for Western, three for Eastern Mediterranean. Ten night fighter squadrons, that is six R.A.F. of sixteen aircraft and four U.S. of twelve aircraft establishment was the ultimate target. One squadron was to be equipped with Mosquitoes and one R.A.F. squadron to return to U.K. when the four U.S. squadrons were fully operational. Supply of aircraft did not meet demand. In Corsica, only one squadron of fighters could be spared to assist the two French squadrons.

/Supply

Supply of new Aids to Bombing Precision

Weather was gradually revealing itself as a major obstacle to air operations. Especially important at this period was it that steps should be taken to bring into operation new aids to navigation and precision bombing through overcast. By October 1943, the General Commanding Eighth U.S. Air Force in U.K., Major-General Ira C. Eaker, (soon to become Air Commander in Italy), was still not convinced that the effect of the radar overcast bombing devices H2S and Oboe had, at that point, been conclusively demonstrated, in making feasible large-scale bombing raids despite overcast conditions; but he believed that, within a month, it would be proved that these conditions would not prevent accurate and concentrated bombardment of objectives. The aids he had in mind would not be promised to Italian-based bomber forces, however. H2S was independent of range and could be used as effectively from Foggia as from U.K. Oboe covered a smaller range, but could be used on targets inaccessible from U.K. The instrument, it was felt, which would effect a radical improvement in bombing precision in overcast conditions was the Norden bomb-sight, until then controlled by the U.S. Navy. Steps were initiated to bring this under Air Force control and into greater production. Some H2S equipment and experts were sent over from U.S. and a training programme begun in the bomber forces in Italy, but it was not until May 1944 that this target-finding technique entered into play in M.A.A.F.

Air Problems in Italy at the End of October 1943

In addition to the perennial one of keeping the enemy air forces out of the air, the Allied Air Forces in Italy had three main tasks. These were to assist the Army, mainly by close support and by interrupting enemy lines of communication; to assist the strategic air offensive on the German war system; and to weaken the German hold on the Balkans and the Aegean. These stood in the priority as given. The allocation of effort between the three tasks depended not only on this priority, but also on relative urgency, weather, location of air bases, and movement and supply to forward bases. Urgencies varied; at the moment, the German attacks on Leros had prolonged our air concentration on this area. Weather had had a determining influence on day-to-day target selection: even when meteorological reports, confirmed by early morning reconnaissance, had promised good conditions, raiding formations frequently found impossible conditions over targets. Heavy bombers were having to be assigned up to four alternative targets, so that, in any case, any one of a number of ways of damaging the enemy could be exploited. The bombing policy would, superficially, seem to reveal some obscurity, but this was natural in conditions not yet crystallised.

Movement and supply were serious problems. Shipping was the subject of a continual fight for priorities, but the general movement into Italy was satisfactory, if slow. The first moves of Strategic Air Force medium bomber and long range fighter groups into the Heel, to help in the Aegean crisis, had been by air. Groups of Marauders and Lightnings moved into Sardinia on 31 October. From there, they could operate over Northern Italy, and Lightnings could escort heavy bombers as far as Southern Germany. Meanwhile, heavy bombers could stage forward in Sardinia or the Foggia - Heel area. The first pipeline to Foggia was operating by 25 November. It ran from Manfredonia and moved 160,000 gallons of 100 octane gasoline weekly.

/The Aegean

Bombing-Policy/MAC
AHB/II.J.1/90/3

Ops Research
Policy Reports -
MAAF AHB/IIJ.1/
19/11(a)/59a.

A.C.M.T. 69
31 Oct. 1943
D/Cas Operations
from Italian
Bases - Priority
of Tasks.
AHB.1D/4/76.
A.A.F. in World
War Vol. 2/Sect. 3
Washington.

The Aegean and Balkans had absorbed a considerable effort. In the latter case, good dividends could be shown by the fifteen hundred sorties by N.A.A.F., in the shape of over one hundred aircraft destroyed on the ground, although some of these were obsolescent. Kos and Leros having been lost, outside the effective range of our fighter forces and well inside the range of powerful enemy air formations, any further drain of air resources was unprofitable, although Middle East Command was calling for air reinforcements from the Central Mediterranean. The German Air Force in Greece remained a threat to our eastern flank in Italy

ALLIED AND GERMAN STRATEGY AFTER THE VOLTURNO CROSSINGS

The Germans Plan of Withdrawal to the Barbara Line

Allied and
German Strategy.
British Hist.
Sect. Central
Mediterranean
History Part I.
Sections A & F.

The quick German reaction to the Allied assault on the Volturno positions, in the course of which the Hermann Goering Panzer Division had thrown the British back across the river at Capua, had been another example of "victorious retreat" and confirmed the enemy in his intentions of withdrawing at his own pace to the Winterstellung, - the Winter Position. Thereafter he proceeded, fighting stubborn rearguard actions, to approach his first strong trans-peninsula line, called the Barbara Line. Here he would stand, strengthening the formidable Sangro and Garigliano River defences. XIV Corps withdrew from the Volturno and Calore Rivers, to a line Monte Massico - Teano - Vairano, along the upper stretches of the Volturno, to Isernia: here LXXVI Corps stood on the River Trigno protectively. Behind the Barbara Line stretched the Bernhardt Line.

The Winter Line

Ibid

The Winter Line was based on the east side of Italy on the River Sangro, on the west on the Garigliano, backed by the Aurunci coastal range and the strong Cassino position, rising to the Massif of Monte Cairo; the centre of Italy, the rugged mountains of the Abruzzi, was considered too difficult for manoeuvres of large forces, but French troops fought there with success. Delaying positions were to be held in front of the Winter line, to gain time and for the inevitable deterioration of weather, so that additional defences could be added to the natural strength of the Line. Army Group B, Rommel's North Italian command, was wound up, and all German forces in Italy, after certain divisions had been transferred to the Russian front, were to be made available to Kesselring.

Allied Appreciation of the Position on 21 October

Ibid

Although the Allied ground strength was eleven divisions to nine German divisions in Southern Italy, the enemy could now draw on another fourteen divisions, and with no practical limit to the strength they could pass into Italy, stage a counter-offensive with the recapture of Naples as object. Naples was now air priority target No.1. The Allies' build-up, on the other hand, was limited. In view of a shortage of landing craft, amphibious operations against the enemy's flanks were impossible.

/The Army

1910/40/G(ED)
15 Army Group
25 Sept.
Colonel Foster,
S.D. and T.

N.A.F. 486
25 Oct. 1943
'La Marsa
Conference'

The Army was to be built up at the expense of the Strategic Air Force movement plan. In September Foggia had been selected as the Strategic base. It was decided to give priority to catching up on the backlogs of Army and Tactical Air Force, before diverting what it was now found would amount to two divisions, to move Strategic Air Force. By 15 December, six Heavy Bombardment Groups were in Foggia, but the move of the balance was not completed until March 1944. The Combined Bomber Offensive was thus delayed. It would be difficult to carry out the directive to capture Rome and its airfields. While we were certainly containing forces, these might grow to dangerous proportions unless greater means were put at the Commander-in-Chief's disposal. One thing was clear; the Allies must retain the initiative, although at the worst a German success in 1944 would draw off troops from France at the vital period. The current intentions were that Eighth Army was to seize the high ground north of Pescara, turn southward up the Pescara River Valley, along Highway 5 - the Via Valeria - and threaten Rome from the east, after a halt. Fifth Army was to press on up Highway 6 as far as the Frosinone area, then on to Rome, in a drive co-ordinated with Eighth Army.

Summary of Allied Advance 6 October to 15 November

On 6 October the first patrols had reached Volturmo River. By 15 November the next phase had been completed and they had won an area twenty to sixty miles in depth across the peninsula. In six weeks, the river had been crossed three times in force, and the Germans driven back on to the Barbara Line. On 15 November the Allies stood on a West-East line passing through Sessa Aurunca - Venafro - Selvona - Pizzona - Montagnola - Agnone - Castiglione - Forli - Atessa - Paglieta.

AIR SUPPORT OF FIFTH ARMY AFTER VOLTURNO

Strategic Bombing of Airfields in the Rome Area

A.A.F. in World
War II Vol.2/
Sect.3
Office of A.F.
History.
No.7 A.A.S.C.
War Diary.

The attacks on Luftwaffe concentrations in the Rome area were amplified. On 20 October fifty-four Fortresses bombed Casale and Marcigliana and thirty-six Mitchells bombed Cerveteri, destroying a fair number of aircraft. The neighbouring Furbara field, which could be used as temporary shelter, was bombed that night, by thirty-nine Wellingtons who fired another dozen aircraft. Two nights later, seventy Wellingtons bombed the fighter base at Guidonia, leaving thirteen aircraft in flames. The next airfield attack came on 30/31 October, when Wellingtons reached out at the Ju.88 bomber base at Perugia, half-way to Florence, without much success. A photograph taken the next day showed only two burnt-out Ju.88s.

Tactical Bombing of Enemy landing Grounds

Ibid

During this period Tactical Invaders concentrated on landing grounds north of Rome. A successful attack on 19 October on Tarquinia accounted for five transport aircraft, five fighters and two S.M.79 Italian torpedo-bombers. On 24 October Acquapendente and on 25 October Tarquinia were the targets, the latter yielding a score of four bombers and two twin-engined aircraft destroyed as well as heavy damage to installations. Three days later, they damaged six He.111s seen on a landing-ground west of Sutri and a number of Ju.88s west of Civita Castellana, all no doubt staging. Many fields had by now been potholed and installations smashed. Damage to aircraft was important, but owing to dispersal not decisive.

/Fighter

Fighter and Fighter-Bomber Support of Fifth Army.

Ibid

Whenever weather allowed, protective patrols were flown over the Army; targets in the battlefield, as well as communications, were attacked by fighters and fighter-bombers as and when called for by the ground forces. At times little more than armed reconnaissance could be carried out. Daylight enemy movement was generally light, the enemy taking, on principle, the fullest advantage of night cover; even night movement was scattered and offered few targets. Moving day targets being difficult to pinpoint in hazy weather, close support was unreliable. Notwithstanding observers at the time put on record the excellent psychological effect on the forward troops of the succession of fighter-bomber attacks ahead of them.

The Naples area and the battle front were also patrolled by Spitfires, aided by Coastal Squadrons now operating from Pomigliano. There was little enemy air opposition during this period. Much of this effort can be written off as unproductive. Invaders were more fortunate and ran, fairly frequently, into small aggressive formations of Me.109s and F.W.190s, finishing the fortnight's effort with ten Me.109s destroyed to their credit. Their combats and attacks on airfields were not effected without loss from flak. These Invaders flew every day, reaching an average of about the hundred mark daily, and a peak of one hundred and forty-four sorties on 26 October, when, with sixty-nine Warhawks, they worked over the Allied lines, with the Invaders hitting S.E. of Vairano, where 3rd U.S. Division were working up towards the Mignano Gap. One of their principal objects was to hinder the enemy's entry into the battle area, by attacking transport, communications and fortified positions along the outer ring running through the Gaeta, Minturno, Arce, Cassino, Mignano and Venafro areas. This they did in no half-hearted fashion; much more could have been achieved had the Allies possessed all-weather airfields; as it was, on some days all or all but one were unusable, in quagmire conditions.

Tactical Bombers on Fifth Army Front

Ibid

On most days from 19 to 26 October, U.S. Mitchells flew against communications, with the main object of blocking roads of entry into the battle zone, at Anzio, Terracina, Formia and Frosinone, as well as the towns of Cassino, Teano and Venafro. Gun positions were a complementary target. On some days, after drying winds had improved their airfields, R.A.F. Baltimores and U.S. Bostons operated, the pitch of their effort coming on 24 October, when sixty sorties were flown against enemy bivouacs, bridges and railway yards at Cassino. The roads here, at Mignano and Formia and bridges south-east of Minturno, ahead of X Corps, were also targets for the light bombers. Weather during the last week of the month held down the light and medium bombers, the only efforts worth recording being the Tactical Mitchell attack of 30 October against Frosinone and the bombing of Civitavecchia docks by Strategic Mitchells the next day. For the first eight nights of the period, R.A.F. Bostons flew seventy-five sorties on armed reconnaissance over the western battle front and rear areas. They found traffic, not in great quantity, but worth attacking, in several areas. Among local successes were those attending the twenty-six air attacks on troop-carrying trains carrying the 65 Infantry Division in which thirty locomotives were destroyed, according to German records.

/AIR

AIR SUPPORT OF EIGHTH ARMY BETWEEN TERMOLI
AND THE END OF OCTOBER 1943

The Crossing of the Trigno River

After Termoli, the 78th Division persisted in its advance towards the Trigno, the lower reaches of which were reached on 24 October. After repelling the customary counter-attack, the Eighth Army established their bridgehead in the area of the coastal road, then enlarged it. Trigno, Palata and Acquaviva fell to the Indians. In the southern sector Boiano fell to the 1st Canadian Division; in succession they took Torella Morise, Santa Elena Sannita, Macchiagodena and thrust on towards Isernia, in which area lay the enemy's nucleus of supply and route of withdrawal from the eastern battle area.

Desert Air Force Operations up to 16 October

As the main German withdrawals from the Termoli area were completed, transport became more difficult for aircraft to find. Despite this and the bad weather from 11 to 16 October, plenty of convoys and locomotives, as well as hostile batteries, were picked out. On 11 October, good work was done by Warhawks against a long train at Montesilvano Station, near Pescara. Three missions in all destroyed the locomotive and many trucks, as well as M/T being carried. On 12 October, while the left flank was closing in on Campobasso, the bag of road vehicles out of a convoy of one hundred was impressive. Day by day, fighter-bombers shot up similar targets in the Giulianova, Pescara and Ortona areas, tanks at San Salvo and transport in Campobasso prior to its capture. Movement near Vasto was brought to a standstill by Bostons on the night 13/14 October. First Canadian Division asked for the destruction of an obstinate gun, but three days' search by tactical reconnaissance fighters failed to locate it. Railway and other guns were silenced and enemy movement watched as far up as Ancona, where the marshalling yards were set on fire on 16 October by Mitchells.

Reports of Bombing of Own Troops

Moving bomb-lines, poor visibility and inadequate training in air/ground co-operation were still the cause of accidents; these are worth noting in view of new precautions taken and lessons learned. On 9 October the 38th Brigade, and on 10 October, the 36th Brigade reported erroneous attacks on their troops, by fighter-bombers and light bombers respectively. It was decided that no close-in direct support would be carried out, unless some form of smoke landmark or target indicator was provided to assist aircraft in target identification. On 11 October a landmark consisting of a letter A bull-dozed out of the ground, with the tracing filled in with white stones, was constructed in the 78th Division area. It was hoped that such landmarks would assist air navigation and bomb-aiming in difficult cloud conditions and poor visibility. On 16 October it was decided to use more artillery smoke and more smoke generators, the smoke as target indicators, the generators as landmarks. It was agreed that red was the colour most easily visible from the air, in normal battle and terrain conditions.

Air Operations in Support of Eighth Army, 17 to 31 October

The Canadians, who entered Campobasso on 17 October, pressed forward in the hilly southern sector through Montagno and Vinchiatturo. By 24 October, the Indians had taken Palata and Acquaviva. The enemy still resisted all efforts of the

/air

air forces to cut his main supply and withdrawal line along the Isernia road, but lost, in this southern sector, the key town of Boiano on 25 October. In harmony with these steady advances, considerable but intermittent air support was provided. The battle area was patrolled by Spitfires, generally about one hundred, rarely less than fifty, who also carried out offensive sweeps, reconnaissance and strafing missions along the east coast, defensive patrols over the Foggia - Manfredonia area, escorted light bombers and protected Bari shipping, (a standing commitment). On 29 October they were re-introduced as fighter-bombers.

By now, Coastal Air Force was beginning to assume the role allotted to it in the Air Plan for Operation Avalanche, namely the protection of ports behind the lines. Accordingly its Spitfires patrolled from Bari - Brindisi by day and Beaufighters by night. The fighter-bomber effort was maintained up to 26 October, some sixty R.A.F. and Dominion Kittybombers and rather more U.S. Warhawks being airborne daily, (most of this effort over Italy), a few sweeps being flown along the Jugo-Slav coast, from which area and Croatia the enemy carried out air reconnaissance of east coast ports and Adriatic shipping. Softening-up operations against Boiano began on 17 October and continued for some days, to assist the Canadians in regaining the initiative; Invaders, Baltimores and Boston A-20s joined, on 19 October, the air assault on Boiano, which suffered eight attacks that day. An ammunition dump and a tunnel were hit and a railway train sealed up in its shed. Boiano fell on 25 October. Rail movement on 78th Division's front was checked by bombing. The Germans used coloured smoke landmarks to mislead our pilots into a confusion of positions, but without success. While the strips were in a soggy state, no fighter-bomber support was available. Light bombers and fighter-bombers continued harassing strong points and gun positions at San Salvo, Cantalupe and elsewhere both by day and night. On 22 October a successful attack was made in the H.Q. of 26th Panzer Regiment just at the time of arrival of reinforcements.

No.1 M.O.R.U.
O.R.B.

Captured German
Documents.
Report
No.18 Army H.Q.
Ottawa.

On 23 October the Canadians, attacking towards the stronghold of Spinete, were supported by accurate bombing in successive raids during morning and afternoon missions, by light and fighter-bombers. On this day of unusual air activity, landmarks and a 25 pounder smoke line four hundred yards long were used with success. An effort was made, without success, by the Germans to simulate the Rover tentacle air controller and so divert Kittybombers. 24 October was the day when one hundred and thirty-six Fortresses and fifty-nine Liberators set out to bomb the aircraft factories at Wiener Neustadt. Calling in at D.A.F. airfields for refuelling, their presence reduced all other air activity to an insignificant scale. Light bombers pounded Frosolone, just before our troops moved in. Six days bad flying weather ensued, which rendered material air aid impracticable.

The Sangro River Bridges

Ibid

The Germans were pulling back systematically towards their fortified positions north of the River Sangro, the bridges over which were fast becoming vital targets - vital, but very difficult to hit -: Allied fighter-bombers failed to hit them on 24 October. The next day again, a heavier effort by

/Bostons

Bostons and S.A.A.F. Baltimores yielded only poor results. These targets were then abandoned until a more favourable background should present itself. The air effort had failed. The Termoli bridgehead was by this time secure. Eighth Army now had to reach the Sangro, before the Germans were too strongly entrenched. Meanwhile the enemy was losing heavily in transport of all kinds up and down the country and his road system was in a state of partial confusion, that was to hinder both him, and the Allies when they passed over the same tracks.

Other Ground Support Operations in the Eastern Sector
17 - 31 October

No.2/5 A.A.S.C.
War Diary

Enemy airfields could not be neglected for long. Macerata, Aquilla and Loreto landing grounds were strafed and a few grounded aircraft destroyed. On 26 October, direct support was again feasible and a large programme was partially achieved against gun and concentration areas on the Canadians' front. Morning attacks were successful, but those in the afternoon were foiled, partly by poor weather and partly by the attempted diversion of our fighter-bombers on to friendly ground troops by ingenious German intrusion on to our Rover tentacle Control Channel; a trick which failed, thanks to the intervention of the Allied Rover controller, who directed aircraft back to base with bombs. Shipping was included in this period's targets; on 26 October, a schooner was left burning at Civitanova.

Captured German
Documents
Report No.18
(p.37)
Army H.Q.
Ottawa.

Support to the advance in the southern sector was continued, with attacks in the Frosolone, Macchiagodena and Cantalupe areas. Bostons and Baltimores destroyed stores and ammunition dumps and Bostons joined Warhawks at Macchiagodena to strafe guns and troops. Reduced night activity by Bostons, to the extent of fifty-nine R.A.F. sorties from the night 17/18 October to the night 25/26, yielded useful results in the form of shattered road convoys and road and rail junctions. German officers commiserated with each other on the 'terrible' Allied air superiority and complained that Allied aircraft picked out each individual vehicle for attack, a statement which, added to some of the evidence secured by airborne cameramen, proves that aircrews were capable of objective reporting as well as poetic license.

The Bridge Problem

The fact that the Germans had demolished about six hundred bridges, and that great damage had been inflicted by Allied bombing, called for drastic action. The order was now given for all unessential bridges in North Africa, Sicily and Southern Italy to be dismantled and sent to the forward areas.

GENERAL ALLIED BOMBING OPERATIONS IN LATTER
HALF OF OCTOBER

First Major Experiment in Rail Interdiction

A.A.F. in World
War II
Vol.2/Sect.3
Office of
Air Force
History U.S.A.F.

Strategic air activities during the last two weeks in October were designedly more in keeping than heretofore with their true function: they were conducted north of a line running approximately from Rome N.E. to the Adriatic. This geographical diversion between S.A.F. and T.A.F. was designed to relieve the former of attacking targets which could be reached by Tactical Bomber Force. The emphasis of the majority of the operations was on communications in Italy, notably against a group of bridges in the area between Grosseto and Ancona. It marked a change from the previous policy of attacking marshalling yards (now growing in density as the Armies

/moved

moved northwards). It was suggested that the best way of causing a drastic reduction in the enemy's supplies was to cut simultaneously as large a number of rail lines by knocking out bridges and sections of tracks.

On 29 October General Marshall cabled General Eisenhower suggesting that the simultaneous destruction by the heavies of several adjacent bridges on each line would stop traffic for a long time. This message was based on a memorandum of 27 October by Brigadier-General L. S. Kuter which stated that the destruction of eleven bridges on nine major rail lines in Northern Italy and five bridges on a line Pisa - Ancone would starve the Germans into withdrawing into the Po Valley;— an optimistic surmise, but these were times when experiment and improvisation were the order of the day.

Strategic Air Force opened the assault on 19 October and for five days, to the tune of some six hundred and fifty sorties, dropped a load of about 1,350 tons of bombs on Central Italian bridges. Photographs showed, on the whole, a satisfactory degree of success. All rail movement north of the Rome area was virtually stopped: most of the objectives were partially destroyed or severely damaged; the enemy was thus still further forced to call on road, inland water and coastal shipping transport. The central Florence - Rome line was blocked N.W. and S.E. of Orvieto and the west and east coast lines blocked in several places. N.A.A.F. aircraft were much more effectively located than before for long range operations. The medium bombers granted to Strategic Air Force were either preparing to move to Southern Sardinia, Grottaglie and Foggia, or already there. Ample escort fighters were available. XII Bomber Command's three groups of Lightnings and one of Kittyhawks were on the mainland, as were the majority of XII Air Support Command's five groups of fighters. With the acquisition of the fields in the Naples and Foggia complexes and round Lecce and Grottaglie, there was ample accommodation for current aircraft housing needs.

Other Allied Bombing Operations. 25 - 31 October

Ibid

Airfield and bridge attacks absorbed the best part of the bomber effort, but several long range raids are to be noted. On the night 24/25 October forty-six Wellingtons attacked the Pistoia marshalling yards and on 29 October, one hundred and thirty-three bombed Genoa marshalling yards. On arrival over Sardinia, bad weather compelled twenty-four of the escorting Lightnings to return to base. Guidonia airfield, which had attained rapid and important status as a fighter base and was also an experimental station, was selected for attack on the night 23/24 October by seventy Wellingtons. There were still twenty-two single-engined fighters and four long-range bombers on the field the next day, but the Wellingtons had set thirteen aircraft alight, which might have been included in those numbers. The Wellingtons, of course, still flew without up-to-date navigational devices.

The Genoa Raid. 29 October

Ibid

As a sample of strategic bombing at the time, the effects of the Genoa day raid are worth noting. Photographic evidence obtained the following day showed widespread damage in the Sampierdarena district. Many hits were seen in the Ansaldo Steel Works, as well as damage to numerous other works, machinery and heavy electrical units. In Ansaldo basin, a

/merchant

merchant vessel had a heavy list. Although cratered, the marshalling yard at Sampierdarena was not blocked. There were three direct hits on the railroad to Ceranesi. A number of bombs had fallen wide.

Enemy Aircraft captured on the Ground, October 1943

Ibid

Three important airfields had fallen to the Allies in the first week of October, namely Naples/Capodichino and Pomigliano, and Capua. The gross harvest of captured aircraft in sundry states on these airfields was one hundred and sixty-four German and one hundred and one Italian.⁽¹⁾

Raids on Turin, Villar Perosa and St. Antheor Viaduct

Ibid

Again and again all through this unusually bitter winter, bad weather robbed the Allies of the advantage of their air superiority. Two raids in considerable force were abortive, owing to solid cloud over the target. They were planned to fit in with the Combined Bombing Plan. The former was on 29 October, when one hundred and sixty-four Fortresses set out to bomb Turin Ball Bearing Factories. One hundred and thirty-three of the aircraft turned, on failing to reach Turin, to attack Genoa as described above. Again on 30 October, twenty-seven Liberators failed, because of cloud, to bomb Villar Perosa Ball Bearing Factory and another one hundred and thirty-eight missed a similar target at Turin, for the same reason. Twenty of the Liberators, with Lightning escort, turned to Genoa and hit the Ansaldo steelworks and the Sampierdarena quarter with 1000 lb. bombs. On the night 16/17 September, aircraft of Bomber Command based in U.K. had bombed the St. Antheor Viaduct in S. France, across which heavy supply traffic was in continuous flow. On 31 October Mediterranean-based Fortresses scored direct hits on the north and south approaches, a blow calculated to slow up mass deliveries.

CREATION OF THE FIFTEENTH AIR FORCE

The Need for a powerful Strategic Air Force in Italy

CM-IN 14271
19 Sept. 1943

F.A.N.254
C.M.S.266/13A
23 Oct. 1943.

On 19 September, General Eisenhower had pleaded for the build-up on Italian bases of a powerful force of heavy bombers, over and above the actual strength of the bomber force of Northwest African Strategic Air Force. More important even than their potential use in the land battle was the consideration that such a force could strike at a range of vital targets well outside the range of the heavy bombers of Eighth Air Force, based in the U.K. and, what was of supreme importance, disperse the enemy fighter defences, so reducing the very heavy casualties being incurred in daylight operations over N.W. Germany.

CM-OUT-6433
Spaatz to
Eisenhower
14 Oct. 1943.
CM-IN-7113
Doolittle and
McDonald sgd
Eisenhower to
Spaatz c/o Arnold
12 Oct. 1943.

The Deputy Air C.-in-C. Mediterranean and the Commander-in-Chief of the Northwest African Strategic Air Force endorsed the plea. The latter maintained that for the purposes of high-altitude bombardment of targets in southern and eastern Germany and the Balkans during the winter months the prospect favoured Foggia as a base 'from two to one to three to one' over bases in the British Isles. During the summer there would be little

/advantage

(1) This brought the total captured on the ground since 3 September 1943 to five hundred and seventy-four German and five hundred and twenty-three Italian aircraft.

'The A.A.F. in
World War II'
p.565/Vol.II
Air Hist. Gp.
U.S.A.F.

advantage in one area over another, but it was estimated that from 1 November to 1 May the number of days on which bombers might be expected to operate was fifty-five for those in Italy against thirty-one for those based in the U.K. General Doolittle supported these arguments of his by pointing out the greater frequency and severity of winter storm tracks in England than in eastern Italy; that Foggia was better protected from the weather than were the East Anglian bases; that icing below 10,000 feet was worse over western Europe because aircraft had to pass through cold fronts, whereas from Foggia they could generally fly between fronts; and that in the Balkans some of the best weather was experienced during the winter months.

Factors in the Decision to create Fifteenth Air Force

Ibid and
J.O. S.514
9 Oct. 1943

The U.S. Chiefs of Staff had put forward a plan on 9 October 1943 for the exploitation of bases in Italy for the Combined Bomber Offensive against Germany and announced their decision to form the Fifteenth (Strategic) Air Force. This was studied by the British Chiefs of Staff, who after early doubts were resolved, accepted and "welcomed" it on 26 October while pointing out the need both to relate such a move to the logistic situation in Italy and not to compromise the sum weight of the offensive against Germany. They wanted assurances that facilities in Italy were adequate for their reception, before groups were dispatched.

P.M's Personal
Min. D.191/3
28 Oct. 1943.

On 27 October the Prime Minister concurred, but called attention to two relevant needs. The first was saturation for the American daylight attacks from the U.K. The second was that the build-up of the Strategic Air Forces in Italy should not get in the way of the battle for Rome and the airfields north of it. The armies and their tactical air support must have priority. General Spaatz assured General Arnold on 30 October that the aircraft envisaged in the build-up of such a force could be fully maintained and operated from Italy, and that this would in no way interfere with the build-up of General Eisenhower's Tactical Air Force, or of ground forces. Even if they had to operate from improvised bases, they could produce better results than if sent to the U.K. It was agreed there should be no reduction in the effectiveness of Pointblank operations and that only such heavy bombers should go to Italy, as could be efficiently operated and would not interfere with the land battle. Meanwhile land progress, as has been soon, was slower than anticipated and there seemed little hope that any groups, other than those already planned for N.A.S.A.F. operations, could move into Italy before January 1944.

CM-IN 18272
Spaatz sgd
Eisenhower to
Agwar for Arnold
30 Oct. 1943.

Establishment of the Fifteenth U.S. Air Force (Strategic)

CM-OUT 9934
C.C.S. to
Eisenhower
22 Oct. 1943.

On 23 October a directive from the Combined Chiefs of Staff went out, establishing, effective 1 November 1943, the Fifteenth U.S. Air Force (Strategic), under General Eisenhower's command and to consist initially of the six Heavy Bombardment Groups and two of the Long Range Fighter Groups assigned at that time to the Twelfth Air Force. By 31 December 1943 the build-up was to reach twelve Heavy Bombardment Groups, four Long Range Fighter Groups and one Reconnaissance Group. It was planned to augment this force, by 31 March 1944, to an ultimate strength of twenty-one Heavy Bombardment Groups, seven Long Range Fighter Groups and one Reconnaissance Group.

/Employment

Employment of Fifteenth Air Force

Ibid

The Fifteenth Air Force was to be employed primarily against the targets of the Combined Bomber Offensive as directed by the C.C.S., except that those units of the Fifteenth at that time assigned to the Twelfth U.S. Air Force, might be employed against objectives other than strategic ones, until such time as the air base objective area (still referred to as North and East of Rome) was secured, as well as against tactical objectives. Target, technique and servicing liaison between Eighth and Fifteenth U.S.A.A.F's would be essential. General Eisenhower could use the Fifteenth in a strategical or tactical emergency as he saw fit, informing the C.C.S. of action taken. Twelfth Air Force would become a tactical body.

AIR SUPPORT FOR THE ADVANCE TOWARDS THE WINTER LINE NOVEMBER 1943

Army Progress in November 1943

Operations of
British, Indian
and Dominion
Forces in Italy
Pt.1 Brit. Hist.
Sect. Central
Mediterranean.

As soon as the Combined Chiefs of Staff had agreed to the retention by the Supreme Commander of sixty-eight landing craft until 15 December, plans were developed, and moves made, to exploit the situation. Eighth Army was to exert pressure down Highway 5 and drive on to Rome. Fifth Army was to press on up Highway 6, (the Via Casilina), and attempt to break through enemy opposition on that axis. An amphibious assault south of the Tiber, and subsequently other assaults north of the Tiber were to be launched. Two French Divisions were detailed to move in, to relieve the pressure on Fifth Army.

Once across the Trigno River, Eighth Army pressed the Germans back to the Bernhardt Line. Isernia, Monte Massico and Monte Santa Croce were taken on 4 November. X Corps reached the lower Garigliano, and the enemy pulled back behind it. On the right flank, VI Corps advanced to the Bernhardt Line, and the hills north of the Mignano Defile. With weakened divisions, Fifth Army pressed on towards Monte Maggiore, but on 14 November withdrew from their assault positions. Eighth Army now held a sector along the Sangro for some fifteen miles upstream and on the slopes of the Maiella Massif. Two thousand yards north of the River Sangro, very strong German positions commanded the crossings of the river, from 300 to 400 feet wide. After several attempts in bad weather, the main crossing of the Sangro was effected on 27 November; the key point of Mozzagrogna fell on 29 November, Castelfrentano on 2 December. The whole ridge above the Sangro to the sea was then in Allied hands. Despite this progress, the enemy's dispositions had not been broken and his deep defensive line remained intact. Ahead lay more rivers at right angles; westward, a country of mountain and defiles, well defended.

Air Support, until now mainly working on behalf of Eighth Army, was diverted to Fifth Army from 1 December, when their main attack on Monte La Difensa and Monte Maggiore opened. The weather allowed full-scale air operations. By 9 December, X Corps had reached the Garigliano all along its front and captured La Difensa and Rocca D'Evandro. Air operations, increasingly repetitive in character and more difficult to assimilate by a student, were more spectacular during November over Eighth Army front, where the great obstacle of the Sangro River line was reached, crossed and bridgeheads established. These will be first considered: then the operations in support of Fifth Army, which, partitioned off by the Apennines, fought at times a campaign of frustration of its own. The revival of German bomber operations will then be dealt with.

/The Winter

The Winter Line operations lasted from early November 1943 until 15 January 1944.

Air Support for the Approach to the Sangro

No.2/5 A.A.S.C.
War Diary

The first three days of November were busy and gratifying ones for D.A.F. After putting out guns and troops at Carpinone on 1 November, they supported the crossing of the Trigno and flew two hundred sorties against communications north of the river. On 3 November they threw their full weight against the enemy in support of the 78th Division's attack on San Salvo and sustained the 19th Indian Brigade in the Tufillo area, which town they bombed by a fortunate error which enabled the ground forces to enter. Eleven requests for air support, a record to this date, were received by the A.A.S.C. from forward tentacles; most were answered and a maximum effort was launched against gun and concentration areas on V Corps. In pre-arranged support, Mitchells and Bostons attacked a dump at Cupello and Bostons and Kittyhawks bombed Palmoli; Warhawks strafed the road Furci - Cupello. An air programme for 4 November, planned to hustle the enemy withdrawal from the Isernia area, was cancelled, like many others that winter, because of a spell of bad weather, which lasted for four days. A fair number of tanks and vehicles between Trigno and Sangro rivers were spotted and knocked out. The close integration of the air/ground effort should be noted.

On 7 November light and medium bombers commenced the preliminary bombing of the Sangro defensive positions. A few small enemy fighter formations, in the northern sector, were hurried out of the area by Spitfires; night navigational landmarks were arranged. With the aid of these check points and flares, increased accuracy of night attack was anticipated. Day bombing had been reported by the Army as accurate. Spitfires, in addition to patrolling and accounting for several Me.109s and F.W. 190s, escorted bomber formations and shipping and carried out successful straffing missions along the enemy's rear line of communication, Sulmona - Avezzano, destroying and damaging trains and vehicles. In the same areas, S.A.A.F. (1) light bombers attacked roads at Alfadena and U.S. Mitchell bombers, marshalling yards at Aquila. The only Strategic bomber attacks of note during the opening of November were the effective bombing of Falconara Marittima railway bridge by a few Liberators and an attack on Ancona harbour by U.S. Mitchells.

From 8 to 10 November little effective flying on any scale was possible. By 10 November Eighth Army troops in the coastal sector were on the banks of the Sangro, putting feelers across it. Weather lifted for a while, and, in particular, fighter bombers supported the 8th Indian Division near Atessa. Others went for gun positions and rail points up to 13 November, when the weather closed in again. Although weather proved disappointing, aircraft were, whenever possible, switched to Balkan targets and these days saw the birth of an offensive in aid of the Yugoslav Partisans, aid which was, in June 1944, to be organised on a heavy scale under the Balkan Air Force. On the whole the weather, so bad on the west of the Apennines, was less disastrous on Eighth Army front.

/Across

(1) South African Air Force.

Across the lower reaches of the Sangro, U.S. Warhawks struck at military billets near Roccaraso. The main weight of the light bomber's attack fell on Palena, which was hampered for three successive days by one hundred and twenty Bostons and Baltimores. On most days in the third week in November, some degree of useful close support was given to the advancing troops, although many plans were stillborn owing to winds, rain and mist. On the night of 18/19 November, eight Boston A-20s straffed the enemy front line between Chieti and Lanciano and dropped flares 'in the hope of keeping him awake.' (There was, of course, no need for this - he was very much awake).

THE ROVER CONTROL, RECONNAISSANCE AND AIDS TO AIR NAVIGATION

The Embryo of the Forward Air Control Post

Air Support
in Italy.
A.H.B.IIJ1/115.
No. 2/5 A.A.S.C.
War Diary

On 19 November the A.O.C. of D.A.F. put forward proposals, unexpected by the Army, for experimenting with a wider use of the Rover tentacle in the coming battle for the Sangro. It was now proposed that the air controller should brief the fighter-bombers, provided he had a better target than the one on which they had been ground-briefed. It was felt that the briefing of pilots in the air was feasible for a specific operation with a well-defined base-line (the Sangro) and a well-defined flank (the sea), and with air superiority great enough to allow the normally uneconomical use of the standing patrol or 'cab-rank'. Certain fighter-bomber squadrons were to be trained in the procedure. This was the beginning of what later came to be known as the Forward Air Control Post. At this point its use was envisaged only in a set piece battle and under specific conditions.

Technique of the Rover Tentacle

Ibid

The Rover Tentacle consisted of a normal armoured vehicle, with the addition of a Very High Frequency set for communicating with aircraft. The 'Rover' was sited in the forward Divisional Observation Post - usually, but not always with a good view of the battle area. The 'Cab-rank' (1) or Rover David (2) system was introduced into full-scale tactics at this time. A number of fighter-bombers were briefed to attack a pre-selected target. For a period of 20 minutes the aircraft orbited close to the forward line. If, at the close of this period, no new target had been given on the V.H.F. link, the formation attacked the pre-selected target. The Rover held an air controller and an air liaison officer. Changes in target had to be esteemed worthwhile by both. Both held the same gridded map (a 1/100,000 map of the immediate battle area, with a special superimposed grid), which was used to give locations to flight leaders. Having found the target area, the flight leader would then have described to him the target within that area. The air controller, from his observation post, had in normal circumstances a good view of the target, but one which was oblique at the best, not vertical, as was the flight leader's. To supplement this, the air controller could use a smaller scale map (say 1/25,000), and, if possible, an air photograph: he would also have the target data supplied by the Air Liaison Officer. After describing the nature, location and importance of the target and, if necessary, giving a natural

/bomb-line

(1) A Cab-rank was a flight of six fighter-bombers.

(2) Named after W.C. David Heysham

bomb-line visible to the flight leader in the air, the target was then identified before aircraft were permitted to attack. After attack, the air controller observed and corrected if necessary, the flight leader reported claims and was interrogated by Intelligence.

The number of Cabranks, with times for reporting to the Rover, was arranged at the Army/Air Conference on the evening prior to the day of operation. Both could be, and were, altered in the light of circumstances. On occasions, the Cabrank reported to the Rover every 20 minutes, in which case 20 minutes was the most in which a Cabrank could be briefed, attack and be interrogated. In point of fact, very often only half that time could be spared a Cabrank, since a worthwhile target was seldom received at the beginning of a 20 minutes patrol. It will be appreciated that much depended on the training and efficiency of the Rover and aircrews. Note also that pre-selected targets were also called alternative targets. The Cabranks were expected to receive a target from the Rover, only failing which were they to attack the alternative. As often as not, however, they were directed to attack their alternative targets, a fact which did much to win the approval of the Air Forces, since one of the principal objections of D.A.F. to this system of the limited decentralisation of control of air forces was that air effort might be abused and wasted. The lay-out as it had developed by May 1944 may be studied at Appendix 22.

Final Conclusions on the Sangro Rover Experiment

Ibid

It was decided, at the close of the Sangro experiment, that the two existing Rover tentacles should remain forward with leading formations on the main axis, to perform their original, steady function of small-scale target adjusters. In addition a third vehicle, manned and operated by elements of the forward fighter control, was held in reserve at a place from which it could be sent forward to any tentacle when the battle was stabilised, it being appreciated that the Cabrank could be usefully employed. This system was both simple and flexible. By linking the forward fighter control post to the existing air support signals system, it was linked to all necessary forward and rear communications. Within its sphere, it was to replace the Army Air Support Control. Note that the system was only feasible in relatively stable conditions: but it did amount to a limited decentralisation of air power: the direct support of the Army was henceforth to be carried out to an extent by an airborne air force. M.O.R.U. (1) at D.A.F. H.Q. continued to allot tasks to Wings on receipt of directives.

Psychological Effect of the Forward Fighter Control

Ibid

It had become true that the speed with which air support could be afforded was greatly increased and that, with increased accuracy, attacks were now to be made closer in to our front lines; but the most striking result was the increase in mutual confidence and understanding between the ground and air forces. By the medium of the Rover, a greater sense of intimacy and identity of purpose was achieved. The pilot felt that his attack was definitely related to happenings on the ground, and he became more battle-conscious. The ground forces, knowing the members of the Rover tentacle crew,

/learned

(1) Mobile Operations Room Unit.

learned the importance of apparently trivial pieces of information required by the air controller for successful briefing of the fighter-bombers. They learned the procedure, possibilities and difficulties of direct support and saw air attacks being carried out in direct and rapid response to their calls for assistance. Few probably realised that the whole system depended, for its existence, on our air superiority.

Value of Air Reconnaissance to the Army

Ibid

Day and night armed reconnaissance missions throughout this period, and over the whole campaign, ensured as vigilant as possible a watch over the enemy's forward and rear areas, and that his movements were attacked. They provided valuable information, which supplemented that given by the more specialised tactical reconnaissance crews. This continuous offensive cover of the battlefield resulted in much damage to the enemy and in disorganisation of his system. Day movement gave way largely to night movement and rail traffic to coastal, road and canal traffic; but whatever the enemy's choice of means, he was continually watched and attacked. The same system prevented him, with his limited air means, from carrying out his own reconnaissance with any success and left him blind, at any rate visually, to our intentions.

Tactical reconnaissance had by now developed into a valuable arm for the answering of specific questions by the army and for finding new targets and reporting on old ones, but there was still room for improvement in the broadcast communications system. Another standing operational commitment was air photography. The use of air photographs by Army and Air Force was increasing and distribution of battlefield cover improving. Pilots were briefed, air and artillery targets selected and plans at all levels made with their aid. The technique of interpretation had reached a high stage of development, although the camera still lied on occasions.

Artificial Aids to Air Navigation

Ibid

The use of landmarks already noted was standardised and improved; units of the R.A.F. Regiment were given in December the permanent responsibility of manning, maintaining, operating and moving the day and night letter landmarks. Experiments with searchlights, portable Krypton lights and other types of signalling were tried and found wanting; the system now comprised the day letter system, similar letter outlines with ignitable petrol-soaked sand and coloured smoke from artillery. This latter was only used as a last-minute check for the pilot.

AIR SUPPORT IN THE SANGRO BATTLES

Bridges across the Sangro

Ibid.
2/5 A.A.S.C.
War Diary

A.A.F. in World
War II. Office
of Air Force
History
U.S.A.F.

Patrols were by this time operating across the Sangro, including those of the newly-arrived 2nd New Zealand Division. Archi and Perano were captured with difficulty. The army's right flank calling for support at Santa Maria and Poggiofiorito on 21 December, Kittyhawks provided it. At Fossacesia some S.A.A.F. Baltimores continued the pounding of positions, but other light bombers ran into cloud. Rear communications at Fano received attention from twenty-five Strategic Marauders, who hit the bridge. Bostons reconnoitred on three nights in the third week and on the night 19/20 November, Mosquitoes resumed their successful 'train-busting' operations as far as Padua and Ferrara.

/The main

The main crossings were now imminent and appropriate air preparations were organised. The weather took a favourable turn. On 22 November, five enemy strongpoints in the Lanciano - Fossacesia area were attacked by medium and light bombers and fighter-bombers. Santa Maria was attacked by U.S. Mitchells and Baltimores. Accuracy of bombing was noted by the Army and results were satisfactory. But for bad weather, heavy support would have been afforded to two Indian Divisions.

On the night of 22/23 November the 78th Division crossed the river and established a bridgehead. On the left, the 8th Indian Division had also crossed near Atessa and reached the San Angelo area. Santa Maria was again bombed on 24 November. The bombing by Mitchells was especially applauded, but in some of the light and fighter-bomber attacks that day, bombs caused casualties among troops of the 19th Indian Brigade; it was thereupon laid down that no bombing attacks over the front line were to be made, without identification of the smoke and artificial landmarks. Routeing of bomber formations was thus seriously restricted.

On 25 November many airfields on both sides were unserviceable. The Sangro River had just recently risen over 7 feet. Notwithstanding, the bombing of defences in the Casoli - Castelfrentano and Lanciano - Fossacesia areas went on. On 26 November, every few minutes from 1045 to 1520 hours, the defended area east of Castelfrentano was attacked. From 25 to 27 November, inclusive, medium and light bombers flew well over one hundred and fifty-three hundred effective sorties respectively against enemy positions in the Fossacesia, Lanciano/Santa Maria areas, while four hundred U.S. Warhawks attacked in the same areas and at Casoli. Results were frequently confirmed by Army observers as excellent.

Ibid

Major Allied Attack on Sangro Positions

Preparations for a full-scale attack, from small bridge-heads across the Sangro, on the Fossacesia - Romagnoli ridge, dominating the whole German defensive positions, had been proceeding more or less openly for days. The softening-up by air of the ground involved was carried up to 27 November, on which day twenty bomber missions were sent against key positions at Casoli. The main attack, launched on the night of 27/28 November met with initial success and by 30 November, against hot resistance by troops, guns, tanks and flame-throwers, had resulted in the capture of Fossacesia, Santa Maria, Mozzagrogna and the high ridge.

The full-scale support arranged for 28 November came into play after a late start, and lasted till the night of 30 November, when Rocca San Giovanni fell into our hands. During these three days, Allied light bombers, Kittyhawks and U.S. Warhawks carried on in a non-stop blitz on enemy positions. Enemy counter-attacks were rendered ineffective by these attacks, in conjunction with the stubborn fighting by Allied troops in conditions of extreme hardship. The way was now paved for the Eighth Army's drive against the Winter Line. Meanwhile the complementary task of damaging communications was carried out by U.S. Mitchells. Heavy commitments over Yugoslavia prevented the Mitchell effort in the Sangro battle from playing any considerable part. Night-flying Bostons continued their role of harrying movements, but their low strength was still unremedied.

/German

German Evidence of Success of Allied Air Attacks

War Diary of
10th Army and
other captured
German Documents.
Report No.18
Army HQ. Ottawa.

War Diaries and records of telephone conversations between German Commanders reveal certain successes of the Allied air attacks in the fast-moving battle. Having broken through the German front, the Allies threw in fighter-bombers to aid in the breakthrough. These aircraft helped to pin down the Germans and inflicted heavy casualties. The scale of air attack was appreciated as unprecedented, and the German losses in "blood and morale" admitted as very high. Nothing on the ground could move while aircraft were bombing and artillery, guided by aircraft, was firing. Whole regiments were written off. The absence of their own Air Force was grimly commented on. Without it, no solution of their predicament could be conceived. Once prepared positions were overrun, men lay unprotected in the open, at the mercy of aircraft, who lay down bomb carpets for as long as six days at a stretch, without any appreciable diminution of effort. Early in the month their own single-engined fighter strength had been increased from sixty-five to ninety-five owing to the completion of an exchange of a unit in Italy with one hitherto operating in Russia. Notwithstanding, enemy close support operations amounted, even in favourable weather, to no more than twenty-five to thirty fighter-bomber and sixty offensive and defensive single-engined fighter sorties a day.

AIR SUPPORT OF FIFTH ARMY IN LATE NOVEMBER
AND EARLY DECEMBER 1943

Air Activity over Front and Rear Areas

X Corps and
Eighth Army
Operations
Br.Hist.Sect/CM.
No.7 A.A.S.C.
War Diary

A.A.F. in World
War II
Office of A.F.
History
U.S.A.F.
Vol.2/Sect.3

While Fifth Army continued throughout November its slow unspectacular progress, the Air Forces, hampered by the deteriorating weather, continued, to the best of their ability, to disrupt the enemy system all through the areas north of the front. The same targets recurred with increasing monotony. The Strategic effort opened with Wellington attacks on Viareggio and Orte marshalling yards and Fortress attacks on west coast railways, Terni viaduct and bridges just north of Rome, near Tarquinia and Orvieto. At the time it was often hard to determine results. Later research was to reveal a fair average degree of accuracy. What little enemy air activity was evident was rendered largely ineffective by Spitfire patrols and sweeps, - an expensive investment which certainly acted as a deterrent to enemy fighter-bombers. A dozen enemy fighters were accounted for in combat. Invaders shot down a Me.210 - (the new twin-engined fighter).

On the Fifth Army front, the Vairano, Venafro, Mignano and Cervaro areas, and areas to the south-west of Cassino, such as Terracina, Pontecorvo and Roccasecca were all scoured for the bombing of gun positions. Fighter-bombers also attended to the constant commitment of railway and road bridges, the repair of which was becoming highly organised. Reinforcement roads were blocked and damaged at Acquafondata, Alfadena, Atina and elsewhere. Cisterna, Ferrara and Tarquinia airfields lost grounded aircraft to Invader raids. Damage continued to be inflicted by heavy bombers on key railway hubs. In particular, in the first fortnight of November, Bolzano, the tracks north of Orbetello, the bridge over the Ombrone river, Cecina and Recco and Prato yards were heavily, and according to photographs, successfully attacked.

Fighting was heaviest south-west of Mignano, where the Germans were entrenched in strong positions blasted out of the rock and occasionally fought back with such effect that the Allies were forced from newly-won positions. Fighters and

/fighter

fighter-bombers operated in support fairly constantly for five of the seven days preceding 14 November, reaching a total of over seven hundred combined U.S. Invaders and U.S. Warhawk sorties and over eight hundred Royal Air Force and U.S. Spitfires patrol sorties. These operations were a welcome fillip to our severely taxed troops.

Enemy Fighter and Fighter-bomber Effort

Ibid

At this phase the Luftwaffe could muster some seventy to eighty Me.109s and twenty-five F.W. 190s, to support their ground troops. These aircraft were based in the Rome and Viterbo areas and wasted much time dispersing and transferring to escape Allied air attacks. Small formations of F.W. 190s made frequent attacks towards the front line, not always without interception by the patrols just mentioned. The Me.109s acted mostly as escorts to the F.W.190s. As a direct consequence of this arrangement, there were few fighters left in Central Italy to intercept Allied formations. On two exceptional days, the fighter offensive effort rose to eighty/ninety sorties. One result was that ten Me.109s, five F.W. 190s and two Ju.88's were destroyed by our air patrols without loss to the aircraft engaged. On 13 November the main Allied fighter-bomber effort was switched against forward landing-grounds at Aquino, Marcigliana and Frosinone. Low as the enemy air effort was, it could not be ignored.

Light Bomber Operations in the first Half of November

Ibid

Mignano, - a much-disputed town - Atina and Acquafredda were bombed several times by Bostons, supplemented sometimes by a few Baltimores. Night flying for Bostons was limited by the poor weather and their low strength. Specific targets were now attacked. Civitavecchia harbour near Rome was twice hit and an ammunition store and chemical works ignited; our Naval units bombarding Formia and Gaeta were helped by flare-dropping and diversionary bombing. Mosquitoes of No.23 Squadron were making their presence felt to an increasing degree. They intruded over Central and Northern Italy as far as Genoa, Padua and Venice, straffing trains, tracks, hangars, searchlights and road transport.

Late November Air Operations in Aid of Fifth Army

Ibid

Little constructive air work was possible during the bad weather covering the third week, beyond Strategic U.S. Marauder attacks on Grosseto, Civitavecchia and Chiusi, where rail yards and harbour were bombed. Organised fighter interception was a rarity at this time in central Italy, but the Chiusi raid ran into a dozen Me.109s and F.W.190s, who attacked them. Small-scale attacks by U.S. Warhawks north-west of Venafrò and south-east of Cassino, and by Invaders on Civitavecchia were the only possible ones in the battle area between 22 and 24 November.

Effect of Bad Weather on Bomber Operations

Ibid

As an example of the effects of bad weather on the operations of Allied long range bombers, who were not yet provided with the most up-to-date navigational aids, the Wellington raid on Turin on the night of 24/25 November should be noted. The target was of great strategic importance - a ball-bearing factory. Of the seventy-six aircraft despatched,

/thirty

thirty returned early owing to weather and icing conditions. Six aircraft located and bombed the target. Three dropped bombs some distance away, others jettisoned their loads. Many aircraft had great difficulty in finding their way back, several landed on other friendly airfields. Five aircraft were destroyed, eleven missing. Some of the crews of aircraft which ditched or crashed were saved. This was only one of many similar cases, but losses were seldom so high. Maintenance, too, was inadequate; the rate of early returns from all causes was forty per cent.

Attacks on Railway Communications intensified

Ibid

The Eighth Army's offensive was reaching its climax; the Fifth's offensive was a matter of days. The overall situation would therefore be improved if supplies and reinforcements to the enemy could be dammed up, although bad weather had considerably helped their supply system. During the last nine days in November, one hundred and sixty heavy and two hundred and twenty-five medium bomber effective sorties were directed on to vulnerable points on the three main railways Genoa - Spezia - Rome, Bologna - Rome, and the East Coast route. Marauders, Fortresses, Wellingtons and U.S. Liberators struck at these three routes at many points: the damage was great and widespread, and more was still to be inflicted as the programme lapsed over into December.

Fifth Army Preparations

Ibid

Fifth Army
Operation
Instruction No.11
24 Nov, 1943

Useful ground had been gained in the first fortnight, although the first battle for Monte Camino from 5 to 15 November left that key-point still in enemy hands. The latter half of the month, during which it rained almost incessantly, was occupied in re-grouping, resting and preparing for the next offensive. A state of general equilibrium was soon to change to tension. It was adjudged necessary now to attack the enemy positions on the wide front on which he had elected to stand for the winter, (although it was hardly the most favourable time of the year) concentrating the full weight of air power and artillery in support, weather, of course, allowing. Fifth Army would advance in three phases, with the ultimate object of clearing the hill mass north and northwest of Cassino and launching armoured troops into the Liri Valley, the so-called 'gateway to Rome.' The first phase of the plan was to capture the Monte Camino - Monte La Difensa - Monte Maggiore Massif, X Corps to take Monte Camino, II Corps the other heights; thereafter, II Corps, being relieved by X Corps, would pass into the lead and capture Monte Sammucro, so completing the opening of the Mignano gap.

The Fifth Army Cover Plan

Ibid

To conceal the concentration for the assault, most Allied ground movement was by night. In addition, an elaborate deception plan was carried out. In Mondragone dummy tanks, vehicles and installations as well as real tanks and troops were massed, and the general appearance of a seaborne ferry base simulated. Tank landing ships reconnoitred off the beaches. The air forces and naval units were to bombard the coast from Minturno to Gaeta. At Naples a whole brigade was to be loaded into craft. Whatever the full extent of the cover plan's success, in which the air forces were unable to co-operate, few reserves ever reached the German forces who lost Monte Camino.

/Air

Air Support for the Fifth Army Attack, late November, abortive

No. 7 A.A.S.C.
War Diary

All available aircraft of Twelfth A.S.C. and T.B.F. were placed at the disposal of Fifth Army for the opening of the attack, and programmes arranged for the bombing of Army targets from 24 November onwards. Up to 30 November, four whole days were lost owing to bad weather, and on the last day, when the emphasis of air attack was to have been switched to the coastal sector in conjunction with the cover plan, the whole air plan collapsed, because of the hostile weather. There were small-scale attacks on gun positions on 26 November and twenty-four Marauders from S.A.F. bombed Cassino, whose plain was in sight of our troops by 1 December. Castelnuovo fell. Warhawks and Invaders were busy attacking guns, preliminary work, which added to the impending air programme's results led to a notable weakening of enemy artillery power.

The weather for 1 December was forecast as bad in the morning, improving from noon onwards. At 0945 hours XII Air Support Command cancelled the day's programme. The Army Commander, on his way to X Corps H.Q. heard of the cancellation a few minutes later and telephoned the Commanding General of XII A.S.C. pointing out that the weather was already showing signs of improvement in the forward areas, requesting urgently that the full programme be executed as planned. The programme as from 1200 hours was set up again and one hundred and seventy-eight fighter-bomber and ninety-six medium bomber sorties were flown against gun concentrations in the general area south and south-west of Cassino. These attacks met with general, but not complete success. The unserviceability of one airfield caused the cancellation of operations by three out of five squadrons told off for duty. Boston A-20 squadrons bombed the Venafrò road area instead of San Ambrogio, with the result that twenty-five of our own troops were killed and more than fifty wounded, and ten motor vehicles seriously damaged. There was some inaccurate bombing by some fighter-bombers. At 2230 hours began an attack by 46th Division on Calabritto.

Tactical Air Force's Record Day

Ibid

The good weather lasted over the critical day of 2 December and enabled air and artillery units to reduce the fierce opposition to the Allied attack on Calabritto and the adjacent defence areas. It was a day worthy of individual record, for it saw the bringing into play of three vital factors and resulted by the next day in the establishment of U.S. Special Force on Monte Maggiore and Monte Difensa, the capture of Razor Back Ridge and the partial capture of Monastery Hill (not Cassino).

The heaviest concentration of artillery fire till then recorded in the campaign was linked to comprehensive air support designed to soften up gun areas. Altogether Tactical Air Force flew over twelve hundred sorties that day - including some seventy D.A.F. Warhawks against Yugoslav targets - the highest number since the end of the Tunisian Campaign. Of the grand total, two hundred and fifty-two medium bomber and three hundred and forty-eight fighter-bomber sorties were at Fifth Army's request.

The gun areas, except San Ambrogio, were effectively bombed. At San Ambrogio, both categories of aircraft bombed too far to the east, concentrating on the forward instead of the reverse slopes of the positions, in which Germans were by

/now

now standing as a tactical principle. The fighter-bombers were reported as more accurate than the previous day and their attacks were considered by the Army to have been the more effective, in the sense that they felt the immediate results more intimately, in terms of lessened resistance at points attacked. One interesting tactical point emerged. X Corps complained that the weight of attack on a certain 'triangle' target was totally inadequate to achieve the desired result. This report was considered and found sound, and the conclusion reached that an area blitz was useless at least one full squadron could attack every ten minutes for a minimum period of three hours.

The Fifth Army began its attack on the massif during the night and met with notable success. The success of the combined air/artillery bombardment of 1 and 2 December was very plain. All day on 3 December the enemy could put up practically no artillery fire but was only able to reply with machine gun and mortar fire. On 5 December the first supply dropping operation was carried out with partial success. It was planned that six Mustangs should drop thirty-two containers to isolated units on the Vallevona Plateau. Containers arrived late and shortage of time left before last light cut the operation short. The troops in the dropping zone failed to show yellow smoke as ordered. As a result only twelve instead of thirty-two reached the troops: some fell in enemy ground. It was, however, only a beginning.

THE GERMAN AIR EFFORT IN NOVEMBER 1943

New Long-Range Bomber Tactics

M.A.A.F./W.I.S.
A.M.W.I.S.

Rise and Fall of
the Luftwaffe
A.M.

By this time the German long-range bomber force had settled down in its bases in Northern Italy and Provence and was ready to resume its offensive. The month of November saw a resurgence of its strength to a point unsurpassed for three months past. It also saw a change of tactics, from the Peltz doctrine of concentrating all available bombers on a single target at fairly lengthy intervals, to one of simultaneous or closely succeeding attacks by smaller formations.

Do.217s in larger numbers used torpedoes and the new Hs.293, or glider-bomb, to be clearly distinguished from the FX radio-controlled bomb which had been used to good effect against the invasion convoys, escorts and naval units. November saw, too, a brief appearance in the Mediterranean of the latest type of German bomber, the Heinkel 177. The German attacks fell into two main groups - raids on convoys and raids on ports. At the beginning of December two-thirds of the bomber force were withdrawn to Germany.

The Three Attacks on Convoys

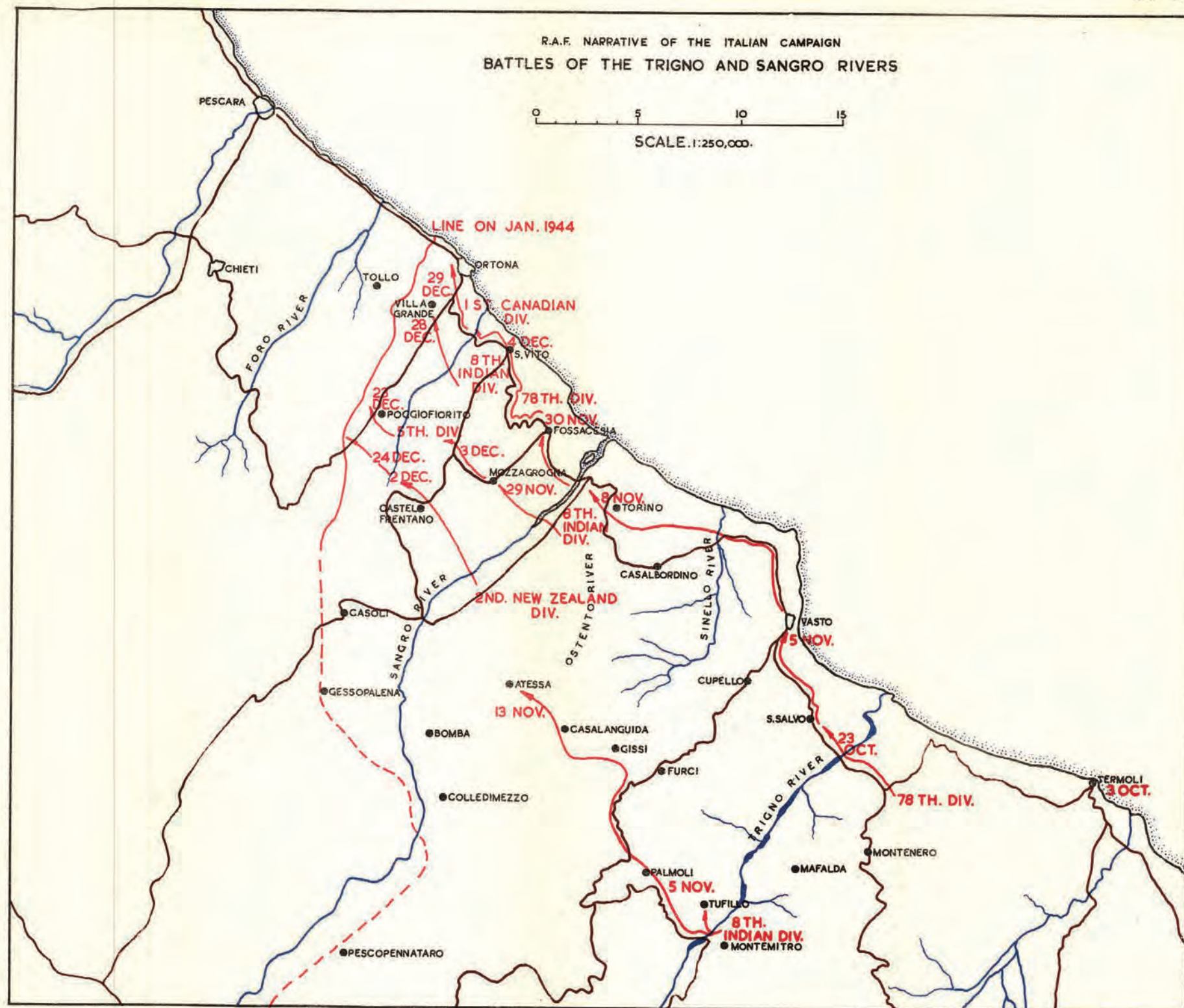
C.A.F./S.15/AIR
17 Dec. 1943
A.H.B./IIM/
A.45/1a

During November, four air attacks on Allied convoys were planned. Three matured and inflicted serious losses on Allied shipping, one was abortive. The first was at dusk on 6 November off Cape Bougaroun in cloudy, showery weather. At 0600 hours off Cape Matifou and again at 1300 hours off Cape Corbelin, an enemy aircraft reported the position of the east-bound convoy, although there was no Radar track of either aircraft. The convoy had a single Hudson as cover: ahead flew a Wellington on anti-submarine escort. At 1753 hours the C.O.L.⁽¹⁾ gave a good indication of an approaching attack from

/55 miles

(1) Chain Home Low Radar Station (for Overseas use).

R.A.F. NARRATIVE OF THE ITALIAN CAMPAIGN
BATTLES OF THE TRIGNO AND SANGRO RIVERS



55 miles North of Cape Bougaroun. Two W/T stations were already engaged on plotting; it was not, therefore, until 1802 hours that a 'blue' (1) warning was passed to the convoy by Djidjelli Sector. With the warning reduced to two minutes, in showery weather and 8/10 cloud with base at about 1,000 feet, the convoy was manifestly at a great disadvantage. It began defence by laying a smoke screen. No fighter defence was possible in such weather conditions. It was left to the ship's gunners to fight the aircraft, who came in without sending a Pathfinder ahead. At 1804 hours they attacked in four phases. Eight Do.217s carrying glider bombs attacked the escort from 3,000/4,000 feet, then about seventeen He.111s attacked the convoy at sea level with torpedoes. The process was then repeated, the whole attack (in the absence of fighter defence) lasting eight minutes. The bombs did no damage, the torpedoes sank a destroyer and two transports. Ship's gunners were successful; the Germans admitted the loss of six aircraft.

The second attack was on the eastbound convoy Untrue at dusk on 11 November, off Cape Carbon. It inflicted serious losses. Ground Radar and a strong fighter defence combined failed to function effectively during the attack. Four times during the day enemy aircraft reconnoitred the convoy. Only one incoming track was recorded by ground Radar and that failed owing to R/T trouble. At 1755 the convoy received a warning from Naval Y and laid a smoke screen which appeared effective against the bomb phase of the attack. Six Airocabras, (2) two Beaufighters (3) (Mk. IV A.I.) and two (Mk. VIII A.I.) were covering the convoy. The attack came in at about 1832 hours unpreceded, as far as could be determined, by any Pathfinder. One of the day fighters sighted six red lights at about 3000 feet approaching the convoy from the N.E. These were, no doubt, controlled bombs launched from the first wave of Do.217s (of which ten were engaged), directed against the escort vessels. Apart from some damage to an escort, this attack was a failure. The fifteen He.111 torpedo bombers which followed launched two attacks, after dropping flares, and hit four ships. The Allied fighters, day and night, made no interceptions whatever during the whole of these proceedings. Three of the transport sank, one was badly damaged. The Beaufighters engaged spent a considerable effort on the crossing tracks of friendly aircraft and were ineffective until late in the action, after the harm had been done. Then one of the Mk. IV Beaufighters intercepted two Do.217s on the way home, destroying one but losing the other in cloud after damaging it. The other Mk. IV Beaufighter had no contacts whatever. The two Mk. VIII Beaufighters, after several vain attempts, had one contact and visual on a Do.217 on the way back. The German aircraft, however, evaded them. Ship's fire accounted for at least one Ju.88 of the five enemy aircraft admitted to be destroyed.

Spurred by the success of this night's effort, the Germans sent out another force the next night in full moonlight to attack the eastbound convoy Dunnock off Cape Tenez. The

/convoy's

(1) A warning to convoys of approaching air attack in the form "Hello Code name of convoy e.g. Untrue, blue warning, blue warning". The warning was unacknowledged, by order.

(2) Of No. 1/5 French Squadron.

(3) Of No. 417 Squadron and No. 153 Squadron.

convoy's position had been reported at least twice during the day by German aircraft. Owing to poor height reading by Allied ground Radar, an attempted fighter interception failed. At 2023 hours the first of a number of aircraft were reported in the area, but, strangely, the enemy bomber formation, probably owing to poor navigation, failed to find the convoy.

The last of the Autumn series occurred in daylight on 26 November off Bougie and succeeded in sinking a transport. Although it proved costly in aircraft, as an experiment it was interesting, from the point of view of both German and Allied capabilities. As far as can be ascertained, it was an all-radio-controlled bomb attack and was carried out by He.177s based at Bordeaux - making their first appearance in the Mediterranean, - Do.217s from their new bases in the Toulouse area, and, in addition to five or six Ju.88s, a few Focke Wulf 200s, which in 1939, 1940 and 1941 had proved such a menace to our Atlantic shipping. Three German aircraft fixed the progress of eastbound convoy Annex during the day of 26 November as it approached the Bougie area, but ground Radar seems to have vectored no fighters on to the reconnaissance aircraft. It did, however, pick up most of the high-flying aircraft carrying controlled bombs, before they began to fly in, in three waves, at 1635 hours. The tactics were interesting. Each wave consisted of two to three closely following formations, each of three or four aircraft. They worked west of the convoy and approached down sun in line astern, attacking with controlled bombs and diving off northward.

The convoy was reasonably well covered by fourteen French Spitfires, four R.A.F. Airocobras and three Mark VIII. Beaufighters; an odd Beaufighter in the area, on a non-operational flight, assisted. Fair Radar warning and adequate height readings ensured good fighter defence. The fighters largely broke up the bomber formations, and prevented the correct approach for the accurate launching of the controlled bombs. One transport was hit and sunk, but eight aircraft were claimed as definitely destroyed and several others damaged. No confirmation of these exact figures is at present available from enemy sources, but losses were not less than claimed. This time ship's gunners only claimed one destroyed: the fighters, for the first time for many weeks, came into their own.

New Measures to protect Convoys against Air Attacks

Ibid

The five German air attacks against our convoys in October and November showed that all was not well with Allied Radar and fighter defence along the North African littoral and that there was as yet no effective answer to the radio-controlled bomb: it was important that one should be found. These considerations led to a research into the whole question, to discover what measures, additional to normal fighter protection, could be employed. Certain immediate action was taken, reinforced by further preparations emerging from a conference held on 13 December 1943 at H.Q. N.A.C.A.F. and attended by most of the Sector and Fighter Squadron Commanders in Northwest Africa.

In addition to the current procedure of passing blue warnings to convoys by W/T, direct Very High Frequency R/T messages were also to be passed. All Operations Room Controllers were given strong reminders of the need of speed. Ships were to use R/T to fighters whenever possible and instruments concerned tested as between ship and aircraft every half hour. The liaison between Shore Sector Controls and Fighter Direction Ships were tightened up and it was ordered that the fighter direction code, frequently discarded, especially by French pilots, must be

/adhered

adhered to. Patrols would function at dusk between one and two miles only from convoys, and Beaufighter patrols would be as low as possible and parallel to the convoy, 12 - 15 miles to seaward. More co-operation was needed from ships. The communication between ship and shore and ship and aircraft were to be improved and speeded up. The Radar used by Fighter Direction Ships had proved useless. With the new sets planned, it was considered that they should be able to pick up low-flying aircraft missed for one reason or another by Coastal Radar Chain. The same F.D. Ships and some escort vessels in addition should be fitted with Mark VIII A.I. Beacons in order to maintain night fighters on their patrol lines.

If the enemy reconnaissance aircraft were checked, actual attacks would diminish or disappear. Hence, active steps to intercept them. No. 32 Squadron was withdrawn from Italy and equipped with Spitfire IXs for anti-reconnaissance work on the North African coast. No. 39 Squadron was to be similarly employed or carry out rover patrols of the Balearic Islands and the coast of Spain. The routing of aircraft was revised, identification circling points established, routing regulations enforced under threat of disciplinary action. Radar cover in the Oran area was thickened up. Classes for improving French pilots' knowledge of the combat code were instituted. Radar cover West of Tenez was weak, so a D/F Station for getting bearings on enemy reports was located in the Oran area to improve the fixing there. Sweeps at the time when enemy reconnaissance aircraft were in the vicinity were arranged. Faults on the landlines were to be reported and repaired and loose ends everywhere generally trimmed. Fighter cover was to patrol further North of convoys and these aircraft were to be suitably camouflaged if coming from other than coastal bases: at present, sand-coloured aircraft could be easily picked out over sea. Defence tactics were refined on: everyone concerned, especially Sector Commanders, was to be put fully into the convoy picture. As regards training, there was little time for this in Coastal Air Force, for convoy commitments were heavy. The Air Officer Commanding called for a drastic cutting down of fighter escort, already none too generous or effective, as has been seen. There had to be training at all costs; the need of it was clear when he quoted the increase in the accident rate from 392 hours in October to 244 hours per accident in November.

Counter-Measures against both Types of Radio-controlled Bomb

Ibid

The problem of the radio controlled bomb provoked a great deal of close study and intensive interrogation. Most of the relevant information had still, in November 1943, come from the latter source. The following counter-measures were suggested. Long-range A.A. engagement of the parent aircraft, close range A.A. engagement of approaching gliders: alteration of ship's courses, smoke, searchlights, coloured lights and fighter protection as an umbrella for the shipping or for heavy bomber formations in daylight: and lastly, perhaps the most likely field for experiment, jamming and a listening watch. It was believed that a frequency of 50 megacycles was used for radio control of the glider. Little advance could be made in this direction until capture, in working order, of the enemy transmitter in an aircraft, but results suggested that the effect of ship's jamming devices on the control of the Hs.293 and FX bombs was appreciable.

/Bomber

Bomber Attacks on the Naples Area

During November, German bombers, usually about twenty/thirty in number, attacked the Naples area on five occasions, on the nights of 5/6, 6/7, 10/11 and 26/27, and in daylight on 9 November. One naval vessel was hit and beached, two others slightly damaged and a direct hit on a mole destroyed an ammunition and stores dump. On the whole, results did not justify the effort, but Naples remained priority target No.1. The German bombers made use, in the first raid, of window metal foil, so preventing our Beaufighters from making contact. On the night 6/7 November three operations were reported. One over the Capua - Monte Corvino area by a few Ju.88s, one on a minelaying effort in Bari Harbour and the convoy attack described above. In the early hours of 10 November about thirty Ju.88s, protected by copious 'window', attacked our shipping off the Volturno and Naples. A few others bombed the Sardinian harbour of La Maddalena. A week elapsed, while the German long range bomber effort rose to a crescendo with the reduction of Leros Island. Then on 24 November came a raid on La Maddalena, sinking an M.T.B. and on 26/27 November Naples received its fourth visit, again by the usual force of some twenty-five bombers.

German Bomber Order of Battle, November 1943

The He.177s moved back to their home base near Bordeaux after the attack of 26 November. The other anti-shipping units were still in Southern France; two Do.217 Gruppen of K.G. 100, less one Staffel(1) dispatched to the Eastern Mediterranean, were both at Istres, and two torpedo bomber Gruppen of K.G. 26 at Salon and Montpellier, but He.111s and Do.217s were transferred to command of Luftflotte 3 (France). In northern Italy, K.G.54 lay at Milan/Cameri and Bergamo, K.G. 30 at Ghedi and Villafranca and K.G. 76 at Villaorba and Aviano.

K.G.100 and K.G. 26

The appearance of K.G. 100 in the Mediterranean with Hs.293s was in keeping with tradition, for it had always been associated with attacks involving special equipment. In the days of the London blitz, this unit, then only a Gruppe, was known in G.A.F. circles as the 'Fire Raisers', because it used extensively incendiary bombs in conjunction with special navigational aids; it was virtually a pathfinder unit. It appeared later, with He.111s, employed on bombing the Nile Delta, with special equipment for jamming our night fighter detection apparatus. K.G.26 was also a battle-seasoned Geschwader, with long experience as an anti-shipping unit. This so-called 'Lion Geschwader' had also operated in the Black Sea and against the Murmansk Convoy routes.

German Fighters and Fighter-bombers

Von Pohl Series
of Reports
CSDIC/CM

The five single-engined Fighter Gruppen in Italy at the close of November all belonged to the two Geschwader J.G.53 and J.G.77, survivors from Sicily. The policy at this time was to maintain two Gruppen in the North (Turin - Milan area) and three in Central Italy (using Fiano, Ciampino, Centocelle and other landing grounds in the Rome area) as well as a F.W.190 Gruppe (II/S.K.G.10). Numerically, then, the Luftwaffe in Italy had a nominal strength of one hundred and eighty long range bombers, twenty bomber-reconnaissance aircraft (Ju.88s and Me.410s), one hundred and fifty single-engined fighters, thirty fighter-bombers, ten tactical reconnaissance Me.109s and

/ten

(1) Six aircraft: no reserve.

ten Coastal Arado 196s. For the first fortnight, the Luftwaffe maintained a steady daily effort of some twenty-five fighter-bomber and sixty/seventy offensive and defence fighter sorties, but in the latter half of the month, bad weather reduced sorties to negligible proportions.

O.B.S. Report
21 Nov. 1943
Captured German
Document
Report No.18
Army H.Q. Ottawa.

Change of German Army Command

After a visit to Hitler's H.Q. in November, Kesselring assumed the command of Army Group 'C' and of the whole Italian theatre as from 21 November. His new status was C.-in-C., Southwest.⁽¹⁾ Rommel was posted to Germany.

ALLIED STRATEGIC AIR OPERATIONS. NOVEMBER 1943

Attacks on German War Industry and Communications

M.A.A.F. O.R.B's

M.A.A.F/W.1.S.

A.A.F. in World
War II

Office of A.F.
History U.S.A.F.

Violent reactions to the raid of 2 November on the Messerschmidt Factory at Wiener Neustadt in the form of upwards of one hundred and twenty enemy fighters was responsible for the loss of six Fortresses and five Liberators out of the force of one hundred and twelve heavy bombers attacking. The massed fire tactics of the Fortresses and Liberators probably accounted for forty to fifty of the interceptors, but this cannot be confirmed. The Germans admitted that six shops were hit and some of them seriously damaged. Turin was successfully attacked on 8 November by eighty-one Fortresses. The Lightning escort had to turn back at Imperia, owing to petrol shortage caused by bad weather and strong head winds.

On 9 and 10 November, attacks in difficult weather scored slight success at the Ansaldo Steel Works at Genoa and none at Villa Perosa Ball Bearing Factory. The disastrous Wellington attack of 24/25 November on Turin Ball Bearing Factory has been dealt with, also two of three attacks made on Antheor Viaduct without more than possible damage to two spans. Cecina Bridge was split open by a 4,000 lb. bomb dropped by a single Wellington aided by flares, on 12 November.

Ibid

Anti-Shipping Attacks

Apart from limited opportunities afforded to fighter-bombers on offensive patrols off the eastern coast of the Adriatic, no shipping targets were found at sea by our aircraft. The attacks on the ports of Ancona and Civitavecchia paid high dividends. Any destruction of German coastwise shipping directly affected the enemy's ability to provide the front line troops with their basic supplies and reserves. The most successful strike of the month was that by one hundred and five Fortresses on the Submarine Base at Toulon on 24 November. Photographs confirmed that seventeen vessels were sunk, including one cruiser, one destroyer and one torpedo boat. This put paid to any German hopes of reviving the French Fleet. Four days later a formation of twenty-four Mitchells bombed Zara harbour in Yugoslavia and sank one German cruiser and one supporting cruiser.

/Effect

(1) Oberbefehlshaber Sud-West (O.B.SW.)

Effect of Weather on Bombing Statistics. November 1943⁽¹⁾

Ibid

Adverse weather conditions restricted strategic operations in November, but this was offset by an increase in light and fighter bomber activity on close support. The total increase of bomber sorties over October was only 1%, that of fighters 52%, while reconnaissance, as might be expected, was 42% less.

HIGH LEVEL CONFERENCES IN NOVEMBER 1943

Cairo and Teheran Conferences

Important moves affecting the long term strategy of the war developed towards the end of November. On 20 and 21 November President Roosevelt, Mr. Churchill and Marshal Chiang Kai-Shek arrived in Cairo, where they sat in conference⁽²⁾ with their advisers from 22 to 26 at Mena House. On 26 November Marshal Stalin arrived at Teheran, where he was joined the next day by the President and Prime Minister. The Teheran Conference⁽³⁾ sat from 28 November to 1 December. On 2 December the President and Prime Minister returned to Cairo, where, from 4 to 6 December, they conferred with the President of the Turkish Republic.

Decisions on Global Strategy affecting the Italian Campaign

Minutes of
Sextant and
Eureka
Conferences.
O.C.S. 423/2
5 Dec. 1943.
(131st and
O.C.S. 138th
(Meetings.

It was decided that, for 1944, Overlord and Anvil⁽⁴⁾ were the supreme operations. Nothing must be undertaken in any other part of the world to hazard their success. They were timed for May 1944, although some felt that Overlord should precede Anvil by a few weeks. Command in the Mediterranean was to be unified, as became a topographical unit of its nature, with effect from 10 December 1943. General Eisenhower was given a new appointment, as Supreme Commander Allied Expeditionary Force, in which capacity he was to command the invasion of Europe from the West; on 1 January 1944 he was to hand over his Mediterranean charge to Sir Henry Maitland Wilson, who was then to become Allied Commander-in-Chief, Mediterranean Theatre.

It was realised that to bring about the early fall of Rome, it was necessary to agree to General Eisenhower's plan for an early amphibious landing south of Rome with one or two divisions, and landing craft were left with him on the understanding that they were released in time for Overlord. The limit of progress that could be visualised with any clarity was the Pisa-Rimini Line. General Eisenhower pleaded that, if that could be attained, he could then maintain, with the forces at his command, a strategic defensive with strong local offensive action, commence operations in the Aegean, take Rhodes, and go into the Balkans at several points. These, and other concepts of offensive action in the Far East were waived in favour of action in the West, where, it was decided, the best chance of destroying the German armed forces at a reasonable date existed. The controversy as to whether Eisenhower's plan would have been the better or not is still proceeding.

/Decisions

(1) Of the total weight of bombs dropped, 70% fell on Italy. Of this, 46% was on Army Support and 34% on Communications, and only 6% each on Airfields, Harbours, and Industry.

(2) Sextant Conference.

(3) Eureka Conference.

(4) Operations against Southern France (later Dragoon).

Decisions affecting the Air Forces in the Mediterranean

Ibid

Collateral with the decision to unify command were the decisions to change the name of Mediterranean Air Command, to appoint a new Air Commander-in-Chief, Mediterranean, and to co-ordinate the structure and effort of the Eighth U.S. Air Force in the U.K. and the Fifteenth U.S. Air Force in Italy under a Commanding General of U.S. Air Forces in Europe.

Directive from
U.S. Chiefs of
Staff to C.G.'s
U.S.S.A.F.E.
E.T.O.U.S.A. and
N.A.T.O.

The Origin of M.A.A.F.

Directive from
C.C.S. to C.in C.
N.A.T.O. 5 Dec.
OZ.4046
A.F.H.Q. General
Order No.67
20 Dec. 1943.

O.Z. 210
12 Jan. 1944.

History of
M.A.A.F.
Lt.Col. Parton.

Mediterranean Allied Air Forces took the place of Mediterranean Air Command on 1 January 1944, officially authorised as at 10 December. The existing Commanders of M.A.C. were designated the Commanders of M.A.A.F. Air Chief Marshal Sir Arthur W. Tedder, G.C.B. becoming Air Commander-in-Chief Mediterranean, and Lieutenant General Carl Spaatz remaining his principal Deputy, as well as Commanding General, U.S.A.A.F. N.A.T.O. Both had already been appointed to accompany General Eisenhower to England, hence decided not to begin the reorganisation of the Air Forces as indicated in the C.C.S. Directive of 5 December, but to leave this in the hands of their successors in M.A.A.F. These were speedily announced as Lieutenant General Ira C. Eaker, U.S.A., and Air Marshal Sir John C. Slessor, as Air C.in C. and principal Deputy respectively. Lieutenant General Eaker's appointment was effective from 1 January 1944, and Air Marshal Slessor's from 12 January 1944. The facts just given are not to be construed as the record of fortuitous happenings. The need for reorganisation and unification of the Command had for many months thrust itself before the Air C.in C's attention. He had put in a considerable amount of effort towards the resolution of the problem, sounding, probing, provoking discussions and tentative solutions throughout his widely-dispersed theatre. Only now was the general global strategic complex to provide the right time and background for the much-needed and earnestly-desired consummation. The form of M.A.A.F. was now established, but owing to the unavoidable delay in the actual transfer of its principals, its internal reorganisation and true history did not begin for another five weeks. It was rightly considered unwise to change the complicated structure of the Air Forces, the largest single air command in the world at that time, in the actual fluid state of the military situation and with a major sea-borne operation pending. Once the landing at Anzio was accomplished, the new commander-in-chief and his staff began reorganising in earnest

General Reorganisation of M.A.A.F.

Ibid

The C.C.S. Directive of 5 December 1943 not only created M.A.A.F., but indicated its general organisational structure. In accordance with the desire of Air Chief Marshal Tedder and General Spaatz for a centralised tactical control, it provided for a single combined U.S. and British operational staff under the Air C.in C., but three separate administrative staffs, to be headed by a Deputy C.in C. (U.S.), a Deputy C.in C. (British), and the A.O.C.-in-C., Middle East. The Air C. in C. was established on the same level as the Naval C.in C. (Admiral Sir John Cunningham) and the C.in C. 15th Army Group (General Sir Harold Alexander), all three reporting to the Supreme Allied Commander, Mediterranean, (General Sir Henry Maitland Wilson).

/The Complexity

The Complexity of Air Command remaining

Ibid

At the Cairo Conference, the U.S. Joint Chiefs of Staff succeeded, against the protests of their British colleagues, in binding the Eighth and Fifteenth Air Force under the operational control of U.S. Strategic Air Forces in Europe. Here was a revolutionary change, pregnant with possibilities of discord. In the event, none arose, and the elaborate arrangements set up were rarely employed for the specific purpose of co-ordinated attacks. As some had originally pointed out, the combination of factors essential to such operations occurred much less frequently than others had allowed for. Only on ten occasions were co-ordinated attacks successfully carried out. At least thirty others never came off. So, in practice, the control of Fifteenth Air Force operations reverted almost entirely to M.A.A.F. Operations Section. The domination of U.S.S.A.F.E. (or U.S.S.T.A.F. as it became later) appeared only in broad-scale target directives and the close personal relationships maintained between Generals Eaker and Spaatz.

Service and Engineer Commands

Ibid

Full details of how the changes within M.A.A.F. worked out in detail may be studied in the A.H.B. monograph on Air Command in the Mediterranean, and in the History of M.A.A.F. December 1943 to 1 September 1944, issued by H.Q., M.A.A.F., April 1945. It is only intended here to give a few relevant facts and to show the scope of the problem. Two new Commands had been created at the end of 1943, namely A.A.F. Service Command M.T.O. (Prov) and A.A.F. Engineer Command M.T.O. (Prov) in October, both American Commands. The old Twelfth Air Force Service Command was redesignated the Allied Air Forces Service Command/M.T.O. Fifteenth Air Force Service Command was formed out of Second Air Service Area Command, and Third Air Service Area Command became Twelfth Air Force Service Command. This new organisation was to control American supply and maintenance.

A.A.F./M.T.O.
General Order
No. 1.
1 Jan. 1944.

In October 1943 the first command of aviation engineers in history was formed. With the creation in October 1943 of Twelfth Air Force Engineer Command (Prov) the position of the Air Engineer as a Commander instead of a Staff Officer was established. With the creation of Fifteenth Air Force and the urgent need for major airfield construction in Italy, it was decided to redesignate the command as A.A.F.E.C./M.T.O. (Prov) so that it could serve both Twelfth and Fifteenth Air Forces, and this was implemented by the same General Order as was the new Service Command. With 'Essayons' as their motto, the Engineers constructed and maintained bases for Twelfth A.F., Fifteenth A.F., D.A.F., South African units and the Balkan Air Force and laid four pipe lines from the coast to Foggia. British airfield Construction Groups, staffed by Royal Engineers, were also engaged on the same type of work, constructing fighter fields for support of Eighth Army operations.⁽¹⁾

/Unification

(1) For a good short resume of the early development of the Engineers' functions in the theatre, refer to the pamphlet issued by A.A.F.E.C./M.T.O. (Prov) entitled "A History of Policies Affecting Aviation Engineers in the Mediterranean Campaigns," and to "The Air Force Engineer," from the same source; both documents are now in the library of the Air Historical Group, Air University, Maxwell Field, Alabama, U.S.A.

Unification of Air Transport

Ibid

M.A.A.F. inherited a four-pronged transport system, but speedily unified it. There were the Army Air Force Transport Command flying into the theatre from overseas; R.A.F. Group No. 216, its British counterpart; the Mediterranean Air Transport Service(1) (Prov); and the facilities of Twelfth Troop Carrier Command. It was decided at a meeting called by the Air C.in C. on 2 February that Air Transport Command and No. 216 Group would take over all scheduled Air transport in the theatre, while M.A.T.S., with occasional help from Twelfth T.C. Command, would handle non-scheduled runs, and, through M.A.A.F., co-ordinate all air transport in the Mediterranean. The resulting increase in the responsibilities of M.A.T.S. were recognised, and it was reorganised as of 1 May 1944, and assigned to Army Air Forces/M.T.O. as an independent command.

Need for Internal Reorganisation

History of
M.A.A.F.
Lt.Col. Parton.

The history of the above new Commands has been carried forward to a logical point, where they may be said to assume a more or less permanent outline. This has been done partly for coherency's sake, and partly so as not to interfere with the smooth reading of the major operations which took place in the first half of 1944. Before proceeding with the narrative of these operations, some record must be left of the general state of affairs within M.A.C. when it handed over to M.A.A.F. Topographically, M.A.C. was an octopus, whose tentacles stretched from Algiers, through La Marsa into Italy. Nothing short of drastic and orderly plans would bring the loose ends together. These were difficult to evolve, with so many allegiances to uphold (such as to Allied Force H.Q.), with the move of the Air forces into Italy still in progress and those now based on the mainland moving into position behind the advancing armies. There was, too, the fact that the Army and Navy were themselves only lodgers and were finding the chronic shortage of suitable accommodation a handicap, when it came to the discussion of adjacent headquarters for the three services.

In such a fluid situation, it was inevitable that vital services such as communications should leave much to be desired. Yet not until these services functioned fully and efficiently, would it be possible to display the full flexibility of Air power. Many months were therefore to pass before the reorganisation was complete. When it was, the pattern was found to work well, and endured practically intact until the end of the campaign. Meanwhile, M.A.A.F. got ready to move its Main H.Q. to Caserta, where the new Air C.in C. was sitting alongside General Alexander and General Mark Clark, preparing for the Anzio battle. M.A.A.F. was at first to have its Command Post at Caserta. La Marsa was to be M.A.A.F. Advanced and Algiers M.A.A.F. Rear.

THE LUFTWAFFE RAID ON BARI. 2 DECEMBER 1943

Appendix D to
Air Staff

M.A.C.A.F. O.R.B.
AHB/IIm/A.45.

The Operation

A sharp reminder that the Luftwaffe was by no means war-weary was given on the night of 2/3 December, when a long-range

/bomber

(1) M.A.T.S.

bomber force from northern Italy raided Bari harbour to such effect that seventeen merchant vessels were lost. A force of one hundred and five aircraft was detailed for the operation, but it was unlikely that they all reached their target. Local controls, not fully functioning, only picked up thirty aircraft as belonging to the main force. (1) At 1925 hours two or three aircraft flying at 10,000 feet circled the harbour dropping 'window'. Between 1930 hours and 2030 hours the main force of bombers was reported as dropping bombs and mines. An early hit on an ammunition ship caused fires on three others, one of which blew up, setting fire to the outer harbour and involving the remainder of the ships in the crowded basins.

C.O.S. A.F.H.Q.
Message 9797
5 Dec. 1943.

Damage Sustained

Appx.D to Air
Staff
M.A.C.A.F. O.R.B.
Dec. 1943
AHB/IIm/A.45.

Fourteen merchant vessels with 34,330 tons of cargo were destroyed, three more were submerged with 7,500 tons of cargo, but these were salvageable: six others were damaged. The bulk petrol pipe was pierced and serious fires started, but the port itself sustained relatively slight damage. It was not, however, till the week ending 23 December that it was operating at its former capacity. The casualty list totalled approximately one thousand, mostly seamen and soldiers.

Interception

Ibid

'Window', dropped continuously through the raid by the early arrivals and probably by aircraft of the main force, was completely successful in foiling the night defenders. One U.S. Beaufighter was patrolling at the opening of the attack, and three Beaufighters were scrambled; no interceptions resulted. Two enemy aircraft, however, failed to return to base.

Investigation into Adequacy of Protection Measures at Bari

Ibid

The Chief of Staff at A.F.H.Q. ordered an investigation into the adequacy of protection measures at Bari. The following summary of their findings is of great interest, not to whatever extent it appeared to localise blame, but for the light it throws on both the material and psychological conditions ruling at that time. The committee of four consisted of Major General A/A and C.D., a Group Captain Operations of N.A.C.A.F., a Fleet Gunnery Officer under C.-in-C. Mediterranean, and a Lieutenant Colonel of P.A.D. and Civil Defence. The following is a summary of their findings.

The absence for some time previous of German bomber activity had resulted in a feeling of complacency in the whole area, and the capabilities of the Germans to stage a fifty plus bomber attack on any night against any one port in the whole of the Italian theatre perhaps not sufficiently realised. The decision to work Bari port to utmost capacity in aid of Eighth Army had meant taking a heavy risk. The port, crowded with ships, was a very vulnerable target. Active and passive air defence would of necessity have to be the best possible. It was good, but not good enough, as regards general supervision of defence, air defence organisation, radar warning, air defence communications, strength of A/A defences, port organisation, passive air defence and civil defence.

/The report

(1) The impression of an observer of great operational experience - Group Captain P. Hugo - was that about fifty aircraft were overhead.

The report admitted the strides made by the Germans in the use of 'window' and that it had become a formidable weapon. They did not say what the defence should have done about it, for the simple reason that, although as pointed out in an early chapter, knowledge of the principle was first known to the Allies, neither they nor anyone else knew the effective counter-measures at that date. The defence arrangements passed through too many hands. The specific air defence system, understaffed, did not provide for adequate supervision and co-ordination. The Navy had made no complaints about the known air defence arrangements. It was unlucky that the best-sited radar warning set happened to be out of action. As it was, all sets operating were neutralised in varying degrees by the 'window', and experiments were strongly urged, founded on the assumption that it was only a preliminary trial. Telephone communication was poor all over the area, and resulted in bad A.A. co-ordination. Air-raid warnings were broadcast and sounded too late. The fighter defences were adequate, if 'window' could be overcome, not unless. Standing patrols were laid on thereafter during moon periods. A.A. worked well, with insufficient guns - a bare minimum - and brought down two aircraft; and there was a need for thirty more searchlights.

They stated that the naval practice of exposing Coast Defence Searchlights continuously, to frustrate mine-laying craft, was highly dangerous and should be abolished. Fire-fighting by both Allied and Italian personnel was good, but there had apparently not been time to organise fully efficient Civil Defence or Passive Air Defence units.

Comparison of November and December Air Operations

Total sorties for November had reached a record low level for the campaign, but increased in December. The American effort of 54 per cent in November rose to 62 per cent in December. In the increased total for Strategic Air Force was found the greatest difference between U.S.A.A.F. and R.A.F. effort, for in December, while the latter's Wellingtons flew less than one hundred sorties, the U.S.A.A.F.'s heavies and mediums flew close on two thousand seven hundred and its escort fighters around one thousand seven hundred. As usual, the R.A.F. predominated in Coastal's operations, but even there U.S. sorties crept up from thirty-two per cent to forty of the total in the two months. As regards bomb tonnage, here again the U.S. contribution rose from nearly eighty to ninety-three per cent. The next notable increase in activity was by the Marauders. In December, marshalling yards ousted gun positions from the head of the target list, a reflection of the increasingly static nature of the land battle.

A.A.F. in World
War II
Office of Air
Force History
U.S.A.F.

Allied aircraft and personnel losses had increased, the heavier toll being attributed to more aggressive fighter tactics and, above all, flak reaction. The November total of one hundred and fifty aircraft destroyed and missing and two hundred and seventy-seven damaged rose to two hundred and nine lost (sixty-one per cent U.S.) and five hundred and forty-four damaged (eighty-five per cent U.S.). The percentage of combat crews killed, wounded, and missing in action per one thousand sorties was greater in December than in November and above the average for the last four months of the year.

Criticism of Strategic Operations by General Arnold (U.S.A.A.F.)

Strategic Air Force had made well-meaning and often effective contributions to the campaign in Italy. These local
/operations

Ibid

operations when set against the needs of the Combined Bomber Operations, left much still to be desired, it was felt by General Arnold (controlling the U.S.A.A.F. from America). In a New Year's message to the Fifteenth he said he believed both the Eighth and the Fifteenth had made too many diversionary uses of aircraft, at the expense of the plan to destroy the Luftwaffe. They must destroy the enemy air forces wherever they found him, in the air, on the ground and in the factories. They would be given the tools with which to do the job.

AIR SUPPORT FOR FIFTH ARMY IN DECEMBER 1943

M.A.A.F/W.1.S.

Restricted Air Support for Fifth Army Assault

M.A.A.F. O.R.B's

The assault following the record air attacks of 2 December acquired impetus; by 8 December, Fifth Army had consolidated positions on Monte Maggiore, and by 10 December had driven the enemy from Rocca and cleared the whole Camino feature. The Germans stood in the mountains North of Mignano and Venafro, prepared to resist any attempts to break through to Cassino and flooding the area Pontecorvo - San Giorgio - Cassino.

No.7 A.A.S.C.
War Diary

A.A.F. in World
War II
Office of Air
Force History
U.S.A.F.

After the peak effort of 2 December, Air Support, on an improving pattern, although superior to the enemy's, was not decisive owing to bad weather. The German fighter effort was being quickly increased over the battle areas to forty/fifty sorties on fine days; and on 3 December formations of them lost five Me.109s to our Spitfire patrols. Night bombing on a low scale was occasionally possible. After a busy two days' blitz on gun and troop positions on 8 and 9 December, our fighter-bombers were again chained to their bases by weather conditions and only a limited effort was possible.

Anti-Communications Air Effort curtailed

Ibid

This weather, which disintegrated on 10 December, dislocated the air plans for the offensive against railways; attacks were cancelled or abortive. The breaks in interdiction gave temporary and welcome relief to the enemy, who lost no time in repairing cuts. There were, all the same, some two hundred and twenty effective U.S. Mitchell sorties flown on railway attacks north of the Rome line between 3 and 12 December and along the East coast at Pescara, Ancona, and Giulianova: in the central areas Terni, Sulmona and Aquila all suffered damage to their rail system. In the North, the Rome-Bologna line was hit at several points by Strategic U.S. Marauders, and U.S. Marauders went as far as Ventimiglia to cut tracks on the Nice-Genoa line.

Slow Progress on Fifth Army Front in late December

Ibid

During the second half of December, Army progress in the western area was slow but important. The second bitter battle for San Pietro opened on 15 December and was won by the Allies at the cost of heavy casualties; by 17 December, Monte Lungo was occupied and a way forced along the knife-edge of Monte Sammucro. Much artillery was expended and many lives lost in these mountains. The German Winter Line had been broken into, not broken. Much fighting was to be done before the rear line of the position, the Gustav Line, was reached, and the difficulties of that line were now the subject of serious study.

Uneven Air Support in late December

Ibid

A break in the bad weather from 13 to 17 December afforded the Air Force a chance of showing what could be done in fair conditions. Noteworthy are the eleven hundred upwards sorties

/by U.S.

by U.S. Invaders and Warhawks, two hundred and fifteen by U.S. Bostons, twenty-four Mitchells (U.S.) and a daily average (except on one day) of over one hundred sorties by R.A.F. and U.S. Spitfires. The Cassino area absorbed most of the U.S. fighter-bomber effort, the targets chosen being bridges on the Cassino - Atina route. Results often reported as successful by ground observers cannot, as usual, be checked in detail, but were cumulative.

In support of the Fifth Army drive towards Cassino, fighter-bombers on 16 and 17 December attacked guns and troops near Cervaro and Vallerotonda. Light bombers (U.S.) bombed Frosinone, (the base on the Cassino supply route) and the same targets as the fighter-bombers. The enemy effort on fine days was still low and his small formations suffered a high percentage of losses. The air effort from 18 to 31 December was only normal on three days, owing to universal bad weather. Even then it had little meaning, for it is only rarely that any close relation to ground tactics can be perceived; this was partly because the Army was re-grouping after the successes of Monte Camino and Rocca D'Evandro for the attack on Monte Porchia, planned for 4 January 1944. A state of equilibrium reigned.

The U.S. Invader and U.S. Warhawk attacks, directed mainly against guns and strong-points in the Cervaro area, the lines of communications Sora-Arce-Frosinone-Anagni, roads and bridges in the Cassino defence zone, roads and bases at Santa Elia, Atina and Civitavecchia, reached the one thousand sorties mark. Altogether some one hundred and eighty Bostons (U.S.) attacked the guns at Santa Elia, roads at Pontecorvo, Cassino and near Atina and the Ferentino marshalling yards on the Rome-Cassino supply route. R.A.F. Bostons continued to intrude by night over the roads leading to the front and a few attacks were staged by U.S. Mitchells on the road and bridges north-west of Aquino and the base at Terracina, from whence seaborne supplies could be handily delivered to the battle area.

AIR OPERATIONS OVER EASTERN ITALY. DECEMBER 1943

Support for Eighth Army, 1 - 19 December 1943

No. 2/5 A.A.S.C.

War Diary

Dec. 1943.

8th Army

Operations

Brit. Hist. Sect.

Central Med.

During December, Eighth Army's task was to press further into the enemy's Sangro positions and seize the general Orsogna-Ortona line. This it partially achieved. The New Zealanders entered Orsogna, but were ejected. It was five months before this key-point fell, as a result of some of the bitterest fighting of the whole campaign. On 2 December, two D.A.F. light-bomber wings were lent for about a week to Twelfth A.S.C. for support of Fifth Army's offensive. (These returned after 9 December to add weight to the moves in the coastal sector towards Ortona). This loan left a little over two hundred and fifty fighters and fighter-bombers for one week, who flew mostly on the New Zealand Div's front. After a good day on 2 December of straffing in the Orsogna, Lanciano and Guardiagrele areas, the bad weather and the fluid state of the bomb-line led to a reduction of support for three days. It was harder to locate hostile batteries and the battle was dangerously mobile. With stiffening German resistance came less movement, hence less worthwhile targets.

/German

Captured German Documents
Report No.18 p.49
Army HQ. Ottawa

German Reinforcement delayed by Desert Air Force

Ibid and 'From
Pachino to Ortona
Hist.Sect. G.S.
Canadian Mil.HQ
in Gt. Britain.

That some of the attacks on communications bore immediate fruit is clear from the record of a telephone conversation between two German officers on 2 December. No.76 Corps, bearing the brunt of the fighting after the retreat across the Sangro, was looking forward to the arrival of No.5 Mountain Corps at a critical hour. The rail track bringing the Mountain Corps south had been so effectively bombed that the troops had to be detrained. Flak protection in the north had been reduced and it was not understood why the defence of important rail centres was being weakened. Things would be different if they had an Air Force.

Direct Support for Canadians, Indians and New Zealanders

No.2/5 A.A.S.C.
War Diary

Little air support was possible until 8 December, when two hundred and forty fighter-bombers supported the New Zealanders' attack towards Orsogna and one hundred and eight fighter-bomber and seventy-two light bomber sorties that of the Canadians towards Ortona. The day's air operations were well reported on by the ground forces. Medium bombers continued to paralyse Pescara, Ancona and Aquila. There was small-scale enemy fighter intervention in the ground battle, costly to them and unproductive.

The Canadian advance on Miglianico opened on 9 December. Air support by fighter-bombers and light-bombers were reported by the Canadians as consistently effective. The Germans began to give way and the next day three hundred and ten fighter-bomber sorties supported the advance and blocked the German withdrawal routes with shattered vehicles. Miglianico, Chieti, and Canosa-Tollo areas all yielded a harvest of transport, guns and strongpoints, some targets being pre-arranged, others in response to Army calls. On 18 December and in the afternoon of 19 December the Canadian and Indian Divisions were well supported while visibility was good.

Capture of Ortona

The Canadians, Indians and New Zealanders cut the Ortona-Orsogna road at two points. In sleet, snow and gales, and against desperate resistance, substantial progress was made, resulting in the capture of Ortona port on 28 December. At the close of the year the Germans stood on a line 3 miles up the coast from Ortona - south of Tollo - Orschio - south of Canosa - Arielli - Guardiagrele - Penna Piedimonte - Maiella. The 1st Parachute Division and the 90th Panzer Grenadier Division who had so strongly defended Ortona had been reinforced by parachute and other fresh troops. The impetus of the Allied attacks had been blunted and held at a vital point. With the help of the prevailing bad weather the northern German flank was saved till Spring. On the southern sector of the front, natural difficulties of terrain precluded the likelihood of an Allied attack during the winter. The Winter Line was to hold firm, with minor variations, for another four months.

Limitation of D.A.F's Support Programme

Ibid

Weather during the second half of December allowed of only five days' full effort. Strong cross-winds often rendered operations impossible from all but one landing ground; many airfields were water-logged and cloud usually low. The few fine days brought out in relief such efforts as those on 16, 18, and 22 December, when fighter-bombers and light bombers aided the Army's advance by attacking transport, troop and gun concentrations and strong points in the Miglianico, Tollo,

/Canosa

Canosa, Chieti and Orsogna areas, and Spitfires flew offensive reconnaissance over enemy supply roads. Activity soared over the last two days into something like a fairly strong and consistent effort, but only on the latter day was the emphasis local, notably in the coastal sector; here twenty-four Spitfires, ninety-four Kittyhawks, one hundred and thirty-one Warhawks went into action against infantry positions and artillery concentrations at Tollo, Orsogna, Ripa and S.E. of Chieti.

The Growing Menace of Flak

Ibid

During the whole month, D.A.F. fighter-bombers had run into intensive A.A. fire in the forward areas and serviceability had suffered accordingly. It was arranged, in co-operation with the artillery that, just prior to the estimated time of arrival of the attacking aircraft, the enemy's known anti-aircraft positions in the vicinity of the target should be neutralised by our own artillery fire. This development⁽¹⁾ was a revival of a method used with success in the Western Desert: it led to some reduction in casualties and in damage to the fighter-bombers.

Operational Research applied to the Flak Problem

Air Intelligence
Weekly Summaries
Nos. 56/59
H.Q.
MAC/MAAF/A.2

In the first three months of 1943, twenty-four per cent of Bomber Command aircraft suffered damage from flak. After the application of evasive tactics proposed by operational research workers, this figure was reduced to seventeen per cent in three months. All findings from various sources were made available to M.A.C., in particular in the form of four articles published over December 1943 and January 1944, in the Air Intelligence Weekly Summary, giving plans and details of the German High Frequency Detection organisation and detailed advice on evasive tactics in the air.

Enemy Air Activity in December 1943

Bari was raided a second time on 13 December, but escaped any serious damage, although 'window' again made interception difficult. An interesting feature was that the twenty Ju. 88s participating came from Greek bases using advanced landing grounds in Yugoslavia. Photographs of enemy bomber bases in Northern Italy confirmed the gradual withdrawal of the long range aircraft for operations in the north of Europe, where bases were less likely to be fogbound than in the Lombardy plain. This drift from Italy was to be reversed in January 1944, when the Allied landing at Anzio provoked the Luftwaffe into a fresh move back to those bases, to strike at our shipping. The raid from Greek bases was doubtless intended to cover and compensate for the withdrawal from Italy.

On the last night of the month, eighteen Ju. 88s, again from Eastern Mediterranean bases, approached S.E. Sicily, one aircraft attacking Catania and the others Augusta, both still crowded reinforcement ports. Little damage was done and five enemy aircraft were destroyed by A.A. The two local Beaufighters ran into the now familiar 'window' and four Mosquito pilots who scrambled made no contact. The only other long range bomber attack was on 21 December, when a convoy 140 miles S.E. of Malta was attacked by eight Ju. 88s, (all that remained of a force of thirty-two airborne) from

/Aegean

(1) Applejack.

Aegean bases, and lost a merchant vessel. The two escorting Mosquitoes damaged two raiders, but one of them was hit by our own naval A.A.

German fighters, reinforced by two Gruppen, were seen on half the days in the month, maintaining an effort on those days of anything from thirty to sixty sorties. They tried on 2 December to pierce our air patrol lines in five small formations, but most failed and jettisoned their bombs. The effort was speeded up on a single day to one hundred and thirty sorties, but general conditions and their chronic low serviceability ratio prevented any repetition. Allied raids of 28 December rendered their close support bases unusable. The next day all fighters were held exclusively for airfield defence. A Me.410, a new fast light bomber, had landed intact on Monte Corvino airfield. In any appreciable strength, these aircraft would have influenced the air situation, but there were only a handful of them in Italy.

German fighter defence in Italy still remained patchy. Twelve Allied bomber missions only were intercepted by a total of two hundred/two hundred and fifty fighters. This poor effort contrasted vividly with the state of affairs in Bulgaria, Germany, and Greece, where Allied bomber raids met fighter opposition on every occasion in large numbers, inflicting notable losses on them. In the last week of the month, the weight of Allied raids into Austria and the Tyrol via the Adriatic littoral forced the Luftwaffe to move some forty/fifty single-engined fighters, previously based in the Plain of Lombardy, to the area North of Venice, where an O.C. Fighters Upper Italy had recently been set up as recorded. South of Spezia there were, at the end of December, about fifteen fighter-bombers and thirty-five single-engined fighters serviceable; and North of this point, some twenty long range bombers and seventy-five single-engined fighters serviceable.

Commentary

It would have been a simple matter to have glossed over the uneven air operations of November and December 1943 in a few plausible pages. Admittedly the record of the multifarious operations and their varying degree of correlation with the land war makes reading as difficult and glutinous as the winter ground which held down troops, aircraft and armour and made nonsense of so many well-intentioned plans; in the sometimes vain search for results one is infected with something of the intense frustration that was beginning to spread through all Allied ranks.

One very pointed question is often put, which must be answered. It is a question valid in its critical tone and in replying to it we may find fresh clues to the real temper of the time. Was not the Allied air effort at the end of 1943, it is asked, a colossal waste of energy? How was it that with the military initiative, and the outstanding air superiority at their disposal, the Allies did not finish the campaign or at any rate, take Rome? The latter half of the question can be at any rate partially answered. The final judgement will not be available until a balanced assessment can be made from all the Air, Army and Navy histories. An island like Pantelleria could be reduced by air attack alone: Italy could only be conquered as a result of combined operations. The exact balance of fluctuating ingredients and the perfect relative tempo in which the varying weight of air, ground and sea attack should be brought successively or simultaneously to bear at a given time and place were not then, and perhaps are not even yet, fully grasped. It is not suggested that complete

/ignorance

ignorance prevailed. On the contrary, some lasting lessons had already been learned, such as the practical impossibility of completely isolating a battlefield by air attack in the absence of sufficient pressure from ground forces; but the more one studies the campaign from a historical viewpoint, the clearer does the transitional, formative character of so many air operations emerge.

To take one point alone, it is a fair statement that the state of our technical knowledge was uneven and that although we had a surfeit of planners, plenty of aircraft and crews normally capable of good, spirited performance, we were weak at evaluation, weak in scientific analysis, hence ignorant of the exact results of our air operations. It was not for nearly a year that the Operational Research Section of M.A.A.F. - the child of the Bombing Survey Unit Mediterranean set up by Professor Zuckerman - was organised on an adequate basis and began to publish reports of value on the results of bombing. For this delay our difficulties in breaking with tradition, our misemployment and mistrust of scientists and our manpower shortage are all to blame. By then, and not until then, had the Partisan movement been trained to furnish periodic informed reports from among its members in railway employ and documents from the Italian railways, as well as German staff documents, come into our possession. By then, photographic evidence had accumulated and was being evaluated on more fruitful lines. By these and other methods it became possible to adjudge the part such factors as aircraft type, air tactics, bomb-aiming devices, weight of bombs in relation to different structural materials, German repair organisation, weather and so forth played in over-all and specific results. These reports will be dealt with more fully in the next volume. It is to be noted, however, that dealing from these later investigations retrospectively to late 1943 one could say the evidence was that the Allies were neither so good in some respects nor so weak in others as was believed at the time.

Lastly, the success of the Allied air offensive depended on, among other factors, the measure of German resistance. This was stronger and longer-lived than had earlier been imagined. Accustomed to live more on the land, lacking many of the comforts of the Allies, and usually without the tonic of air support, the Germans were the most formidable possible opponents in the world, and it is chastening to read in the Tenth Army War Diary the comments by high-ranking officers that among the most respected troops on the Allied front were the French gowms, native troops led by French officers.

Summary of Chapter 6

During the months of November and December 1943, the Allies could claim success to the extent that they had continued to hold down German divisions in Italy, and to have inflicted heavy losses in men and material on them. Two major rivers had been crossed at the most unfavourable period of the year and a fairly uniform advance in line made up the Peninsula. The Air Forces and the Navy had used their superiority to the best effect their extended structure would allow, and even if they could point to little really major and decisive action, were in constant practice and improving their methods.

The front line was now approaching the narrowest part of Italy, which the seasoned German Army could hold with less troops. The weather, the terrain, the high morale and applied

/science

science of the enemy would harden the position of stalemate. Rome was still distant. Casualties had been high. Build-up. was not rapid enough. The three Services were tired and disappointed at the deferment of their hopes. The only chance of retaining the initiative was to stage a sea-borne hook, establish a bridgehead, cut the Via Casilina: eventually the main and the bridgehead forces would join forces and advance to the capture of Rome. It will now be seen to what extent this gamble succeeded and failed, and why. The Air history of the months of January and February will be seen to revolve round the Anzio landing.

/CHAPTER 7



FIRST STALEMATE, ANZIO AND THE WINTER ATTACK

THE ANZIO PLAN

The Plan Maturing

Operations in
support of
Shingle, M.A.A.F.,
A.H.B. II J.11/49

'British Forces at
Anzio'

British Historical
Section Central
Mediterranean
A.H.B.II J.11/58/5
The History of
M.A.A.F. H.Q.

M.A.A.F. Rear
Secret Cypher
Message No.A.297

The idea of further sea-borne landings had existed since before the invasion of Italy. The only operation of this kind since possible had been that at Termoli. The original plan for an amphibious operation in the Rome area to flank the Germans opposite the Fifth Army and to assist the capture of Rome (1) was first developed in November, 1943. On 25 December, 1943, a conference was held by the Prime Minister at which the Shingle Plan was finally decided on. The beaches of the twin towns of Anzio and Nettuno, south of Rome and the Tiber River were chosen as the most favourable point for the landings. In the view of the Prime Minister, it would be folly to allow the campaign in Italy to drag on, and to face the supreme operations of Overlord and Anvil with the task in Italy half finished. It was agreed that an amphibious landing of not less than two assault divisions behind the enemy's right flank, and subsequent seizure of the high ground - Colli Laziali - in the Alban Hills system was essential for a quick decision. It should decide the battle for Rome and destroy a substantial part of the enemy forces.

Detailed planning was undertaken by the Commanding Generals of 15th Army Group, and of M.A.T.A.F. It soon became apparent to A.F.H.Q. that the wisdom of launching the operation was doubtful, unless an assurance that sufficient landing craft were available could be secured. This was obtained on 8 January, 1944 and modifications to other operational plans made. D Day was named as 22 January, 1944. Air plans were embodied in a general directive issued on 30 December, 1943 to the C.G.XII A.S.C., A.O.C. T.B.F., and A.O.C. D.A.F. The short period available for the detailed planning - twenty-three days - is again to be noted; the accomplishment of it was no mean achievement on the part of the Air planners,

TAF/60/AIR
30 Dec., 1943.

Role of Tactical Air Force in the Air Plan

ibid

In the General Directive mentioned above, the role of T.A.F. as a whole was given as follows. In the period up to D minus 1 Day it was, firstly, to continue its support of Fifth and Eighth Armies; secondly, to assist Strategic Air Force in neutralising and destroying the enemy air forces located in Central Italy; and thirdly, to impose the maximum interference on the movement of enemy forces and supply in Central Italy and towards the assault. In the period of D minus 1 Day, it was the same, with the additional task of providing protection to the Shingle convoys. In the assault period it was fourfold, covering protection by day and night for shipping at the assault beaches or in convoy, prevention of enemy movement towards the assault area from the north, imposition of maximum interference on enemy forces and provision of direct support for the assault forces.

Role of Tactical Bomber Force in the Air Plan

TAF/60/AIR No.4
4 Jan., 1944.

For the interdiction of enemy movement a detailed directive was issued on 4 January, 1944 to Tactical Bomber Force. In it, the primary mission of T.B.F. was given as to interdict rail communications in West and Central Italy, south of 44 degrees north latitude to the Rome area.

/Operations

(1) Operation Shingle

Operations of the 42nd Bomber Wing from Sardinia were scheduled by directives from T.B.F. to cover the period up to D Day. Target selection was to be in the following order of priority. The Florence - Orte line, the Arezzo - Orte line, the Pisa-Leghorn-Rome line, then certain alternative and by-pass lines; and lastly, to assist in the maintenance of the Cover Plan, - the Southern Coast of France from Nice on to Genoa - La Spezia - Pisa. Mitchells were to be used initially to support the Armies.

Role of Strategic Air Force in the Air Plan

The Supreme Commander expressed a desire to declare a 'Tactical Emergency', thus invoking a clause in the Combined Chief of Staff Directive of 5 December, 1943 aiming at the availability of Strategic Air Force for attacks on Shingle targets in support of the Ground Forces. He refrained, however, from taking this action, on the assurances of Air Marshal Tedder and General Eaker that all units of M.A.A.F. would be made available if the situation required.

TAF/60/AIR
3 and 15 Jan.,
1944.
MAAF/ACF/S.63
Air

Bombing Plan for
Operation
Shingle M.A.T.A.F.
15 Jan., 1944.

A notable change of emphasis in the bombing plan was evident in the directives issued on 3 and 15 January. The former was Air Marshal Tedder's last before relinquishing command. In it was a statement that detailed investigations had shown that disruption of rail communications could best be achieved by attacks on marshalling yards and major wagon repair shops by day bombers. The bombing policy for night bombers included attacks on important and congested marshalling yards. In the Bombing Plan for Operation Shingle of 15 January, 1944, marshalling yards were not included in the list of targets, but the tasks of the bombers of Strategic Air Force as well as Tactical Bomber Force in the three phases planned, included the wide-scale attacking and disrupting of railway lines. The change was symptomatic of the growth within M.A.C. and M.A.A.F., over a long period, of two sharply-divided schools of thought, known to history as the upholders of the Zuckerman and Interdiction Theories. The clash of the two theories and the ultimate compromise in the Italian theatre will be dealt with in a later chapter.

Air Force and Ground Intentions

Operations in
Support of
Shingle M.A.A.F.
A.H.B./II.J.11/49.

The general intentions of the Air Forces were to force the enemy to fight and to destroy as much of his air force in the air and on the ground as possible, to attack enemy communications in such a manner as to impose maximum disruption to enemy supply lines to the battle area and to support the ground and naval operations by every means possible from the air.

Ibid.

Ground intentions were, generally speaking, to cut the enemy's communications to the main front, forcing him to withdraw from his prepared line of defence; to bring our forces to bear under more favourable conditions, chosen by ourselves rather than the enemy, and to destroy as much of the enemy forces in the chosen area as possible.

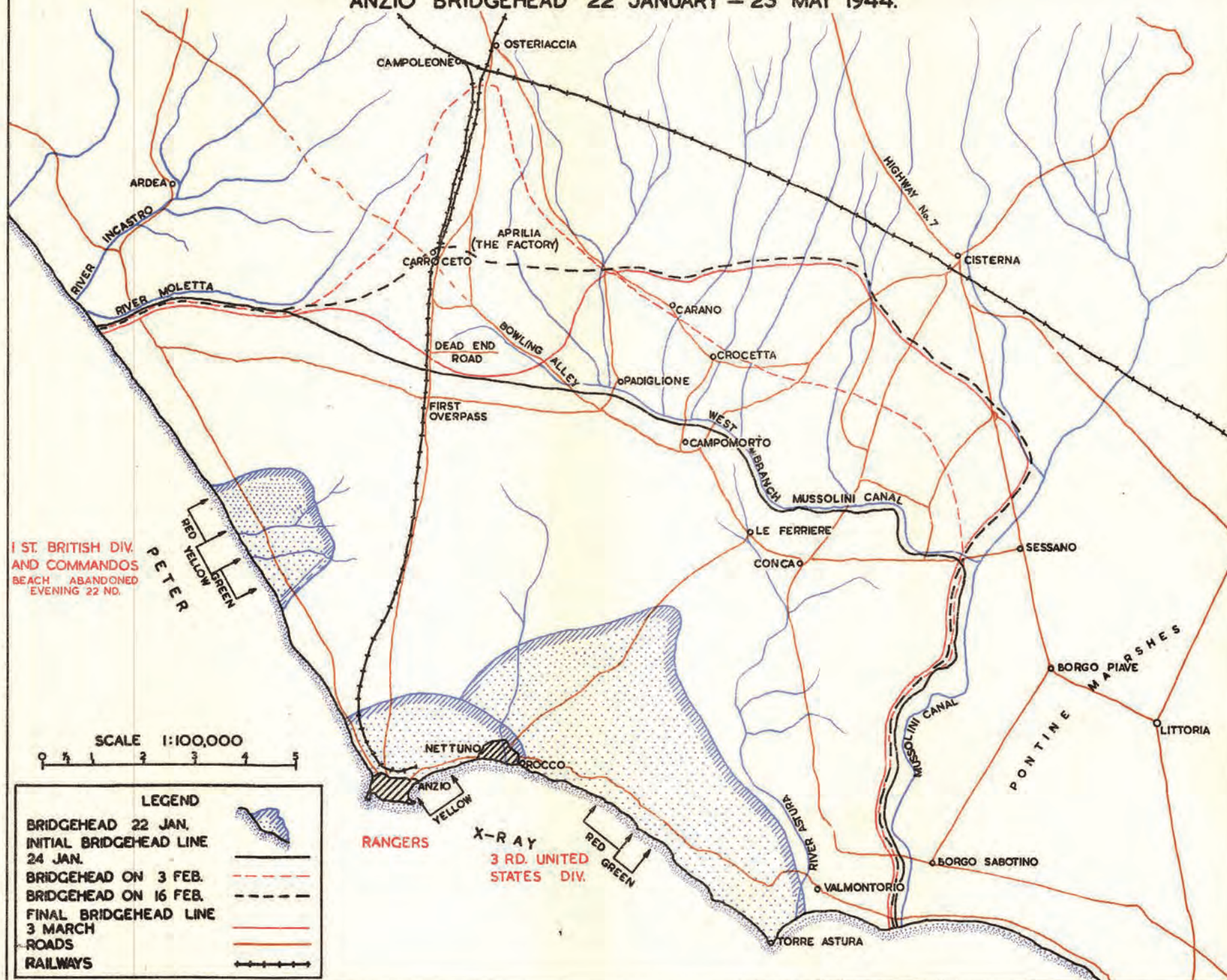
Choice of Terrain

15th Army Group
Instruction No.1
8 Nov., 1943.
British Forces at
Anzio - Hist
Sect. C: Med.
A.H.B./II.J.11/
58/5.

As far back as 8 November, 1943, 15th Army Group had discussed an amphibious operation directed on the Alban hills. The geographical reasons for the choice of this objective were straightforward. Rising just south of Rome, this large massif dominated both the two routes from Rome to the enemy's line on the Garigliano, Highway 6 (the Via Casilina) and Highway 7 (the Via Appia). The latter could be cut with ease by landing almost anywhere on the west coast of

/that

R. A. F. NARRATIVE OF THE ITALIAN CAMPAIGN.
ANZIO BRIDGEHEAD 22 JANUARY – 23 MAY 1944.



that region, but the Alban Hills mark the first point where the inland route, (No.6), is not protected by the almost trackless Aurunci mountains. If we could seize them (Highways 6 and 7), the enemy's communications would be cut and Rome almost within our grasp; a strong frontal assault on Fifth Army's front would, it was hoped, compel a wholesale withdrawal. It was soon decided that the site of the landing should be Anzio. It gave immediate access into relatively open terrain, though broken by water obstacles, over which good roads led directly to the Alban Hills only 20 miles away. The beaches were poor, but they were the best available south of the Tiber. There were three possible landing sites, one east and one west of Anzio and one in the port itself. The beach to the west was particularly shallow and had, in fact, to be abandoned after the initial assault. The weather was likely to be bad for beach working; forecasts promised an average of only two good days out of seven. Conditions would be much improved if the port of Anzio could be captured undemolished. As for opposition to the landing, it was not expected, unless enemy intelligence had foreknowledge of the plan, that he would have any large forces in the area. The coastal defence system, now unoccupied, appeared complex, but played no actual role in the resistance to the landing.

The Fifth Army Plan of Operations linked with Shingle

15th Army Group
Operations
Instructions Nos
32 - 34.

Fifth Army was to make the strongest possible thrust towards Cassino and Frosinone shortly before the assault landing, so as to draw in enemy reserves which might be turned against the landing forces; then, to create a breach in his front, through which every opportunity would be taken to link up rapidly with the sea-borne operation. For this X Corps was reinforced by the 5th British Infantry Division; later the New Zealand Div. was withdrawn from Eighth Army and moved to the Naples area by 26 January, for Shingle. Concentration of the maximum forces in Fifth Army sector was realised as likely to be the most profitable strategy. Successive attacks by the three Corps were planned; by the French Expeditionary Corps on 12 January against the high ground north of Cassino; by II Corps on 15 January to capture Monte Porchia and Monte Trocchio and reach the Rapido River, and by X Corps on 17 January, to cross the lower Garigliano in the Minturno area and attack northwards up the Ausente River valley towards San Giorgio A Liri. Finally II Corps was, on 20 January, to force the Rapido near Sant'Angelo and, supported by armour, exploit rapidly westwards and north-westwards. Two days later VI Corps, (a mixed force of U.S. and British units) was to land at Anzio, in the strength of two divisions.

Fifth Army Plan for the Anzio Landings

5th Army Field
Order No.5(i)
12 Jan. 1944.

The Fifth Army plan for Operation Shingle was for VI Corps to seize and secure a bridgehead in the vicinity of Anzio and then to advance to the Alban Hills. The beach-head was to be seized by three co-ordinated assaults. On the right the 3rd United States Division was to land three regiments to assault over 'X-Ray' beaches about 4 miles east of Anzio. The Ranger force of three battalions and the 504th Parachute Infantry were to land east of Anzio harbour, with the task of clearing the harbour area and silencing local enemy defences.

/On

On 'Peter' beaches, 6 miles northwest of Anzio, a brigade group of 1st British Infantry Division was to assault; the 2nd Special Service Brigade was to land with it and strike east to establish a road block on the main road above Anzio. The entire assaulting force was to link up to consolidate a beach-head seven miles deep, centering on the port of Anzio.

PRE - ASSAULT OPERATIONS

Ground Operations

On the Adriatic, Eighth Army was still trying to break through the enemy's defensive system, but with less and less success as the weather worsened and the enemy's strength increased. On 5 and 6 December the Indians and Canadians had crossed the Moro River, across which they had driven the 1st Parachute Division after a bitter struggle. All attacks on Orsogna failed. For another five months no advance was made east of the Apennines. The Germans profited by the interval to relieve their troops and strengthen defence lines further north.

On the Fifth Army front, II Corps and the French Corps, between 3 and 15 January, drove the Germans back through their deep winter positions on to the Gustav Line. San Vittore and Monte Porchia were captured on 6 January and Monte Trocchio, the last hill before the Garigliano, was abandoned by the enemy on 15 January. The Germans were alarmed by an advance by the 2nd Moroccan and 3rd Algerian Divisions of 10 miles through Monte Santa Croce, across the upper Rapido, to Monte Pile. On 20 January, Headquarters 15th Army Group opened in the Royal Palace at Caserta.

The Cover Plan

The air operations connected with the projected Anzio assault opened on 2 January, 1944. As cover plan, a belief was fostered in the enemy's mind that an Allied landing was imminent north of Rome, with Civitavecchia as the most likely assault point. Other feints were devised, including a gathering of troops and landing craft in Sardinia and Corsica. Air attacks were made to draw attention to northern Italy, while fighter-bombers scoured the Civitavecchia area. On 2 January, seventy-three U.S. Mitchells made four attacks on railways along the French-Italian Riviera and marshalling yards at Arma Rive. The next day fifty Fortresses bombed Turin railways and others its industrial targets.

The Three Phases of the Air Plan

The Allied bombing programme was divided into three phases, not to be confused with the three phases of T.A.F. operations outlined above. The preparatory phase, extending from 1 to 14 January, inclusive, would see the disruption of rail communications in central Italy, as well as the cover operations mentioned in the last paragraph. The second phase, from 15 to 21 January inclusive, would be characterised by an all-out effort to isolate the battle area by increased attacks on railways and roads north of Rome and those leading to Anzio from the Fifth and Eighth Army fronts, and an intensification of counter air force operations. The third phase, extending from D Day onwards, would continue the isolation of the battle area by means of air bombardment and provide maximum close support for the ground forces. As regards the attacks on railways, Tactical Bomber Force would concentrate on nearer targets in central Italy and Strategic Air Force on those in the North.

/Air

Ibid. and
M.A.T.A.F.
Intelligence
Appreciation
No.3, TAF/317/1/
MT. (undated)
British Forces
at Anzio
Br.Hist. Sect/
C.M. AHB/II J.
11/58/5.

Ibid.

Air Operations in the First Phase of Shingle

Ibid.

After the heavy bomber cover operations, Strategic Air Force continued the attacks on strategic targets from 4 to 13 January. The contemporary political situation called for diversions of strength to Balkan objectives such as Sofia, Pola and the Piraeus. The Fighter Aircraft Factory at Reggio Emilia, producing thirty Italian fighters a month, as well as other items used by the Luftwaffe, was so seriously damaged that a substantial reduction in production for half a year was probably inevitable. Tactical Bomber Force attacked railroad communications in Central Italy at many points, to disrupt the flow of supplies to the two fronts, on all days except one.

Attacks on Airfields in the First Phase

No. 7 A.A.S.C.
War Diary
M.A.T.A.F. ORB.

Operation
Shingle
M.A.T.A.F.

The German reconnaissance Ju.88s and Me.410s were at this time based at Perugia. An attack on this airfield by forty-eight Mitchells, accounting for four aircraft, opened an extended blitz on the enemy air forces. Again, on the night 8/9 January Wellingtons attacked Viterbo, where fifty-two fighters were harbouring, and left many fires among aircraft and buildings. Four nights later, Perugia was again visited, this time by a few Wellingtons. Liberators, following up the next day, had the same trouble as the previous missions in finding the target in the poor visibility conditions.

Activity soared on 13 January over the fighter and fighter-bomber bases in the Rome area, from whence an increased activity over the battle area had been noticed over the preceding three days. Guidonia was bombed by sixty-eight Mitchells and thirty-seven Fortresses, Ciampino by thirty-six Marauders and sixty-one Fortresses, Perugia by forty Liberators. Where mediums and heavies co-operated, the heavies dropped demolition bombs to hole the runways and surfaces, thus preventing aircraft from taking off, or if they were airborne, damaging them in landing; an hour later, the mediums attacked with fragmentation clusters to destroy and damage aircraft in the dispersal areas. Photographs showed eight aircraft destroyed on the ground at Guidonia, nine at Ciampino, and four at Centocelle. Damage was done to other aircraft and airfield installations. The sum total of these attacks was restrictive but the damage to aircraft on the ground less than hoped for. The all-out attack on 13 January goaded the enemy fighters to opposition; of fifty/sixty fighters encountered, seven were destroyed, for the loss of two Mitchells, two Lightnings and one Thunderbolt.

Attacks on Airfields in the Second Phase

Ibid.

This programme extended up to the eve of the landings. The northern bases for long range bombers at Osoppo and Villaorba were attacked, as a precaution, on 16 January by heavy Strategic bombers and the latter base the same night by Wellingtons. There were few bombers in the area at this time, but the damage inflicted must have hindered the Ju.88 groups when they returned to bomb shipping off Anzio. Villaorba had already been raided on 10 January and nine Me.109s hit beyond hope of repair. Eighteen other aircraft were badly damaged. What airfields were still serviceable in the Rome area were bombed on 19 and 20 January.

/Fortresses

Fortresses, escorted by Lightnings, and Thunderbolts as top cover for some missions, carried out one hundred and ninety-one effective sorties against Ciampino, one hundred and three against Centocelle, and fifty-six against Guidonia, formerly the Italian experimental air base. The net result was greatly to the Allied advantage. The enemy was forced to pull out his tactical squadrons from all the Rome area fields, only using a few fields over the following critical period as emergency landing grounds. The next stage back for the Luftwaffe was to the Rieti and Viterbo fields. This logical move was forestalled and hampered by attacks on 19 January by one hundred and sixty-three Marauders and Mitchells.

Blinding the Luftwaffe Reconnaissance Organisation

Ibid.

It was becoming more and more important and at the same time difficult, to conceal the assembly of men and materials massing for the attack. To aid the retention of tactical surprise, nothing so effective was accomplished by any of the armed forces as the strike of 19 ~~January~~ on the enemy long-range reconnaissance base at Perugia. Fifty-nine U.S. Liberators set out in two almost equally-sized missions. One of them failed to locate the target, so the twenty-seven aircraft turned across Italy to bomb Iesi airfield near Ancona. Twenty-eight of the remaining aircraft found Perugia and bombed it so successfully that for four days the Luftwaffe was unable to resume long range reconnaissance. They were thus deprived of vital visual evidence. In itself this might not have guaranteed the preservation of the element of surprise to the Allies. Very fortunately for them, other factors, which will be detailed later, were ruling at the time, and this success added to them, gave us the immunity which could not otherwise have been claimed.

Attacks on Bomber Bases in the South of France

The long-range bombers had made several attacks in January from the bases of Salon and Istres. More were expected as soon as the invasion convoys were sighted or shipping assembled. As a precautionary measure, on 21 January thirty-two Fortresses bombed Istres and thirty-six bombed Salon. Both bases were revisited on 27 January, the former by twenty-nine Fortresses and the latter by sixty-seven Fortresses: great damage was done to hangars, control buildings, workshops, the airfields and parked aircraft. Montpellier, too, was successfully attacked by sixty-eight Fortresses. The full significance of these attacks will be more apparent when the Luftwaffe bomber Order of Battle is dealt with, a few pages on.

/Other

Other Air Operations in the Second Phase⁽¹⁾

Ibid.

While the neutralisation of airfields proceeded, a bombing campaign of great intensity was executed by both heavy and medium bombers against railway lines. It was rightly estimated that because of the fact that by only four main routes could the enemy transport supplies to the front, the rail system was very vulnerable, but the Allies were over-sanguine as to their ability to cripple decisively the enemy's supply system and block the minimum of stores necessary to maintain a static front.

The bombing accuracy achieved by the Marauders, (now equipped with Norden bombsights) in the initial phases of the communication-cutting operations north of Rome, indicate that these groups were capable of destroying bridges, provided a reasonably strong effort were made. This was exploited by using Marauders against rail bridges, while Mitchells, equipped with the less precise British MK IXE bombsight, were used against choke points and marshalling yards. The success of these operations was such that by 19 January (D minus 3) all communications from Northern Italy to the Rome area were cut.

Pre-Assault Air Operations in the Western Battle Area.

No. 7, A.A.S.C. War Diary. The progress of Fifth Army up to the eve of the assault was due in no small measure to the Twelfth A.S.C.'s close support and air protection, although there were occasions, such as the crossing of the Garigliano, when bad weather disappointed both Army and Air Forces. The U.S. Invader and U.S. Warhawk effort was noteworthy, over one thousand and nine hundred sorties respectively being flown in the first fortnight. Equally important in their sphere were the fourteen hundred sorties by R.A.F. and U.S. Spitfires patrolling the battle area, carrying out offensive sweeps of the Rome area and escorting bombers. Most of the Warhawk effort was directed on battlefield targets; the Invaders dealt with communication in the enemy's immediate rear.

Before the French attack on 12 January the accent of the air effort was in the central sector. There, as a prelude to the capture of Cervaro, west of Cassino, this town was bombed almost daily. With the help of U.S. Bostons, the French maintained continuous pressure on Cassino, now only four miles away from the nearest Allied troops. Switching to the right flank of the French, the U.S. Warhawks and Bostons bombed the enemy's positions north-east of Cassino; in the central sector, the enemy was slowly bombed off Monte Trocchio. Communications were the care of U.S. Warhawks, U.S. Invaders, U.S. Mitchells and U.S. Marauders. They bombed the Cassino and Cervaro road junctions, the rail yards at Aquino and Ceccano, burst the dam at Isoletta, hit Pontecorvo bridge, rails and roads at Frosinone and Fondi, a tunnel entrance at Terracina, bridges, roads and railways north-west of Cassino and Frosinone.

/Further

(1) Comparison of Effort in Phases One and Two

In the course of Phase One of operations connected with the Anzio project, the Mediterranean Allied Air Forces flew a total of 12,974 sorties, dropping 5,777 tons of bombs and destroying ninety-one enemy aircraft for the loss of twenty-seven Allied bombers and fifty-five fighters. In Phase Two, the sortie total over the seven-day period as compared with the previous period of fourteen days, was 9876. 6461 tons of bombs were dropped and fifty-one enemy aircraft believed destroyed for the loss of thirty-one bombers and twenty-nine fighters.

Further back, Warhawks bombed several points on the supply routes from Rome to the western battle area, and Invaders went to Civitavecchia, thus helping both the larger effort and the cover plan and creating blocks at key points.

The German Air Force conserving its Strength.

The enemy fighter effort during Phases One and Two showed no deviation from its even, inconspicuous course and although it must have been apparent from the pattern of Allied bombing that there was going to be little respite in the approaching period, fighters came reluctantly to combat. Their fair-weather daily effort hovered round the figures of one hundred/one hundred and twenty fighter sorties in all, with fifty/sixty sighted in the Rome area. The long-range bomber Ju.88s left Northern Italy for a temporary sojourn in the South of France, only to return, greatly reinforced, towards the end of the month. Fighters trickled south to the Rome area.

German Air Attacks on Allied Targets, 1 - 21 January, 1944

Owing as much to internal moves as to lack of enterprise, few long-range bomber raids were carried out by the Luftwaffe in January before they reacted to the Anzio landings. On the night 8/9 January, sixteen enemy aircraft made two unsuccessful attacks on a convoy off Appollonia. Seven Hurricanes were airborne, but made no contact, although ship's gunners accounted for one bomber. An eastbound convoy which had been shadowed by submarines for two previous nights, was attacked off Oran on the night 10/11 January by twenty Ju.88s and He.111s, whose torpedoes sank one merchant vessel and damaged another, which reached port in safety. Escorting fighters intercepted the bombers and Beaufighters claimed four Ju.88s destroyed. U.S. Beaufighters claimed one Ju.88 damaged. Ship's gunners claimed two He.111s destroyed. The Germans admitted the loss of six aircraft.

THE OPPOSING AIR FORCES

Enemy Fighter and Bomber Forces

On 22 January, enemy fighter strength in Italy was estimated at two hundred Me.109s and twenty five to thirty F.W.190s. Rather more than one-third of the Me.109s and all the F.W.190s were based in the Rome area, providing slender close support to the ground forces. Up to D Day, the January daily effort of eighty to one hundred sorties per day, apart from routine flights, has already been noted. The remainder of the enemy fighter forces, some one hundred and twenty Me.109s were based in northern Italy for the defence of industrial and communication targets north of the Apennines, and to intercept Allied bomber formations on the way to Central Europe. There were no night fighters in the theatre. Six Gruppen of long range bombers, comprising some one hundred and eighty Ju.88s, had been withdrawn to Germany from the Mediterranean during December in preparation for reprisal raids on England. On 22 January, the only striking force available to the Germans to meet a landing was the two Gruppen (fifty Ju.88s) in Greece and Crete and two Gruppen of torpedo bombers (about sixty Ju.88s and He.111s) in the South of France.

/Enemy

Rise & Fall of
the German Air
Force.
Air Ministry.

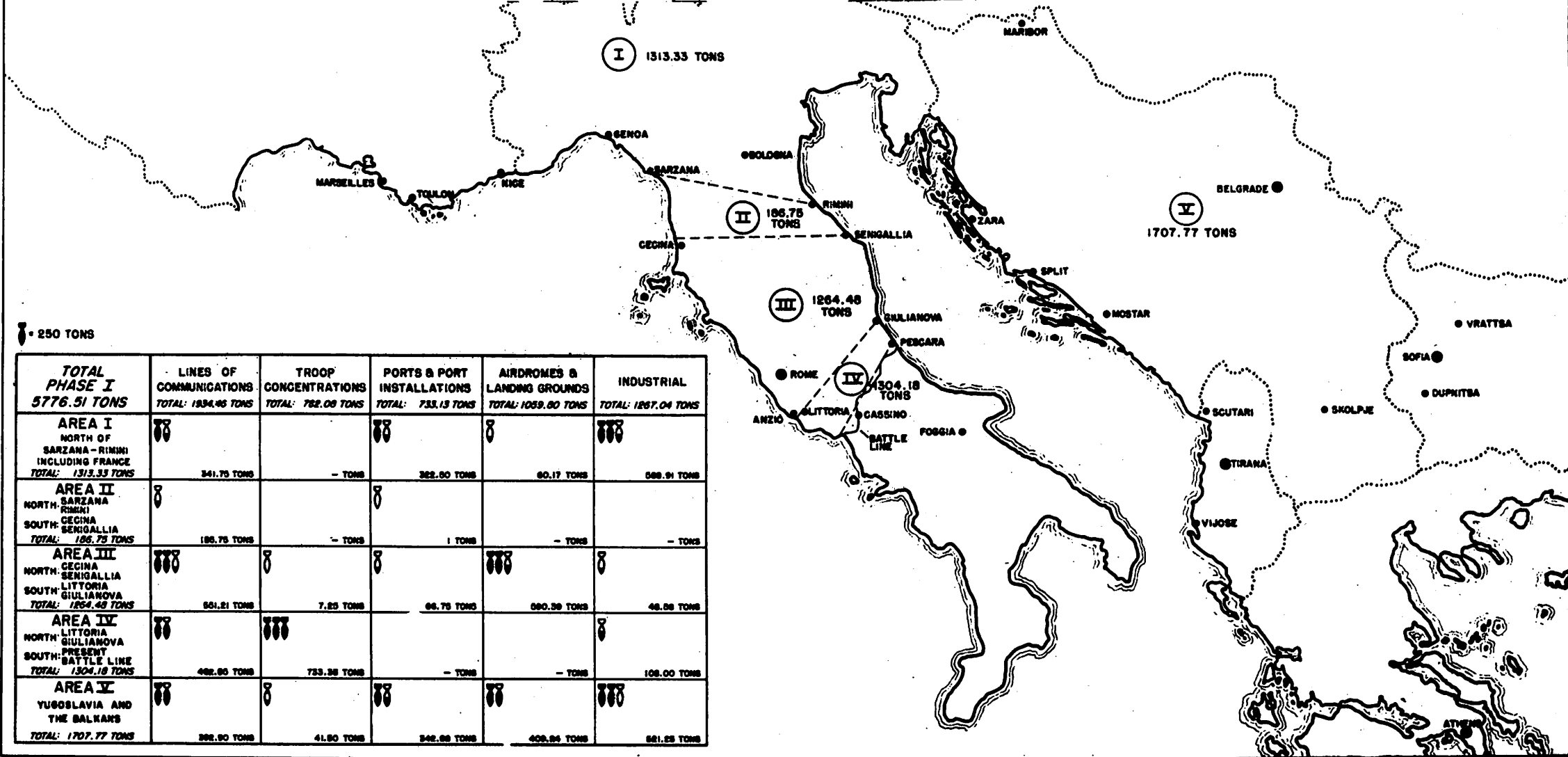
Air Ministry
Weekly
Intelligence
Summary.
C.A.F. O.R.B.

Rise & Fall of
the German Air
Force. Air
Ministry.
A.C.A.S.(I).

R. A. F. NARRATIVE OF THE ITALIAN CAMPAIGN

ALLIED BOMBING EFFORT — SHINGLE OPERATION — PHASE I

1 January 1944 to 14 January 1944



Enemy Reconnaissance Forces

Ibid. and
Kriegstagebuch
(War Diary) of
Deutsches Markdo
Italien
(at N.I.D.(1.5)
Admiralty)

Up to the time of the Perugia raid on 19 January (the successful issue of which has been noted), the German routine was to fly two or three sorties daily and nightly from that base up and down the Tyrrhenian and Adriatic coasts. To achieve this, a standing force of twenty Ju.88s and Me.410s was maintained. Tactical reconnaissance over the battle area was made by Me.109s, (some coming from Croatia) and during the week preceding the landing these aircraft also carried out reconnaissance off the west coast south of Rome. The last German air reconnaissance of Naples was on 11 December, 1943. Their intelligence was in serious arrears on both Naples and Salerno. The progress of the Allied convoys was unobserved. Thanks to the raid on Perugia, the Allied landing craft off Anzio were not sighted until 0815 on 22 January. This was some 6 hours after the initial landing time and it fell to a Tac/R Messerschmitt 109 to make the observation.

Allied Air Strength at the Time of the Anzio Assault

The total strength of Allied aircraft of all types brought into play in the Anzio operation was two thousand five hundred and sixty-seven in Phase 1, two thousand six hundred and ninety-one in Phase 2 and two thousand nine hundred and three in Phase 3. It is as well to consider the variety of types included at this time. This, as well as the total aircraft airborne and the total effective sorties flown in Phase 3 are given at Appendix 15. Phase 3 extended from 22 January to 15 February, 1944.

Locations of the Allied Air Forces

Order of Battle
M.A.A.F.

By now the Allied Air Forces were deployed to great advantage for the struggle for the road to Rome. Of the totals given above, nearly 55 per cent was located at the Bari, Foggia and Termoli bases and the remainder at Naples and on Corsica and Sardinia. U.S. Liberator Groups, defensive fighters and Coastal aircraft were in the Bari area. U.S. Fortresses, R.A.F. Wellingtons, a U.S. Mitchell force, R.A.F. and S.A.A.F. light bombers, S.A.F. fighters and the Photographic Reconnaissance Spitfire and Mosquito Squadron were all at Foggia. In the Termoli area the depleted D.A.F. Kittyhawk, U.S. Warhawk and Spitfire squadrons stood by for the support of Eighth Army. In the Naples area nearly eight hundred and fifty bomber, fighter, coastal and reconnaissance aircraft were concentrated, in particular a large U.S. Mitchell force, in addition to Twelfth Air Support Command's increased fighter, fighter-bomber and reconnaissance strength and the C.A.F. defensive squadrons. The U.S. Marauder bomber force was based on Sardinia, in company with strong U.S. Lightning, Beaufighter and Mosquito contingents. In Corsica there was a sizeable U.S. Mitchell detachment and a fairly strong and balanced fighter force, operating from airfields dotted along the east coast. In the rear areas M.A.C.A.F. controlled a force of defensive fighters and coastal aircraft along the North African seaboard, on Sicily and on Malta to cover Central Mediterranean commitments. Co-operation with the Navy was ensured by A.H.Q., Air Defences Eastern Mediterranean and H.Q. No.201 Group, later merged to form A.H.Q. Eastern Mediterranean.⁽¹⁾

/Responsibilities

(1) The Order of Battle of Tactical Air Force at the time of Anzio is given at Appendix 14.

Responsibilities for Protection and Close Support

TAF/60/AIR
30 Dec. 1943 and
Jan. 1944,
Op. Instructions
and Directives.

Fighter cover from the departure port of Naples as far as Ponza Island over the assault convoys was the task of Coastal Air Forces; from thence to the beachhead and there-over, of Twelfth Air Support Command fighters, fitted with long-range tanks. This cover was to be in three layers. At 20,000 to 25,000 feet over beachheads and convoys were to be four Spitfire patrols; at 16,000 to 18,000 twelve Spitfires (eight over the beachhead and four over the convoy area); and at 8,000 feet sixteen American Warhawks (eight over the beachhead and eight over the convoy). To extend the hours of patrol to cover dusk and dawn periods, sufficient Spitfire pilots had been trained to take off and land in darkness. A control ship gave warning of enemy aircraft to air patrols, who intercepted visually, since their patrol areas were small and visibility normally good. Pilots and controllers used a simple Code Card developed at Salerno, bearing three rows of four letters each, to enable them to indicate area locations speedily. This would serve until, as at Salerno, it was believed broken by German control. The Warhawk pilots were to be used as 'triple threat' men. They were to proceed to the beachhead area for patrol, bombing both on the way to, and from their patrol, thus carrying out three functions.

Twelfth A.S.C. provided air support to the Fifth Army landing on a direct and simple system. Air Support Command received requests for attack of ground objectives through No. 7 A.A.S.C. from one source only, namely the Commanding General of Fifth Army, who had with him an Air Liaison Officer in an advisory capacity. Command Post of Twelfth A.S.C. and that of Fifth Army were adjacent. The Army collected its own target information, determined priority for attack and passed requests for attack to Air Support Command. The C.G. of Twelfth A.S.C. evaluated these requests and decided which to carry out. An air support communication squadron was turned over to the Army, to aid in the collection of target information to facilitate this target designation system. A nightly conference was held at which Fifth Army and Twelfth Air Support Command personnel discussed the coming days operations and drew up programmes and priorities. A directive to Wings and Groups concerned followed, passed on by M.O.R.U., any alterations being passed by telephone. This conference set aside a force for 'call targets', to function in response to a telephone call, if attack at minimum notice were called for. If the C.G. of M.A.T.A.F. could not cover the sum of Army requests he could call on the C.G. of M.A.A.F. to supplement the support with strategic aircraft. Aircraft in the air were controlled by 64th Fighter Wing⁽¹⁾ in Naples, a Control Ship off the assault beach, and ultimately by a Control Squadron established on the beachhead. The use of a Control Ship separate from H.Q. Ship was an intelligent application of the lesson learnt at Salerno and a success.

Night fighter protection over the assault area was provided by Coastal and Tactical Air Force Beaufighters, directly controlled by Coastal and Twelfth A.S.C. Fighter Wings. It was reckoned that enemy bomber attacks would fall mostly at dusk and dawn; accordingly four pairs of night fighters were to operate shortly before daylight and in the early evening. During the night hours two pairs patrolled, one under radar control, the other free-lancing.

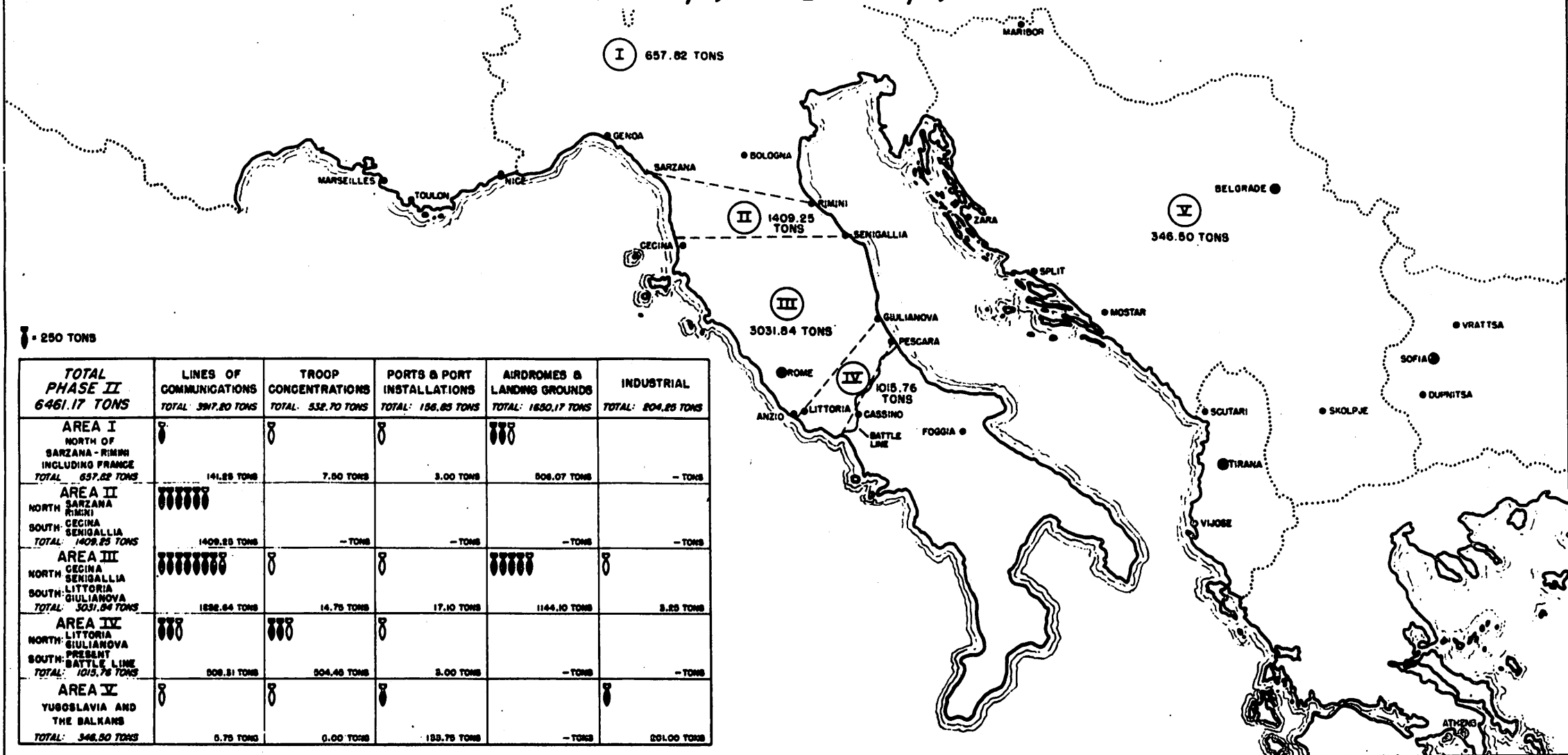
/The G.C.I.,

- (1) All records of 64th Fighter Wing were sent to Washington, apparently without being microfilmed.

R. A. F. NARRATIVE OF THE ITALIAN CAMPAIGN

ALLIED BOMBING EFFORT—SHINGLE OPERATION—PHASE II

15 January 1944 to 21 January 1944.



The G.C.I., as at Salerno and Sicily, was first mounted in a L.S.T., later ashore. Gunfire spotting for the Navy was provided by R.A.F. Spitfires, and for the Army by U.S. Mustangs. No. 654 Squadron flying Air Observation Post Austers continued their valuable function over Fifth Army. Many reports up to this date had testified to the success already achieved in bringing down artillery fire on the enemy's positions, out of all proportion to their insignificant dimensions.

THE ASSAULT

The Unopposed Landings

Rise and Fall of the German Air Force (A.M.)

British Forces At Anzio

Annexe III to
Appendix C-1
British Hist.
Sect. Central
Mediterranean

The assault convoy sailed from the Naples ports on the afternoon of 21 January and with a calm sea and good visibility proceeded, covered by one hundred and thirty-five fighters, towards Anzio. Without interference from enemy surface craft or submarines, and unobserved, the convoy reached assembly stations off the beaches. To avoid raising the alarm, no preliminary naval bombardment of the beaches was arranged, although at Civitavecchia a diversionary bombardment was proceeding. A salvo of seven hundred and eighty-five rockets at 0149 hours provoked no reaction. Zero hour was 0200 hours. At 0225 hours the 2nd North Staffordshire were ashore, followed by the 6th Gordons. Others followed and British Brigade H.Q. was established ashore by 0530 hrs. Throughout the day our units advanced against slight opposition to gain their initial objectives. A bridgehead was established and its perimeter closed on the first day.

Medium Bomber
Operations.
1 Jan - 28 Aug.
1944. H.Q. Twelfth
Air Force A.H.B.
IIJ11/12.

Complete tactical surprise had been achieved. The main German forces were at the moment launching fierce counter-attacks against X Corps. The enemy shore defences were unmanned. The only German unit in the area and for 25 miles on either side of it was a battalion of the 29th Panzer Grenadier Division, which had been severely mauled in recent fighting and was resting.

Tactical Surprise

Captured German
Document.
A.H.B. 6. Trans-
lation VII/82

The reasons for the complete local tactical surprise show a complex of events and a degree of German unawareness which could hardly have been more favourable from the Allied viewpoint. On 12 January Kesselring warned the Chief of General Staff of Luftflotte 2 that fresh enemy landings must be expected before long in the Italian theatre, possibly in the Rome, Leghorn, Genoa, Rimini-Venice or Istrian areas; the attack might take the form of a feint at Rome while the main forces landed at Leghorn. He ordered elaborate defence measures, including concentrations of forces, machinery to ensure maximum flexibility in deployment, anti-aircraft cover, transport and fuel readiness and precautions on airfields against possible airborne landings in the rear areas. The deadline for reports on progress made was 30 January. The code word for signs of an imminent landing was Himmelfahrt, followed by a regional code word. Three days later, while the general possibility of some such minor operation was admitted the view was held that no major landing was likely for some time - it was out of the question for anything up to four to six months to come. On 18 January, when 5th Br. Inf. Div. launched an attack on the Gustav Line, Kesselring believed that to be the principal operation in the contemporary phase. During the four days before Shingle, he only made one fleeting remark on the possibility of such an event. Shingle came as a complete surprise to him.

Von Pohl Report
No. A.592
C.S.D.I.C. (Air)
CMF German Naval
War Diary
(at N.I.D. (i.5))
10th Army War
Diary Report No.
20 Army H.Q.
Ottawa. (A.H.B. 6)

G.260700/DEW/5/50.

There was no evidence forthcoming to warn the Germans, no agents' reports on Allied intentions of any value, a fact complimentary to the loyalty of the Italians in our area. The luck was against the Luftwaffe. The German air reconnaissance had been crippled at Perugia and fog had intervened to prevent last minute reconnaissance of repaired aircraft. Naval patrolling, too, was ineffective. Their radar warning system broke down on the night 21/22 January. The Allies for their part did nothing to announce their approach, keeping strict radio silence during the periods of port assembly and convoy. The Anzio landings interrupted the reorganisation of the Tenth and Fourteenth Armies, created a new threat to the weakened Cassino front and enforced immediate redispersions.

Captured German
Document/Ops
Div. Luftflotte 2
A.H.B. 6 Transln.
VII/82.

Kesselring was not alone in misconstruing the significance of the attack on 18 January. On 20 January an order signed by Hitler was circularised for attention of all troops. The position was to be held. A defensive victory at that point might have extensive political effects, disorganise Allied plans for the main invasion and afford the German troops many weeks of rest. Counter-attacks were to be timed for dawn, sundown or during bad weather, when our air operations would be impossible. He reiterated the order to hold every foot of ground as a matter of honour.

Rapid Reaction by the Luftwaffe.

German air reconnaissance had degenerated over the early winter months into routine weather and sea patrols. What they might have achieved in providing evidence of Allied plans had been denied them by the play of chance, fighter interception and the applied science of Allied methods: but, poor as was the condition of German intelligence and however it was misconstrued, it was a military virtue of the Germans to react quickly to a threat once recognized.

The German Air Force's reaction to the major strategic threat of Anzio was prompt and energetic. Between 22 and 31 January one hundred and thirty-five long range bombers were rapidly moved to Italy from N.W. Germany, France and Greece, including aircraft which as late as the night of 21/22 January had been operating over London.⁽¹⁾ Simultaneously the anti-shipping force in Southern France was reinforced by fifty to sixty Do.217s and He.177s, operating with Hs.293 glider bombs. These operated against assault shipping, using advanced landing grounds in Italy. Luftflotte 3 had already taken over operations from the South of France from Flieger Korps II. On the other hand, there was no immediate strengthening of close support forces. In late January there was a move of some fifty single-engined fighters from Northern to Central Italy, but there was no reinforcement from outside Italy until the end of February, when forty single-engined fighters were transferred from the Western Front for the support of the third German counter-attack.

/Fighter-bomber

- (1) Between 22 and 31 Jan. 1944, the following elements of eight Long Range Bomber units were transferred to Italy:-

From Greece	I, III Lehr I	45 aircraft
" W. Front	II, III K.G. 30	40 "
	I K.G. 76	15 "
" S. France	II K.G. 100	5 "
" Refitting	I K.G. 30	15 "
	II K.G. 76	15 "
		135

During the following week
another Gruppe returned to N. Italy 15
150 aircraft.

Fighter-bomber strength never exceeded forty operational aircraft at this period, whatever local Allied units may have reported, and the failure to reinforce the fighter-bomber force beyond this figure was one of the most striking features of the German attempts to liquidate the Anzio bridgehead. Nevertheless, the overall increase in strength by 1 March, 1944, was substantial, amounting to nearly 35 per cent since the landing on 22 January. At its peak, Luftwaffe strength in the Mediterranean rose to some seven hundred and fifty aircraft, of which five hundred were in the Central Mediterranean, and approximately four hundred and fifty/seventy-five available for operations in the Anzio area.

Luftwaffe Operations against the Bridgehead

Ibid and
'Rise and Fall
of the German
Air Force' (A.M.)

In the first phase of air operations against the Anzio bridgehead, before the Germans had recovered from their local surprise, and before ground troops had moved against the bridgehead, the main reaction was by long-range bombers, to whom was assigned the task of hindering the Allied build-up by attacks on shipping. The weight of this task fell on the torpedo and glider-bombers, who carried out more than twenty attacks on shipping off Anzio, opening with a total effort of one hundred and forty-five sorties on the nights 23/24 and 24/25 January.

The effort - which included some Do.217's from as far as Bordeaux - remained high until the night of 26/27 January, when one hundred and five bombers attacked shipping at Anzio; then it gradually fell off, although they operated in the area on every night up to and including 29/30 January. Thereafter, bad weather prevented bomber operations over Italy for a week. Owing to strong Allied fighter patrols, these bombers were unable to operate in daylight and suffered crippling losses in experienced crews and aircraft. The proportion of hits or near misses to total sorties fell sharply and they could not sustain the initial effort. Only part of the forces airborne reached their targets, where they met strong night fighter defences. So, when the German Army delivered its first counter-attack on 3 February, Luftwaffe support was inadequate. Between 3 and 15 February, seven attacks on shipping took place, but the highest total of sorties on any one night was only about fifty, of which twenty were by Do.217's and He.177's (with glider bombs). The Ju.88 units in Northern Italy, crippled by a strategic raid on Villaorba, proved incapable of more than small harassing attacks, mainly on ground targets, with forces rarely exceeding ten/fifteen aircraft. Daylight attacks on shipping by bombers and fighter-bombers were not, in the aggregate, very successful. There was an attack on 24 January against three hospital ships, two of which were damaged and one sunk without serious casualties. Total shipping losses attributable to enemy air action at Anzio - Nettuno during the period 23 January to 19 February amounted to three naval vessels sunk and five damaged, and one merchant vessel sunk and seven damaged.

Escorted Long Range Bomber Convoy Attack

Ibid and
A.M.W. 15
No.231.

The Germans had taken to heart some of the lessons learnt in the October and November attacks on convoys, usually made at high cost to themselves. The results of this, as well as the strenuous measures taken by Coastal Air Force, could be measured in the study of the attack on the convoy off Oran on the evening of 1 February.

/Weather

Weather was foul over Italy: the bombers were free for a long range effort, the first for some time past. This time the bombers were escorted by twin-engined Me.110 fighters. The Coastal plan for interception further North than heretofore, made about a month before, was executed, Allied fighters intercepting the raiding force fifty miles North of the convoy. Altogether, fighters and A.A. destroyed five aircraft, a loss admitted by the Germans and one which weakened by so much the forces available for glider-bomb and torpedo attacks against the Allied sea-borne build-up at Anzio.

Von Pohl Series
of Interrogation
Reports - A.595
C.S.D.L.C.(Air)
C.M.F.
(A.H.B.6.)

Re-Deployment of German Flak

Weakness in aircraft in the Italian theatre led to greater emphasis on the employment of flak, which played an important part in army co-operation at Anzio. By 24 January, all available flak forces, (which were a functional arm of the German Air Force, under command of General der Flieger Von Pohl) amounting to eight heavy and one light battalions were quickly assembled in the area. In addition to fulfilling their normal function as anti-aircraft weapons, they served, when required, as a powerful reinforcement to German Army artillery. From the Alban Hills, Allied activity in the bridgehead could be accurately observed, so flak guns were employed as siege artillery, (as they had been on the Russian front at Sebastopol) covering the whole of Anzio. Field Marshal Von Richthofen, Commander of Luftflotte 2, after a survey of the employment of flak, changed tactics to a concentration of flak artillery on specific land targets, on the lines of earlier effective and economic operations in the Army Co-operation arm of Fliegerkorps VIII under his command in France, Crete and Russia. To supply this force, 4,000 tons tare of road transport plied between the railheads at Florence and Bologna to maintain a daily expenditure by flak of some twenty thousand shells.

Enemy Ground Reactions to the Landings

'British Forces
at Anzio'
Brit. Hist. Sect.
Central
Mediterranean,
'German Strategy'
Brit Hist. Sect.
Central
Mediterranean,

Kesselring's first decision was to build up hastily a blocking force to contain the beachhead, and to switch rapidly forces from other sectors. It was soon clear that he intended both to hold the Gustav Line and to seal off the bridgehead, intentions strengthened by an order from the Fuehrer, quoted above. The Italian theatre was to be reinforced; they were expected to eliminate the Anzio bridgehead, for not only was this essential from a military point of view, in order to hold Italy with the minimum forces, but also, psychologically and politically, it would be a great gain to defeat the first seaborne landing made by the Allies in 1944. By 30 January, 1944,

/there

SECRET

- 251 -

there were elements of eight divisions south of Rome; (1) the focal point of German defence was still the Cassino Massif.

C.G.S. Luftlotte
2 to Gen. Mahnke
AHB.6 Translation
VII/82.

Yet another Fuehrer order sounded a note of hysteria. Six days after the landing, he warned of the imminent outbreak of the battle for Rome, involving the fate of the Tenth Army. The invasion of Europe planned for 1944, he said, had begun with the landing at Nettuno. It was aimed at gaining experience for future operations and at the locking-up and attrition of German forces at the maximum distance from England where the invasion troops stood at the ready. Inspired hatred was recommended as the note on which to conduct the war against an enemy bent on exterminating the German people and European culture.

Bridgehead Enlargements and Counter-Attacks

British Forces
at Anzio
Br.Hist. Sect./
CM. AHB/II J,
11/58/5.

Before the bridgehead settled down to a stable form, a great deal of thrust and counter-thrust was to develop. Air operations in support of the bridgehead must be viewed as the execution of broad plans phased in advance, with clearly defined targets, which were modified to meet the violent land fighting. This land fighting may be conveniently grouped round three major German counter-attacks on 3, 16 and 29 February. The first German counter-attack came too late to throw the Allies into the sea. British were already well established in the Carroceto - Aprilia area and planning to attack towards Albano; the Americans were regrouping for a thrust towards Cisterna; both these thrusts were halted. Von Mackensen prepared his first counter-attack, with the object of pinching off the British-held Campoleone salient and then driving on to the area at Aprilia round the blocks of buildings known as the Factory.

/These

(1)

Captured
Document
A.O.K.10/981/
AZ (D.3)
24 Jan. 1944.
Report No.20
Ottawa,
(A.H.B.6.)

On 24 January the German Armies were re-organised as follows:-

Tenth Army to retain its actual positions resting on the Gulf of Gaeta; to reinforce the Senger Switch positions; to withdraw its left wing to the Foro position (the Adriatic portion of the Winter Line from the Maiella Mountains to the sea)

Fourteenth Army to assume command of the coastal front from Cecina to Terracina, to throw out the Shingle forces and guard against other landings between Cecina and Tiber mouth; to defend Elba Island.

Army Group Zangen to guard against landings North of a line Cecina - Porto Recanati; to fortify the Apennine position and coastal fronts; to take over command of rear areas vacated by Fourteenth Army.

SECRET

These moves would give him a good base for launching a major assault. This first counter-attack began late on 3 February, achieving some success and the capture of Carroceto. Air support in some of the most difficult hours of the struggle was rendered impossible by cloud cover and drizzling rain.

The second major attempt to destroy the bridgehead lasted from 16 to 19 February and the whole weight of our air and naval power had to be thrown in to decide the issue in our favour. The last attempt was made on 29 February and ended in failure on 2 March. Again a maximum air aid effort was put in, at stages governed by the weather. Thereafter, from 3 March to 22 May, the Allies in the beach-head lived on uncomfortably, without the ability to launch a breakout and without suffering any further major attacks. Map No.6 gives a picture of the landings and the perimeters of the bridgehead on 3 and 16 February and the final bridge-head line of 3 March, 1944.

Operations in
support of
Shingle
M.A.A.F.
A.H.B.II
J.11/49.

Air Operations over the Assault

The assault convoys of over two hundred and fifty landing ships and craft were escorted to Anzio by aircraft and Navy units without loss. Forty-eight R.A.F. Spitfire and eighty-seven U.S. Warhawks flew an umbrella. Over the beaches two hundred and thirty-four Royal Air Force and U.S. Spitfire, two hundred and fifty-five U.S. Warhawk and twenty-four U.S. Mustang patrol sorties covered the troops and craft, intercepting four German escorted missions by some fifty/sixty fighter bombers. Seven F.W.190s were destroyed by our patrols and three Allied fighters lost.

Strategic fighters swept the Rome area, the U.S. Thunderbolts running into a formation of fifteen Me.109s and accounting for five of them. Fighters and fighter-bombers helped to isolate the battle area as far as possible. U.S. Fortresses bombed road and rail junctions at Frascati and U.S. medium bombers cut the Rome road at Velletri. U.S. Invaders hit road and rails at Frascati and Palestrina. The Fifth Army attack was aided by a Fortress raid on Pontecorvo and by U.S. Liberators who bombed the Terracina road defiles. U.S. Marauders, Bostons and Invaders bombed roads round Frosinone, Esperia and Arnara. In the eastern zone, the 26th Panzer Division, rapidly switched to the Anzio area, suffered loss and damage in attacks by one hundred and forty-five Desert Air Force Spitfire and Kittyhawk aircraft. Baltimores and night Bostons harried the roads at Popoli and between Ceprano and Frosinone.

No.2/5 A.A.S.C.
War Diary,

Brief Strategic Air Aid

Operations in
support of
Shingle
M.A.A.F.

The Strategic Air Force continued its support over 22 and 23 January, then turned to other commitments for about three weeks, returning to Anzio at a time of crisis. On 23 January seventy-eight Fortresses, in a vain attempt to stem contact between the western front and Anzio, bombed bridges at Ceprano and Pontecorvo. Strategic Thunderbolts (1) swept the Rome - Terni - Florence area and Lightning-bombers flew armed reconnaissance over the Rome - Rieti roads.

/Anti-Air

(1) P-47s.

Ibid.

Anti-Air Force Operations in late January.

On 25 January all German airfields in the Rome area were closed for mining and the close support forces moved to bases 120 miles from the front. Much of the enemy daily average of seventy-five fighter and fighter bomber sorties against the bridgehead proved abortive, owing to the far superior Allied fighter screens. Over the ten days 23 January to 1 February it was claimed that over fifty F.W. 190s and Me.109s were shot down, with another forty probably destroyed and damaged, at the expense of no more than a score of our own aircraft. 27 January saw a record to that date for T.A.F. victories in the Italian Campaign, twenty-five German fighters being claimed as falling in combat, figures unsubstantiated but probably fairly near the mark.

MATAF/MACAF
O.R.B.'s.

The long-range bomber offensive was met by T.A.F. and C.A.F. Beaufighters, and their score from the night 23/24 January to the end of the month (including some caught off Corsica on the enemy's homeward run) amounted to six Ju.88s, four He.177s, four Do.217s and one He.111, a quite important achievement.

Coastal Air Force fighters came into prominence at this period. Two occasions picked out of a number will illustrate their activities. On the evening of 23/24 January, a formation of Spitfire-bombers based in Corsica ran into a formation of German bombers crossing from Southern France to Viareggio and shot down four He.111s and two Ju.88s without loss. The next evening other Spitfires intercepted a formation of Do.217s coming into Anzio anchorage at sea level and destroyed two of them for the loss of two. Thanks to the multiplication of such vigilance by air the beachhead enjoyed an otherwise impossible degree of relative immunity from air attack and loss.

Crippling of Luftwaffe Bomber Force at Villaorba and Udine

A particularly good result was recorded on 30 January, when a large concentration of long-range bombers was struck by a Strategic raid. Villaorba, Maniago, Lavariano and Udine airfields in the Po Basin were bombed respectively by seventy-six, thirty-five and forty-one Fortresses and sixty-three Liberators. The raids on Villaorba and Udine gave the best results. Warned by their radar of the approaching bombers, the German aircraft took off for safety. At this moment a groups of Thunderbolts swept in at tree-top heights, below the radar screen, ahead of the heavies, and caught the Germans taking off, shooting down thirty-six of them for the loss of two. Fragmentation bombs completed the havoc. The day's total was believed to be sixty-eight German aircraft destroyed. While this may have been a sanguine estimate, there is no enemy evidence available to refute it. In view of reports by Gen. Von Pohl and others on similar events, the enemy losses were bearable to them on account of their good dispersal.

Twelfth Air Force Medium Bomber Operations D Day through 4 February, 1944.

Appx. D/SASO/4
H.M.A.T.A.F.
O.R.B.
A.H.B./IIM/A41/
LC,

In the two-weeks period opening with D Day, medium bomber missions were governed by the needs of the Anzio beachhead for close support and by very poor flying weather. Twenty-four missions in all were flown in close support, three of these were against positions and troops at the entrance to the Liri Valley, the rest against road junctions.

/Intermediate

Intermediate support, (neither close support nor long-range railway interdiction) was also carried out at points such as Avezzano, the centre of a road complex feeding several vital areas. The remainder of the bombing missions in this period were a continuation of the now established programme of railway interdiction by 42nd Wing. Twelve out of the eighteen missions against rail targets were against marshalling yards, six against bridges. Bridges on the Florence-Rome line and tracks on the Viterbo lines were rendered temporarily unserviceable and the marshalling yards at Terni put out of action for six days. The attacks on San Benedetto marshalling yards on the Falconaro-Pescara route did some damage, but failed to immobilise the target.

THE THREE GERMAN COUNTER-ATTACKS
AT ANZIO

First German Counter-Attack.

British Forces
at Anzio,
Brit. Hist.
Section Central
Med.
'Anzio Beachhead'
Hist. Div. U.S. Army.

By 3 February, the first German counter-attack was developing against the 3rd United States Division at the approach to the railway between Campoleone and Cisterna. This was not the major attack intended for 1 February, but a preliminary operation designed to reduce the Campoleone salient. On the night 3/4 February, the German attack was switched to the base of the British salient, then stretching from Carroceto to Campoleone, isolating a brigade of Guards. On 4 February, bad weather forbade any air support. After a remission of a day or two, the Germans came down the Anzio-Campoleone road in greater strength and two days' heavy fighting ensued before the attack was slowed down. Although not yet built up to full strength, the Germans doubtless chose the period largely on account of the certain bad weather, which reduced to a minimum the value of Allied air superiority. They achieved their object of nipping off the Campoleone salient.

M.A.A.F./W.I.S.

No. 7 A.A.S.C.
War Diary.

In spite of the weather, on 2 and 3 February, U.S. mediums, light bombers, U.S. Invaders and U.S. Warhawks flew a total of two hundred and eighty-seven sorties, the general effort being against the main supply roads from Rome, dumps and transport. The roads linking East with West were also attacked by Baltimores and Thunderbolts. During the period of pressure between 4 and 9 February, although greatly hindered by bad weather, U.S. Bostons, U.S. Invaders, and Warhawks all kept up a fair average of sorties against bridge-head objectives and communications. The local targets included troops, dumps, observation towers, railway guns, and, further back, radar stations and rail sidings. Air support, on the whole, was a source of disappointment, but through no fault of the Air Forces.

Kesselrings plans for air support, too, were ruined, by bad weather and internal deficiencies. He intended nightly long range bomber attacks on shipping off Anzio, considerable fighter reinforcements and fighter-bomber squadrons to provide cover for his attacking troops and to silence Allied batteries. None of these plans materialised and the period is well worth noting as one of many occasions during the campaign when at a time of crisis the Air Forces on both sides were unable to play a dominating part, yet a situation was adjusted without their effective intervention. It was noticed that, notwithstanding the crisis at Anzio, the Germans still betrayed acute nervousness as to possibilities of another imminent Allied landing on the Adriatic coast of Italy; their reconnaissance aircraft, based both in Northern Italy and the Balkans, were unusually active.

/Inevitability

Inevitability of Major Enemy Counter-Attack.

British Forces
at Anzio./Br.
Hist. Sect.
CMF./A.H.B.
IIJ11/58/5.

It was inherent in the nature of things and in the logical sequence of operations that sooner or later the Germans would stage an all-out counter-offensive. The appreciation of this certainty was fixed by General Alexander in a signal of 27 January to General Clark, where he spoke of an enemy plan to hold the Allied attacks with comparatively weak forces, behind which he could concentrate for a major counter-attack. To forestall this idea, the Allies made unsuccessful attempts to capture Cisterna and Campoleone. New plans for their capture, with air support, were frustrated by the German counter-attacks of 3 to 12 February, during which the Allies lost Buon Riposo Ridge, Carroceto and the Factory, and their salient, two and one-half miles deep, was nipped off. The Germans now held master positions for an all-out drive down the Albano-Anzio road, which, if it succeeded, would cut the Allied forces in two, prevent their evacuation from the poor beaches and lead to their destruction. The enemy's, and the Allies' main problem was how to build up sufficient forces to carry the beachhead battle a step forward, while the Cassino battle approached a new crescendo of violence.

Intelligence of Enemy Preparations

Anzio Beachhead
Hist. Div.
Dept. of the
Army U.S.
A.H.B./II.J11/
52.
No. 7 A.A.S.C.
War Diary
Feb. 1944.

Pressure on VI Corps continued to be heavy, as the days passed after the loss of Carroceto and the Factory. On 9 February, medium bombers were switched to obvious troop and M/T concentrations in the Campoleone areas and returned reporting the likelihood of even greater concentrations the next day. An all-out effort planned for Strategic and Tactical Air Forces, Desert Air Force and XII Air Support Command on behalf of VI Corps in the beachhead had to be drastically curtailed owing to bad weather; again, the next day, a big programme had to be abandoned. This run of treacherous weather all through the beachhead crisis must be constantly borne in mind, for it destroyed the continuity of the day and night effort of air support, as well as handicapping armoured movements (already confined to the roads) and curtailing air reconnaissance on both sides.

13 February was a fine day; Allied bombers and fighter-bombers put up a serious effort against the Factory area and concentrations both here and north of Rome. The small force of night bombers attacked both in this area and between Frosinone and Viterbo. The latter formations reported a general impression of heavy movement to the South and South-east. Again, on 15/16 February, night bombers reported heavy movement mainly southwards on all roads north of Rome. In daylight, bombers and fighter-bombers, in response to requests by Army formations, attacked a variety of targets such as the gun positions reported by Tac/R aircraft and railway guns which were inflicting very considerable damage along the waterfront and in the Allied lines. They confirmed evidence from interrogation of prisoners-of-war and from captured documents that a big attack was impending. All these sources revealed the important detail of the preparation - the main plan was a foregone conclusion.

Evidence of preparations at air bases was, owing to the treacherous weather, very difficult to obtain and to keep up-to-date. General intelligence estimates of German aircraft strength and serviceability were, before the counter-attack, fairly near the mark. If the fighter and fighter-

/bomber

bomber force then available, based in the Viterbo, Orvieto and Tarquinia areas and using advanced landing grounds at Fabbrica di Roma and Canino, were all that could be thrown into the coming struggle, the issue would seem to be heavily in the favour of the Allies. The Luftwaffe was clearly husbanding its aircraft - although by no means inactive, - but the smallness of its numbers, added to the known skill of its personnel in dispersal, made it a far more difficult target to cripple than a much larger air force. In any case, the Tactical Air Force was fully committed to tasks arising from the Cassino and beachhead fighting, all represented as urgent. In the Cassino area an attack on Monastery Hill was planned. If this succeeded, a break through into the Liri Valley would open up the path for our armour to Rome. In the beachhead our inferior forces were still struggling, on the defensive and under intense bombardment and frequent air attack, to establish themselves. The front-line emergency was great enough to justify the occasional intervention of the Strategic Air Force, in addition to its long-term attacks on enemy communications, supplies and war industry.

German Plans for Air Support.

Kesselring had planned to open his major counter-attack on 1 February at the earliest, provided he received adequate reinforcements. His plan assigned the following role to the Luftwaffe. The night attacks on shipping off Nettuno would go on, with a special attack, on the eve of the attack, on those Allied warships whose gunfire was so destructive. On D Day, the chief air task was the support of the attacking ground forces, with fighter-bombers concentrating on Allied batteries. Allied naval guns were bad targets in view of the active and superior air defence: these would, therefore, be engaged by artillery and railway guns, with possible day air attacks as a last resort. At the end of January over early February, one could normally count on a deterioration in the weather, which would to an appreciable degree offset Allied air superiority. He was not disappointed on this score.

Allied Efforts to prevent Enemy Air Build-Up

Apart from the daily losses inflicted on the Luftwaffe by beachhead patrols, fighter and fighter-bomber sweeps and formations of heavy bombers and their escorts, what action was taken by the Allied Air Force to keep up-to-date on the state of the Luftwaffe and to execute counter air-force operations? The answer is that air reconnaissance, even in unfavourable weather, provided reasonably consistent photographic cover of airfields likely to be concerned in a counter-offensive, with adequate evidence of a small but active mixed force, well dispersed; but that there is no evidence of any consistent series of Allied attacks in sufficient force to seriously cripple the Luftwaffe in advance. Between 5 and 15 February, airfields in the Rome area, at Viterbo, Siena, Perugia Forli, Orvieto, Tarquinia, Vicenza, Padua and Rieti, as well as the northern bases of Udine, Osoppo, Maniago and so forth were photographed on several days.

Counter Air Force Operations 2 - 14 February.

On 2 February, twenty-seven Invaders, bombing in the Viterbo area, shot up three aircraft on one of the landing grounds in the course of their sweep. The next day, twenty-four Mitchells set out for the Viterbo area, (the airfields were not their specific targets) but were

/forced

Appx.E/Ops to
H.Q. MATAF O.R.B.
Feb. 1944.
No.7 A.A.S.C.
War Diary.

Ibid,

forced to return owing to bad weather. Two days later, the first anti-airfield operation in the month was undertaken by a dozen Invaders, who were turned back by bad weather before they reached their target - Viterbo airfield. The only major effort was staged on 8 February and here the attack on the airfields was only a part of the force's brief. One hundred and eight Liberators bombed, (among other targets in the areas) Viterbo Main, Orvieto and Tarquinia airfields, all in active use by front-line units. Photographs of these fields were taken the same day, but no evidence reported of any damage inflicted, nor are there any enemy sources to assist. The only clear result reported was the destruction of two of a force of about twenty enemy fighters met near Adria. On 12 February, twelve Invaders attacked a newly-discovered landing ground near Fabrica di Roma, but only saw two aircraft, of which they destroyed one. A more serious effort was made on 14 February, when thirty-six Invaders bombed Furbara airfield, destroying four aircraft. The same day some Fortresses dropped bombs on Pontedera, not a vital field at the time. In late January, as already recorded, Strategic bombers had attacked bomber airfields in S. France and in N. Italy, but the lapse of more than a fortnight up to the opening of the counter-attack was sufficient, as was well known, for the Luftwaffe to recover to a great extent. A much heavier, more sustained and continuous effort would have been called for to affectively hinder the German plans for air support. The question arises as to why this was not forthcoming.

Reasons for Immunity of German Air Bases

The possibilities of anti-air-base operations were drastically limited for several reasons. Firstly, the critical situation at Cassino was calling for tactical and strategical air support. Both armies had drafted strong reinforcements to that area and were withdrawing exhausted units. The mountainous centre was snowbound. The Desert Air Force could afford little support from its own bases under the appalling weather conditions; for the greater part of the period 9 to 14 February it was grounded. With their effort divided, Strategic Air Force suffered, too, the handicaps imposed by the weather and was forced to cancel all operations on seven days and eight nights out of the first fortnight in February.

Then the situation in the beachhead called desperately for the use of every available aircraft left over after the demands of the Cassino front had been met. The Allied forces in the beachhead, inferior by nearly fifty per cent to the German forces massing against them were, in spite of their aggressive intentions and thwarted plans for the offensive, still in every material sense of the term, on the defensive; this being the case, the calls for the bombing of military installations of all categories immediately ahead of our troops were continuous, insistent and quite in keeping with the situation. Defensive patrols, too, rather than offensive ones were called for. Because of all these reasons it will be seen that, intimately linked as the Air Forces were with the fate of the Fifth Army, fighting on two fronts for its very existence, the balance of aircraft left over for other than immediate targets was small: it might be fairly said that our air superiority for offensive purposes, was far less than appeared on paper.

/Allied

Allied air plans for major offensives such as the landings in Sicily and at Salerno had included preparatory anti-air-force operations. The force in the beachhead had just failed to capture Cisterna and Campoleone, had suffered a serious reverse and lost its salient. In the prevailing atmosphere of crisis, with divided commitments and in very bad weather, the German Air Force itself did not receive the attention it merited, and was so enabled to come back for a brief period in something like its old form. Things might have been very different if the Allies had possessed a night bomber force scientifically balanced with the far superior day force, for this night force, in addition to dealing far more effectively with road movement by night, could have been profitably engaged against air bases: yet the only night bomber in use - the Wellington - had already been written off (1) in the U.K. as lacking sufficient height and speed to compete with the German defence system. Beaufighters, as already stated, were in very low production.

A.H.B.I.

German Ground Plan

British Forces at Anzio. Hist. Sect. CMF. II.J.11/53/5

Anzio Beachhead Hist. Div. Dept. of the Army U.S. AHB. II.J.11/52, No. 7 A.A.S.C. War Diary.

The German ground plan, execution of which was finally fixed for the early hours of 16 February, was to attack on a narrow front of about 4,000 yards, straight down the Albano - Anzio road on to Anzio itself, only eight miles from the starting-point. Once Anzio was reached, the beachhead would be split in two (the northern beach had been abandoned since 22 January) and deprived of its port. With beaches of such poor value, evacuation might well be out of the question. The Germans held a good start line by 16 February; two more divisions (2) had been brought in, as well as three infantry regiments and two tank battalions; the enemy thus mustered the equivalent of over ten divisions against an Allied force of rather less than half that number. Four infantry divisions were to launch the assault, led by the crack Lehr Regiment, (the Infantry Demonstration Regiment from Doeberitz). Two mobile divisions (3) were echeloned behind them to exploit success. Great hopes were pinned on the operation. A special order from Hitler was read, in which he stated that "this abscess" must and would be eliminated in three days. They were promised massive air support, and the privilege of operating for the first time the new secret weapon - the miniature Goliath remote-controlled explosive tank.

Air and Artillery Prelude

Ibid.

For three days prior to the counter-attack the German close support air effort was kept down so as to conserve aircraft for what was to be the decisive operation. On 13 and 14 February, only sixty-five combined fighter/fighter-bomber sorties were flown in the battle area daily. On 15 February; all fighter-bombers were rested, only a few harassing fighters appearing over the beachhead. Air crews and ground personnel were impressed with the decisive importance of the coming attack and the necessity of supporting it from the air with all available resources.

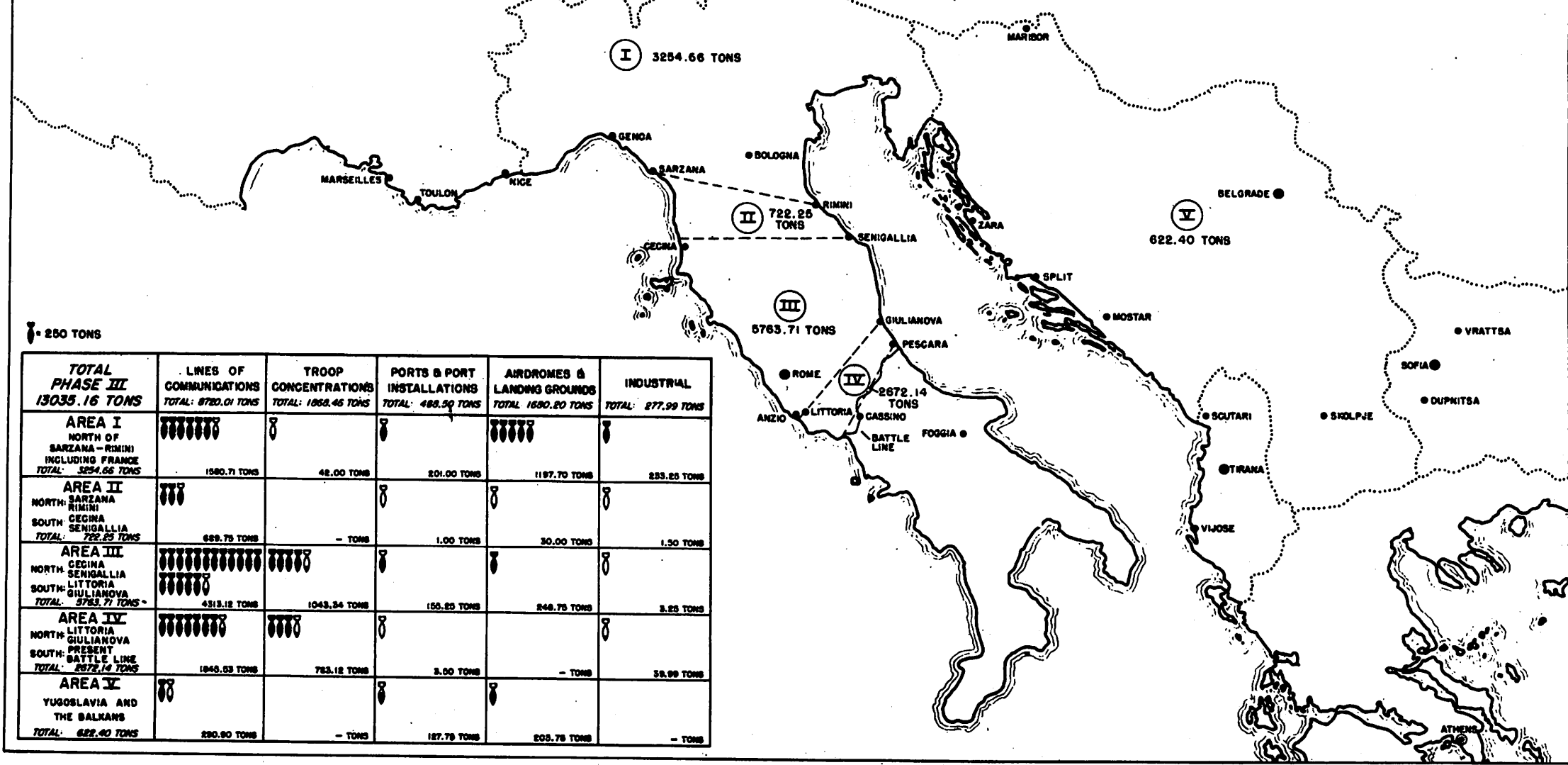
/During

- (1) The last Wellington long range bomber operation took place on the night 8/9 October, 1943. Thereafter the U.K. - based Wellingtons were used for transport and mine-laying.
- (2) 114th Jaeger from Yugoslavia and 362nd Infantry from N. Italy.
- (3) 26th Panzer and 29th Panzer Grenadier.

R. A. F. NARRATIVE OF THE ITALIAN CAMPAIGN

ALLIED BOMBING EFFORT—SHINGLE OPERATION—PHASE III

22 January 1944 to 15 February 1944



A.H.B. MAP No. 349.

MAP No. 7B.

During the night 15/16 February, a force of about forty long range bombers - mostly Ju.88s but, including a few Do.217s from S. France, bombed the beachhead positions without materially affecting the situation. At 0600 hours on 16 February, enemy guns opened up, along the central beachhead front, a barrage lasting half an hour.

Second Major German Counter-Attack, 16 February

Ibid.

While the barrage continued, infantry supported by tanks attacked the 45th Division from bases in the Carroceto Factory area and, at heavy cost in men and armour, achieved some success before resistance broke their momentum. When the artillery barrage along the Albano road lifted at 0730 hours, German tanks struck. The main attack was observed, as the day passed, to develop against 45th Division, but several diversionary attacks divided the Allied defences. Fighter-bombers, escorted by fighters, supported the operations, strafing troops and installations, in unaccustomed strength and with considerable aggressiveness. Altogether five full-scale and extended air attacks were carried out. In all, the German day's effort involved ninety to ninety-five fighter-bombers and one hundred and fifty fighters on escort, armed sweeps and patrols.

Among other targets, the air strip at Nettuno, being used by day only, was heavily bombed and rendered unusable even by day, so from this day over the whole period of crisis, all Allied fighter support had to come from bases in the Naples area. An ammunition dump North of Anzio was blown up by an enemy bomb, but little other serious damage inflicted. The nuisance value of the effort was, however, considerable and the margin of Allied air superiority appreciably reduced in that sector.

Allied Air Forces switched to Bridgehead

Ibid.

While the Army was sorting out the real danger point from the area of the feint attacks, the ponderous task of shifting the emphasis of air support from Cassino to the bridgehead assumed momentum. The day 15 February was a historic one in the Cassino sector. As a preliminary to what it was hoped was to be the capture of Monte Cassino, the first of a series of heavy air attacks had been made. The programme for the assault from 16 February onwards included heavy air support. All this had to be radically altered as the German attack from Carroceto began to assume menacing proportions. From early morning, a considerable number of opportunity targets were engaged, while medium bombers and fighter-bombers were brought in increasing numbers into the battle area, and plans for full-scale air support the next day by all the resources of Strategic Air Force, Tactical Bomber Force and Twelfth Air Support Command were hurriedly drawn up. Desert Air Force, whenever it was not grounded by weather, was to continue the reduction of the Monte Cassino redoubt.

On the VI Corps front in the beachhead, Warhawks, in formations of twelve or eight, began operating at 0813 hours and, by 1345 hours, had carried out eleven separate missions at Corps request against M/T, tanks, troops, gun batteries and railway guns. Invaders joined in at 0930 hours and carried out forty-four sorties in four missions against similar targets. Baltimores operated, twelve aircraft at 1000 hours and twenty-four at 1505 hours, against M/T

/assembly

assembly points and troops at Carroceto. Visibility by that hour was poor; these were the final day air operations. Campoleone, now a strong German base vital to the assault, was the target for thirty-six Mitchells at 1430 hours, when the weight of attack began to increase. Twenty-four Bostons at 1455 hours and twelve Thunderbolts at 1525 hours were airborne, but the weather had by this time begun to close in and the latter had to abandon their mission.

Good Work by Artillery Observation Aircraft.

"Anzio Beachhead"
Hist.Div.U.S.
Army Dept.
A.H.B./II.J 11/52.

While enemy artillery delivered the heaviest counter-battery fire so far experienced in the beachhead, organised efforts were made to ground the cub artillery observation aircraft the Allies used to such effect in support of their own artillery. One was shot down at 1000 hours, according to the American Historical Division; 3rd Div., for whom it was operating, called for fighter protection for its other spotting cub aircraft, but no immediate cover was possible, as Nettuno air strip was, as recorded, no longer functioning.

Summing up the first day's air effort, it was not heavy enough to seriously influence the course of the battle, which went steadily in the favour of the Germans until 19 February; but the seeds of confusion in German operations were to be sown on the following day by an all-out Allied air/sea/ground effort, when the switch of air support had been completed. So far, the enemy had not yet committed his main force, and seemed to be resting on slight gains in the sectors of the 45th and 56th Divisions. Far worse was still to come, and a foretaste of this was felt on the critical Albano road sector, where, before midnight, Germans began a successful night attack.

The Second Day

British Forces
at Anzio. Hist.
Sect. CMF.
II.J. 11/53/5.

Anzio Beachhead
Hist. Div. Dept.
of the Army U.S.
A.H.B.II.J. 11/52.

No. 7 A.A.S.C.
War Diary.

Striking swiftly and in force, the enemy exploited his night success by pressing through the gap he had opened. He sent over about thirty-five mixed F.W.190s and M.E.109s at 0740 hours, to bomb and straff the 45th Division's front line. A few minutes later, a powerful force of German infantry followed up, tanks supporting them throughout the day. His bombers, again including a few Do217s, had been over the bridgehead during the night; as on the previous day, from seventy to seventy-five fighter-bombers carried out operations (four this day) against our positions, supported by some one hundred and thirty-five fighters. Other sectors were promised air support as soon as the situation permitted: meanwhile thirty Me.109s from Northern Italy, which arrived at Viterbo on 16 February, were preparing to strike. They were not much in evidence until 19 February, when they helped to fill up operational loss gaps but too late. This represented the best the Luftwaffe was prepared to do to support a land battle which might have far-reaching results. They denuded the fighter defences of the northern areas, but drafted in no fresh reinforcements from outside Italy.

Air Support for VI Corps. 17 February

Allied Intelligence had correctly surmised by late 16 February that the main attack would come down the Albano Road. The Allied air effort's main operations, in direct support, of 17 and 18 February, therefore,
/will be

Ibid. (All
above references)

will be found centred round that principle. The weather on 17 February, for the first time for a long period, was good all day, and allowed the calls for continuous attacks on the rear German forming-up areas to be carried through. These areas came in for the heaviest punishment, but eighty-eight fighter bombers worked over the Carroceto Factory area, where both troops and armour were taking cover. Allied aircraft that day dropped the greatest weight of bombs ever before recorded in Direct Support on a single day and the number of heavy bombers employed in Direct Support was also the greatest known up to that date. (1) The Fortresses, Liberators, Mitchells and Marauders concentrated on Campoleone and targets up the Albano road, close to the front line; the fighter-bombers attacked the ruined Factory, Carroceto town and the overpass used for the passage of troops and arms. In further aid of our hard-pressed and slowly retreating troops, VI Corps concentrated the full weight of its greatly superior artillery and two cruisers fired shells against the enemy's flank. Reflection of the combined effect of the air/artillery/naval gun bombardment will probably be found in the German Army War Diaries now in the archives of the Historical Office in the United States. As these are not yet available, the results of these operations and those of the two succeeding days must be correlated with the failure of the German offensive and what reports are already to hand. One thing is certain; the massive air effort, added to the naval bombardment and the ground resistance did not stop the Germans, who poured in their large infantry reserves in what seemed to the Allies to be never-ending waves. By nightfall the enemy was in a position to make a direct attack on VI Corps final defence line, behind which a reserve line was being established. During the night he moved up fresh units for a resumption of the offensive; hand to hand fighting continued.

No. 205 Group
- O.R.B.

As against an effort of only twenty-three aircraft on the Grottaferrata area the previous night, sixty-three Wellingtons were out bombing concentrations, M/T and positions in the Albano - Genzano, Grottaferrata and Velletri areas, where the main stream of reinforcements and supplies was flowing. Notwithstanding this bombing and the sustained effort of Allied artillery, 18 February, proved to be a day of supreme crisis for our forces. German long-range bombers again attacked our lines ineffectively; three of the thirty-nine Ju.88s engaged were shot down.

The Day of supreme Crisis - 18 February.

Ibid. (all
above references)

During 18 February, the enemy launched three attacks, the first at dawn, the second at 0930 hours and the third at 1700 hours. Enemy infiltration and a frustrated Allied counter-attack in the stormy night presented a state of sufficient confusion for the enemy's deep thrust, at dawn, across the already weakened shoulders of our salient to reach the final Allied beachhead line positions at several points. Close to the critical overpass, positions were covered by units who, for two days, had received no food or water and were short of ammunition; their wounded had to be left in water-logged slit trenches. Because of the incessant pressure of the enemy, few men had had much sleep or rest.

/The cold

(1) Total sorties for 17 February by bombers were: 248 by fighter-bombers: 60, by light bombers; 152, by medium bombers and 288 by heavy bombers.

The cold was intense, the sky overcast, the wind gusty.

Failure of Air Support Programme owing to Weather - 18 February

Appx. E/Ops/49
to H.Q.M.A.T.A.F.
O.R.E. and Ibid.

Plans for full Allied air support broke down in face of the weather, which had worsened during the night. It was so bad all day that all tactical bomber sorties were either cancelled or rendered abortive. XII Air Support Command managed to put up a total of four hundred and thirty-one sorties⁽¹⁾. The regular beachhead patrols were maintained; enemy fighters and fighter-bombers lost three aircraft to them. South African fighters took off on armed reconnaissance of the roads, but had to turn back. Most of the offensive operations of the day were the role of the fighter-bombers. One hundred and twenty-seven Warhawks and Invaders supported our troops opposing the main enemy thrust. No. 27 Group used 1,000 lb bombs among their armament and one of these was seen to hit a tank. A successful mission by No. 324 Group destroyed one tank and set two others afire, destroyed six M/T and a staff car, and strafed a machine gun position, causing casualties. Aircraft of No. 27 Group also reported eight direct hits on one of the factories near Carroceto and four on adjacent buildings. A further sixteen sorties by the same group reported all bombs on their target - a troop concentration. Another group started fires on the local railway tracks. The heavy bomber crews could not operate. In any case, there were limits to their ability to respond to the requests of Tactical Air Force to support the land battle. A reminder of other over-riding priorities was given on this very day in the form of an Operation Instruction, wherein it was restated that their first priority object was the destruction of Pointblank targets in Europe and their second the disruption of rail communications in Italy. The Army reported the fighter-bomber attacks near the bomb-line very effective on the whole, although the rapidly deteriorating weather led to some inaccuracy.

Operation
Instruction No. 8/
18 Feb. 1944.
H.Q. - M.A.A.F.

"Anzio Beachhead"
Mil. Div. U.S.
Army A.H.B./
II J. 11/52.

Outstanding in the air contribution this day was the work of an Air Observation Post aircraft, whose pilot - Capt. W. H. McKay - was observing for the 45th Division Artillery. His excellent effort compensated for the inability of heavier aircraft to operate during the most critical hours of the struggle. The second phase of the day's attack had opened at 0930 hours and threatened to break our final defence line. At 1110 hours Capt. McKay spotted a force of tanks and approximately two thousand five hundred Germans, moving South from Carroceto along the Albano road. As a result of his signal, within twelve minutes the Corps Fire Control Centre massed the fire of two hundred and twenty-four guns on the target. The attack was disorganised and broken up. In the next fifty minutes, this same pilot directed the fire of these guns on to four other concentrations, delaying the enemy from taking up his positions. The rest of the small force of observation aircraft evaded all the efforts of the Luftwaffe and artillery to liquidate them - fortunately-for at the time there was only one flight of six aircraft operating in the beachhead. Another flight was due to arrive on transfer from Eighth Army.⁽²⁾

/Third

(1) 243 fighters, 145 fighter-bombers, 13 bombers, 35 reconnaissance.

(2) These aircraft, entirely devoted to the task of spotting for ground artillery, have been already referred to on page 247. One flight of six aircraft was operating in the beachhead (Squadron 651); the rest of the Squadron plus Squadrons Nos. 654 and 655 were operating with the Eighth Army.

T.A.F./100/14/
J.R.G. Air O.P.
Squadrons.

Third German Attack on 18 February

Ibid.

After further concentration, the Germans made the last heavy attack of the day, from 1700 hours until 2100 hours. As on the two previous days, it was blunted and partially held, but the threat remained serious. Artillery and ground troops took the brunt of its severity, air support diminishing with worsening weather. The Luftwaffe support programme suffered the same handicaps and only forty fighter-bombers and sixty fighters were airborne; but these aircraft were reported as being lively in action. Prisoners of war reported the stunning effect of the combined artillery and air attacks and that supplies of ammunition and water were running low. The 1st Armoured Div. launched an effective counter-attack and our infantry stood their ground.

Air Support Plans for 19 February again frustrated by bad Weather.

No. 7 A.A.S.C.
War Diary

In view of the serious nature and still superior weight of the German attacks, the programmes of both Strategic and Tactical Air Forces were modified in harmony with the emergency and in spite of Strategic priorities. A big effort was to be diverted on 19 February from the marshalling yards in the Rome area and railways north of Rome, (both due for attack), to the VI Corps battle area. Again fortune frustrated the Air Forces' attempts to join battle by sending another day of the worst kind of winter weather. Almost the entire effort had to be cancelled. Two groups of Mitchells succeeded in flying four successful missions with close on one hundred aircraft; over one hundred and sixty Warhawks, supporting some fifty-six Invaders, flew all through the day, bombing troops and tanks, inflicting especial devastation in the wooded area near Carroceto, used extensively to conceal concentration. The entire Desert Air Force was grounded by gales, so no help was forthcoming from the other side of the snow-covered Apennines.

Von Pohl Reports
(A.H.B.6.)

The Luftwaffe equalled its fighter-bomber effort for the previous day and, reinforced by a gruppe from Northern Italy, pushed his fighter effort up to near the one hundred mark. If the enemy was short of aircraft, he did not lack flak equipment and this flak was ubiquitous, intense and accurate, combining with determination its dual role of ground and anti-aircraft artillery.

German Counter-Attack halted - 19 February.

Ibid.
(above Allied
sources.)

VI Corps had, during the 18 February, held its own on the whole. It had counter-attacked successfully in one sector, and inflicted major losses with its artillery fire. It had also strengthened its positions against possible enemy airborne operations by dividing the beachhead area into defence zones. The final enemy effort at a break through began at 0400 hours on 19 February. All the morning, supported by frequent bombing and strafing air attacks on our front lines, the enemy infantry and armour struggled vainly to breach our lines. Prisoners began to talk of interrupted communications and delay in the arrival of reinforcements, shortages. It was noticed that the size of the formations of both infantry and tanks was declining; the identity of the units captured was so varied that it was clear that all kinds of secondary troops had been thrown in to replace the heavy casualties. The enemy had committed his best reserves and although he had gained ground, he had not broken the Allied line. By the afternoon of 20 February he was exhausted, and withdrew to reorganise. He had failed with a force of mainly fresh troops to break the resistance of half the number of men, tired after a month's continuous fighting.

"Anzio Beachhead"
U.S. Army Hist.
Div.
Von
Pohl series of
Interrogation
Reports
CSDIC/CMF.

The American Army allots an appreciable share of the responsibility for the breakdown of enemy communications and supplies to the air bombing along the axis of the Albano road, from the Factory and Carroceto back to the Alban Hills. The German Army attributed the majority of its casualties to Allied artillery fire and believed it would have had more success had its armour not been frequently bogged down. The Goliath explosive tank had been mud-bound and was a ludicrous failure.

German Confusion exploited by Allied Bombers

No. 7 A.A.S.C.
War Diary.

The failure of their latest attempt to destroy the Allied salient and its attendant heavy casualties, left the Germans in a state of some confusion, which the Allied Air Force were quick to exploit. The Carroceto area was chosen for its profitable targets. Seventy-five Liberators (U.S.) and about one hundred Marauders, bombing through intense flak, dropped high explosive, general purpose and fragmentation bombs on troop concentrations and dumps near Carroceto and on big troop concentrations along a two-mile stretch of railway five miles north of the Carroceto front line. Other troops, as well as tanks, guns and quarters, were bombed by a total of nearly two hundred Mitchells, Bostons, Warhawks and Invaders. Thereafter, the diminishing tempo of the ground battle was accompanied by a falling-off in the opposing air efforts. The Luftwaffe's serviceability was by this time in a low state. Notwithstanding, it could still look forward to steady replacements.

14th Army Plan for Third Counter-Attack

Allied Strategy
Br.Hist.Sect/CM
AHB/II/J11/58/2.

Evidence gradually accumulated which pointed to another counter-attack. This, it was appreciated, could not be made in the same strength as that of 16 February, for there were large gaps in the German divisions and morale could hardly be the same after such a calamitous anti-climax to an offensive from which so much had been hoped. Mackensen planned a medium-scale attack, using LXXVI Corps only, to narrow down the bridgehead by driving a wedge into the eastern flank and so to cut off the troops defending the Mussolini Canal. If this was successfully accomplished, further attrition might reduce the bridgehead to dangerously small dimensions. Diversionary attacks in both flanks were to conceal the main attack by four divisions with a mobile division in reserve.

Luftwaffe Dispositions prior to Counter-Attack.

Rise and Fall
of the German
Air Force -
Air Min.

After the breakdown of the last offensive, the Luftwaffe proceeded in earnest to reinforce and to restore its strength and serviceability. A single engined fighter unit of forty mixed F.W.190s and Me.109s was transferred from the area west of the Seine to Central Italy, a move from a depleted area which did nothing to weaken the defence of Germany. Fighter units in North Italy began to ferry some of their aircraft to Central Italy, to strengthen the four fighter units engaged in battle area operations. The northern units, in turn, were fed by replacement aircraft from Germany. These moves, the fact that the low scale of contemporary operations favoured an improvement in the serviceability ratio and that long range bomber operations were being confined to small scale harassing attacks, all favoured the theory that the enemy was husbanding and re-grouping forces for another offensive.

/The enemy

The enemy decided to make the attack before further delay upset the balance of forces. The ground was dry enough for tanks to operate. Before long it would probably deteriorate again, therefore advantage should be taken of favourable conditions at air bases.

Allied Counter-Air Force Operations preceding German Offensive

H.Q. MATAF
O.R.B. Appx.
E/Ops/55
No. 7 A.A.S.C.
War Diary.

On this occasion systematic action was taken before the event to cripple the enemy air force. On 23 February, a day of bad flying weather, a force of ninety-nine Liberators was airborne, with Orvieto airfield as their target; the operation was abortive. The next day, conditions improving, forty-five Mitchells bombed Fabrica di Roma airfield. Photographs showed that half the force's bombs hit the target, burning five aircraft and part of the runway. On 27 February, Guidonia and Littorio airfields in the Rome area were bombed by small formations of Invaders and Warhawks, the former raid force hitting hangars, causing an explosion and doing slight damage to aircraft. These fields were attacked to greater effect the next day. At Littorio eighteen direct hits were scored on the hangar area and at Guidonia the airfield and buildings were hit and strafed. A fire was started at Marcigliana airfield. Aircraft which had been using these fields were no longer there, being probably airborne on operations. The fighter landing-ground at Canino was due for attack that day, but cloud prevented accurate bombing by the force of seventy-two Mitchells despatched. Only about forty reached the target. Photographs showed no damage to the actual field.

Thus it will be seen that a programme of three days' bombing was attempted, but, owing to bad weather and bad luck, failed to inflict any serious losses on the Luftwaffe. An attack on 29 February, the day of the main attack from Cisterna against VI Corps, a force of sixty Marauders was more successful in a raid on the bomber and fighter base at Viterbo. Photographs showed good coverage, although weather was unfavourable. Another force of thirty-six Marauders were also airborne against the same target, but twenty-seven were forced back to base by bad weather without having bombed. One bombed Viterbo Satellite No. 2; only eight of them hit Viterbo Main, striking the revetment area.

Launching of Third Enemy Counter-Attack

Ibid.

The attack began at dawn 28 February with a small diversionary attack on the British sector, with the object of widening the existing salient. It was halted by ground forces after hard fighting and thrown back. A second smaller attack was broken up by artillery fire by dawn. The major attack was launched from Cisterna on 29 February against VI Corps, who were ready to meet it. Some thirty fighter-bombers supported it. There were more aircraft available, but the weather was altogether unfavourable for flying. Four divisions in the centre, one on the extreme left and a parachute division on the right did their utmost, but failed to penetrate more than a thousand yards, at high cost to themselves. It was clear to VI Corps that this was the major attack. G-2 decided that the main effort was coming from north of Cisterna.

/Air

Air Effort to meet Main Threat 29 February.

No. 7 A.A.S.C.
War Diary.

In sympathy with this appreciation the best possible air effort available in the time and in the weather conditions ruling was directed against the dangerous area north of Cisterna. During the whole of the forenoon flying was impossible, but weather improved from 1300 hrs. at which time calls from VI Corps began to come in, indicating considerable activity in the areas S. and N.W. of Cisterna. It was found possible to alter completely the pre-arranged programme and to switch a fairly large effort to the new battle area. Apart from the Marauder attack on Viterbo Main airfield mentioned, fourteen missions by fighter-bombers and by light and medium bombers were carried out in direct response to calls from VI Corps and 3rd Division, against troops proceeding along a river bed, tanks, M/T and guns. Other aircraft were out on armed reconnaissance, straffing visible movements. Aircraft reported considerable activity in all target areas and plenty of flak, which indicated that the enemy was being hit in some of his sorest places.

Failure of German Attack on 1 March

The stubborn resistance of Allied ground forces and the damage and delay inflicted by air attacks had blunted the force of the attack, for on 1 March a strong thrust against 3rd Division by approximately three divisions was halted during the forenoon, leaving only small infiltrating forces. The weather was very bad, both for armoured and air operations, so much of the credit for this day's defeat of the Germans went to the Army. There were a few armed reconnaissance and straffing missions by Invaders and Warhawks, but only one primary target was hit.

The Luftwaffe made an even less effective appearance and again the close support which had been planned on the assumption of dry weather failed to materialise (1) There were a few Ju. 88's out every night over and off the beachhead, but they operated singly and did no more than harass on a negligible scale. Kesselring realised that day - 1 March - that any renewal of attempts to liquidate the beachhead was virtually impossible unless further ground forces were brought in. This was a condition not to be realised. The Germans were therefore going over to the defensive. Their main object henceforward was to prevent the Allies breaking out of the bridgehead in the direction of Rome.

/From

(1) First line strength of the Luftwaffe on 1 March in the Mediterranean was approximately:-

	Italy S. of Spezia	Italy N. of Spezia	Southern France	Total Central Med.	Eastern Med.	Grand Total
L.R.B.	-	130	85	215	-	215
D.B.	-	-	-	-	-	-
F.B.	35	-	-	35	-	35
S.E.F.	180	70	-	250	45	295
T.E.F.	-	-	10	10	20	30
L.R.R.	25	-	15	40	25	65
Tac.R.	20	-	10	30	30	60
Coastal	-	5	15	20	40	60
	260	205	135	600	160	760

From this day, therefore, German strategy can be perceived to shift gradually from the offensive to the defensive. Then, as earlier and later, the fear was never absent that the Allies would attempt another landing, that might be in the Gaeta-Terracina area or at Civita Vecchia. With this in mind, anti-shipping units were ordered to prepare for operations at short notice against attempted landings and air reconnaissance was stepped up.

All-Out Air Effort 2 March

No. 7 A.A.S.C.
War Diary.

Although the German Army H.Q. realised they could not liquidate the bridgehead, they would not, naturally, interfere with the momentum acquired by the heavy forces committed to the attack. During the night of 1/2 March a few heavy Allied bombers attacked positions round Vellella, but it was too stormy for any appreciable effort. 2 March was a day of brilliant weather and the pent-up Air Forces enjoyed a free rein. The ground position was still ugly, although 3 Div. had regained most of the ground lost during the night. The enemy was very active still and his assembling areas in a state of continuous movement. Artillery, although less in weight than the Allied batteries, continued to be aggressive in support of four entire divisions.

Close on eight hundred aircraft operated in direct support of VI Corps that day; all targets were within 4,000 yards of the bomblines. Ten groups of heavy bombers, four groups of light bombers and three hundred and sixty fighter-bombers were in action. Forward assembly areas and artillery positions were especially attacked. Both ground and air reports indicated by the day's end that great damage had been inflicted. VI Corps reports were enthusiastic in their tone, and spoke of the degree in which the bombing had raised the morale of our own troops. No. 3 Brigade described a formation of ninety-six bombers going over as 'the best sight seen for days'. No. 3 Division said its frontline troops were 'elated' with the bombing of the railroad N.W. of Cisterna in the morning. Enemy fortifications had been badly damaged and heavy casualties inflicted. No. 56 Division's troops were 'most enthusiastic'.

This day was the occasion of an unusual request - one by Air Forces to Army. The most intense flak of the day was experienced by a force of twenty A-20 Bostons (U.S.) - bombing a gun area. Twenty out of twenty-four aircraft engaged were badly holed. A request was made by the Air Forces, and obtained the assent of the Chief of Staff Fifth Army, that the same target be attacked heavily on the morrow. The only German air activity that day was reconnaissance by two aircraft. The attack on 3 March was half-hearted, and achieved nothing. It petered out completely on 4 March.

Complaint by VI Corps Commander answered and Air Forces exonerated.

Ibid.

On 24 February the Commander of VI Corps - Maj. Gen. L.K. Truscott - informed the Army Commander that he was not well satisfied with the air support arrangements for VI Corps. Acting in the belief that reflection was thereby cast on the Air Forces, No. 7/9 Army Air Support Control drew up, and submitted, a list showing full details of all recent VI Corps and Fifth Army requests and the extent to which they had been met. The view was that there was little basis for the complaint. In many cases, Fifth Army had been able to anticipate VI Corps requirements and had provided large-

/scale

scale programmes which, when weather allowed of execution, must have assisted considerably in the repulse of enemy attacks. The reasons for the complaint remained obscure until a personal interview with the Commander of VI Corps was arranged. It appeared that the complaint related purely and simply to the machinery of his own staff, not to the Air Forces. Internal re-organisation had already begun, with the object of placing greater responsibility on G-3 and G-2 for the selection of targets and relieving the Air Liaison Officer of much of it. Twelfth Air Support Command lent one of its Colonels to VI Corps H.Q. to assist them with advice on target selection and air matters generally.

CONCLUSIONS AND LESSONS FROM THE ANZIO OPERATION.

Gen. Eaker's Summing-up

Operations in support of Shingle M.A.A.F. A.H.B. II J.11/49. Letter from Gen. Eaker to Gen. Arnold 6 Mar. 1944.

The third major landing on Italian soil had been executed and, like its forerunners, had only succeeded by a narrow margin. By 6 March the third of a dangerous series of counter-attacks had been held, but the general situation was still difficult and the hoped-for break-through to Rome indefinitely delayed. Searching study of the problems and history of the operation gave birth at this point to a report by the Air C.-in-C. which is given in full at Appendix 16, and because of its comprehensiveness, should be studied.

Control and Uniformity.

Ibid.

If the beaches had been cleared more quickly, fighters on beach patrol could have been correspondingly released for fighter-bomber work. Further, if the bridgehead had been expanded earlier, great economies of fighter sorties could have been achieved, for it would have been possible to lay down a number of fighter strips. In the event, the only strip which could be laid was rendered untenable by enemy artillery fire and was abandoned. There were no emergency strips to replace it. The method whereby requests for air attacks on enemy forces, emanating from the Ground Army Command Post, were passed direct to the Air Command post worked well and proved in its simplicity a model for the future. The system of spotting for Ground and Naval artillery fire could, had it been uniform and centralised, have economised in spotting aircraft and given greater flexibility in the conduct of such operations. The fighter-control ship, with the single function of controlling fighters, had proved an indispensable factor.

Counter-Air Operations

Ibid.

The deployment of the Air Forces and their phased effort had helped in the achievement of tactical surprise, prevented daylight low level bombing attacks against our beachhead forces, cut down enemy daylight dive-bombing and night bombing to a minimum, and total daily enemy sorties for all purposes to below the hundred mark. Our methods and numbers had killed effective air opposition to our own formations and accounted for something in the region of four hundred enemy aircraft.

Disruption of Communications and Close Support

A high degree, although not a complete one, of isolation, had been effected by cutting communications to the beach-head and keeping them cut long enough for the landing to be made and consolidated with virtually no opposition. Out of one hundred and twenty-eight traffic days the enemy

/was

S E C R E T

- 269 -

was allowed the use of his principal communications line to the battle area on only seventeen days. Ample written evidence is available of the Army's (1) keen appreciation of the value of the Air support. The type of letter such as that sent on 21 February by General Mark Clark to Brig. Gen. Gordon P. Saville, C.G., of Twelfth A.S.C. records appreciation of the fine precision work by our dive-bombers operating over a fluid bomb-line.

The Needs of Second Tactical Air Force

A.X.802
Air Min. to
H.Q., M.A.A.F.
Advanced
14 Jan. 44
A.H.B. II J.1/
90/251 (a)/12a

The build-up in U.K. of air forces for Operation Overlord had now reached a point when calls would have to be made on personnel from other theatres. In mid-January the news was broken to M.A.A.F. that by 1 Mar. 44, it would have to part with four single-engined fighter squadrons, with their due proportion of ancillary personnel. One thousand men would be withdrawn from M.A.A.F. to U.K. M.A.A.F.'s ceiling was lowered by two thousand personnel and a seven per cent overall deficiency on the remaining ceiling. Drafting would be reduced to one hundred men a month for January to March inclusive. All this involved the overlay of complicated fighter re-organisation on top of the general re-organisation about to fall to the lot of the new Air Commander-in-Chief and his staff.

(1) Examination of Maps 7, 7a and 7b reveals the chronological increase in the scale of air effort and its convergence towards the active front. Map 6 shows the progress of the land battle from 22 January to 23 May, 1944, with the various perimeter changes.

S E C R E T

C H A P T E R 8

CASSINO - AIR INTERDICTION AND SECOND STALEMATETHE FIRST AND SECOND BATTLES FOR CASSINOGerman Lines of Defence, January 1944

German Strategy
Br. Hist. Sect.
Central Med
A.H.B./II.J.11/
58/7

The next line of defence in the path of the Allies was known as the Fondi - Monte Cairo Switch Line (or Senger or Fuehrer Line). This stretched from Terracina on the west coast, through Fondi, Santa Oliva, Piedimonte, turned east to include Cassino, then roughly north, culminating in Monte Cairo. The stretch covering the Cassino Area and main front was known as the Gustav Line. The Allied reference to an Adolf Hitler Line behind Cassino is a local term for a rear section of the Fuehrer Line. Behind this system, protecting Rome, was the C Line, stretching from north of Anzio, through points south-west of Valmontone and near Avezzano to the east coast. A short line known as the Campagna Switch Line ran from Albano to Rome. There were only two paths to Rome for the Allied armies - by sea and up the Liri Valley. At the entrance to this valley rose the bastion of Monte Cassino, and its complex of minor hill features, the whole dominated remotely by Monte Cairo to the north.

N.Z. Corps at
Cassino.
Br.Hist.Sect./CM
AHB/II.J.11/58/6

The Monte Cassino Fortress

The entrance to the Liri Valley was both easily defensible and very heavily defended. An Allied attack in the area across the Rapido, just preceding the Anzio landing, failed. It was then clear that the Cassino spur was the mainstay of the enemy defensive system. Before the War, methods of attacking the Monte Cassino spur had been studied at the Italian Staff College as a regular exercise; without any artificial works, the position was generally considered to be almost impregnable. The Germans had been developing and fortifying it for the past four months, constructing pillboxes of steel and concrete, and drilling and blasting emplacements in the rock. The site of the Abbey, ⁽¹⁾ lying on the extreme /edge

P.A.I.F. 534 WD
4th Indian Div.
10 Feb. 1944

Guide to Italy
1920

(1) The Abbey of Monte Cassino (or as it was known to the Allies in the area - the 'Monastery' -) was founded in 529 A.D. by Saint Benedict on the site of an ancient Roman temple to Apollo. During the Middle Ages it acquired world-wide renown as a centre of religious life and of the Arts and Sciences. Within its high walls was a treasure-house of works of Christian art, in most known media and of superb workmanship, as well as many priceless manuscripts; all this was matchless and irreplaceable. According to a book published in 1879 and purchased in Naples by an officer of 4th Indian Div., it was converted into a fortress in 1230 and reconstructed, after suffering several attacks, in both the 14th and 17th centuries. In 1821, four further towers were constructed and, at some time thereafter, the massive main gate, which leads through to a vault lined with stones each 9 metres 40 cm. long. A 38 metres long stone flagged path, steep even for mules, and lighted by five large flanking windows, led up to the second door, an arch with a tower on one side and a stone lion on the other (both emblems of the Monastery). The third door, 10 metres ahead of the second was a strong tower in the Middle Ages; it led on to the three large cloisters. Under the main centre cloister was a water cistern with a capacity of 320,000 gallons. Under the 18th century College were the capacious cellars, the contents of which were a theme for the poet rather than the historian. 4th Indian Division regarded the Abbey as a modern fortress beyond the capacity of contemporary field engineers to deal with.

edge of the spur, dominated the town of Cassino, the greater part of the valley of the Rapido River and the entire eastern end of the Liri Valley. The Abbey was by no means the only point of vantage, nor even the most important, but its value as an observation post cannot be questioned by anyone who has visited it. Extensive field works covered the steep eastern slope of the spur and a wide area of the summit. Further to the west, two other dominating features, Point 593 and Point 575 had been converted into strong points. The whole constituted an intricate system of interlocking defences, from which accurate and intense cross-fire could be brought to bear on any line of approach.

First Movements towards Cassino

Ibid.

Early in January, plans were laid for X Corps to force an entrance into the Liri Valley. Operations began in earnest just before the Anzio landing. By the end of January, the French Expeditionary Corps had seized the high ground to the north-east and north of Cassino. American troops had crossed the Rapido River a mile south of Belvedere hill, after a first attempt further downstream had failed. The village of Cairo fell on 31 January.

The First Battle for Cassino

Ibid.

Unsuccessful U.S. II Corps Effort

Fifth Army planned turning movements on either side of the Liri Valley and a frontal thrust into the valley. X Corps crossed the Garigliano River in a movement aimed at entry from the south; by 20 January it had a footing in the hills, drawing on itself the weight of counter-attacks by four divisions. II U.S. Corps assaulted across the Rapido River, the French attacked in the mountains, but the offensive did not go to plan. The weight of the attack was shifted to the right flank to encircle Cassino by capturing Monte Castellone and Monte Albaneta. By 30 January, after bitter fighting, the Rapido River had been crossed at certain points, and Monte Cairo and the encircling hills taken. II Corps continued attacking with the object of taking Cassino, but, after two weeks, had secured only a few houses on the outskirts of the town. By 6 February, leading troops had fought their way to within 300 yards of Monastery Hill. On 11 February, the last attack failed; the exhausted U.S. II Corps passed command of the sector to the New Zealand Corps.⁽¹⁾

Air Support for Fifth Army Operations towards Cassino

No. 7 A.A.S.C.
War Diary

Little direct support could be given the main Fifth Army forces while Anzio beachhead was being consolidated. Full fighter protection was given wherever weather allowed, but the main weight of air effort affecting both the main front and the beachhead fell on communications targets. In the first battle of Cassino, some of the more noteworthy air efforts were on 20 January when one hundred and seventy-nine Warhawks straffed enemy positions from Cassino to Rocca Di Papa. In spite of extensive bombardment of the enemy rail system, the changeable weather after 28 January enabled the Germans to keep a minimum of one line open to the Rome area. The Wellington effort over the period 2 to 14 February fell to some fifty sorties. American heavy bombers attained a total of some three hundred and forty sorties against railways and the U.S. Tactical mediums just passed the two hundred and sixty sortie mark.

No. 205 Gp.
O.R.B.

/Much

(1) With 2nd N.Z. Div. and 4th Indian Div. under command

Medium Bomber
Operations 1
Jan. - 28 Aug.
1944
H.Q.XII A.F.
AHB/II.J.11/12

Much damage was effected, confirmed by air photographs, in particular at Modena, Ferrara and Padua, but traffic, although hindered, flowed continuously southwards. In Central Italy, hits were recorded on Bucine Viaducts, Viterbo, Terni and Siena marshalling yards, blocking lines temporarily.

The Second Battle for Cassino

Plans

Corps Plans for the Second Battle for Cassino

N.Z. Corps.Op.
Instn. No. 4
9 Feb. 1944 &
4th Ind.Div.Ops.
Instr. No. 3
11 Feb. 1944
Ibid. p. 9.

On 9 February, General Freyberg ordered the attack by New Zealand Corps. The intention was to capture Monastery Hill and Cassino in the event of II U.S. Corps being unable to complete this task by dark on 12 February. In his instructions there was no reference to the Abbey. It was not given as an objective and no reference was made to air support. 2nd New Zealand Division was to act mainly in a support role, crossing the River Rapido and assisting 4th Indian Division, after the latter had cut Highway 6, to capture the town of Cassino.

4th Indian Division Plans

PAIF.534 WD.HQ.
R.E. 4 Ind.Div.
9 Feb. 1944
Ibid. p. 9.

Earlier on the 9th the Senior Officers⁽¹⁾ of the 4th Indian Division had discussed the capture of, and entry into, the Abbey buildings. At 1330 hours the Royal Engineers⁽²⁾ were informed that a possible engineer task was an entry into Cassino Monastery. The Engineer Commanders foresaw difficulties and despatched an officer to H.Q. Fifth Army to obtain information about the building. The subaltern returned that night without any information, but put forward ideas regarding the purchase of books in Naples. On 10 and 11 February this officer visited Naples, where he obtained several books and a line plan. On 11 February the general engineering problems were discussed by New Zealand Corps and 4th Indian Division.

Origins of Army Request for Air Bombing of Abbey

4th Ind.Div.Op.
Instn. No. 3
11 Feb. 1944

On 10 and 11 February, 4th Indian Division prepared its plans and at 2245 hours on 11 February its G.D.O.1 signed the divisional operation instruction. No reference was made to the Abbey as such, except in the Air paragraph which read as follows:-

"Requests have been made for all buildings and suspected enemy strongpoints on or in vicinity of objectives including the Monastery to be subjected to intense bombing from now onward."

This is the first reference which can be found to date to a request for the bombing of the Abbey buildings.

/Belief

(1) Divisional Commander - Maj. Gen. F.I.S. Tucker, C.B., D.S.O. He being sick remained at H.Q. during this operation, giving every assistance to his deputy. He signed all documents relative to the air bombing of Cassino Abbey.
Acting Divisional Commander - Brigadier H.E. Dimoline, C.B.E., D.S.O. (C.R.A. 4th Indian Div.)
Acting C.R.A. - Lt. Col. J.F. Adye.

(2) Commander - Lt. Col. E. Stenhouse

Belief of 4th Indian Division's Commander in Strategic Air Support

A military commentator quoted in "The Tiger Triumphs" S.O. 1946

It is beyond doubt that the strong views of General Taker were the deciding factors in the presentation and successful advocacy of the Army request for air action against the Abbey. It had been publicly stated that "his skill and training of infantry for war, and their leading in battle was of such an original yet practical kind as to border on genius." Mountain warfare was his speciality. His etcher's eye (he was an artist of some standing) for fine gradations of perspective was said to enable him to master, as few commanders had done, the lie of a battlefield.

Main H.Q. 4 Ind. Div. No. 433/G 12 Feb. 1944 Sgd. Gen. Taker

He was a great believer in the power of the air arm to prepare the ground for an army attack and had always pointed out that the Monastery Hill position could not be taken until a preliminary "softening up" by air had been completed or until the hill could be turned and isolated.(1) Infantry could not jump the position with its concrete and steel emplacements. He compared Monastery Hill with other redoubtable positions stormed in the history of the division, concluding that it was the most formidable of all and that to "go direct for it without softening it properly" was "to hit one's head straight against the hardest part of the whole operation." He made these points in two letters to New Zealand Corps. Although not stating that the Abbey was occupied by the enemy the second letter(2) indicated that "block buster" bombs should be dropped in it. It read:-

Ibid. paras. 6 & 7

"6. Whether the Monastery is now occupied by a German Garrison or not, it is certain that it will be held as a keep by the last remnants of the garrison of the position. It is therefore also essential that the building should be so demolished as to prevent its effective occupation at that time.

7. I would ask that you would give me definite information at once as to how this fortress will be dealt with as the means are not within the capacity of this Division."

New Zealand Corps' Publication of Report of German Occupation of Abbey

4th Ind.Div. Intell.Summary No.22 12 Feb. 1944 p. 75 Pt.Two(e)

On 12 February appeared the first printed statement that the Abbey was occupied. 4th Indian Division published under the heading:-

"Violation of Geneva Convention" the statement of a German sergeant taken prisoner that there were several

/German

(1) It is interesting to note that the Cassino feature was captured in the May following largely by the application of this alternative plan outlined by General Taker, in which General Alexander himself was interested.

(2) Signed by the G.S.O.1 but there is little doubt it was composed by General Taker: dated 12 February.

German units⁽¹⁾ in the Abbey; the summary quoted the New Zealand Corps Intelligence Summary⁽²⁾ as its source.

Army Discussions before Request for Air Attack

No. 7 A.A.S.C.
War Diary
13 Feb. 1944

On 13 February the officer commanding⁽³⁾ No. 7 Army Air Support Control at Headquarters Fifth Army visited New Zealand Corps and discussed arrangements for a large scale bombing attack on Cassino Abbey to be co-ordinated with the 4th Indian Division's attack on that objective. At 1400 hours on the same day a conference was held at Headquarters 5th Indian Infantry Brigade for all brigade commanders, heads of services, 4th Indian Division and representatives of New Zealand Corps. It was decided (inter alia) that

"(b) Monastery feature should first be subjected to intensive bombing from the air."

The request had not at this point been sanctioned by the Commanding General of New Zealand Corps, but it is certain that the request was supported by General Freyberg, probably discussed at the daily 15th Army Group G-3(Air) meeting and by Generals Clark, Alexander and Cannon.

New Zealand Corps' Attitude to the Bombing of the Abbey

Box 6744 A.F.H.Q.
2 N.Z. Div.
papers

Further to the publication of the prisoner-of-war's testimony in their Intelligence Summary, the New Zealand Corps stated in their monthly narrative that the Abbey had been fortified by the Germans and that "on 12 February G.O.C. 4th Indian Division represented urgently that heavy bombs would have to be used as siege artillery." The Abbey was, they said "known to be the hub of the defensive system on Monte Cassino."

A report by General Freyberg to the New Zealand Government⁽⁴⁾ stated:-

"On February 15 the Benedictine Monastery was destroyed by heavy air bombardment, a step which was forced upon us because despite enemy protests to the contrary it was being used as observatory for military purposes."

No evidence was adduced in support of the statements that the Abbey was manned by German troops. Before carrying the narrative of operations further, it is important to consider two factors - the contemporary policy of the Allies towards the property of the Holy See in Italy, and towards historic and sacred monuments in Italy generally, and the policy relating to the employment of strategic bombers in a tactical role

/Allied

(1) The text read:-
PW, a S/Sgt. H.Q. Coy. III/132, states that H.Q. III/132 and OP Para Bn and RAP are all together in the Abbey on hill 463 (G.8321) marked with a Red Cross flag. He states that from 15 to 30 Jan. the H.Q. III Bn. (Bn. UREIG) and one platoon 13 Coy. with 2 X 75 mm. inf. now in position were in the same house with the RAP at G.845238 (NZ Corps I.S. No.20)

(2) No. 20

(3) Lt. Col. the Hon. J. Hare, R.A.

(4) Dated 4 April 1944 (Cabinet Archives)

Allied Policy Towards Property of the Holy
See and Historic Monuments

Diplomatic and Military

Perusal of the files of the Air Ministry, Mediterranean Allied Air Forces, Allied Armies in Italy, the Foreign Office and the British Minister to the Holy See lead one to the conclusion that throughout the Sicilian and Italian campaigns the Allies acted with the greatest possible consideration for the safety and integrity of religious and historic monuments subject to the overriding needs of the battle.

F.A.N.322
22 Jan. 1944

On the day of the invasion of Sicily, ⁽¹⁾ President Roosevelt addressed a letter to the Pope, part of which read:-

"There is no need for me to re-affirm that respect for religious beliefs and for the free exercise of religious worship is fundamental to our ideas. Churches and religious institutions will, to the extent that it is within our power, be spared the devastations of war during the struggle ahead. Throughout the period of operations, the neutral status of the Vatican City, as well as the Papal domains throughout Italy will be respected....."

The phrase "to the extent that ^{it} is within our power" should be borne in mind.

A.C.A.S.(Ops.)
B.39
(AHB/II.J.11/17)

General Eisenhower issued a special order at the beginning of the campaign in Italy, reminding all commanders that Italy was a country which had greatly contributed to our common cultural inheritance; that it was rich in monuments whose creation helped and then illustrated the growth of the Allied civilisation; and that, in so far as military necessity permitted, those monuments should be spared from all damage. Thereafter, correspondence was continuous, for the high moral tone of the Supreme Commander's order was something to be aimed at rather than a guarantee. The phrase to be noted here is "in so far as military necessity permitted."

On 4 November, General Eisenhower instructed 15th Army Group that Monte Cassino Abbey ⁽²⁾ was to be added to the list of monuments to be protected, in addition to the Papal estate of Castel Gandolfo (already on the said list). At the time, the ground forces were out of range of both places, but the air forces were well within range of them.

/Vatican

(1) 10 July 1943

(2) Monte Cassino Abbey did not come under the heading of "Papal property." It was the property of the Benedictine Order, situated in an Ecclesiastical District under direct control of the Pope in matters spiritual, the Abbey itself being "Prelatus nullius Diocesec" (i.e. controlled by a prelate who possessed episcopal jurisdiction without a diocese). The name of the old Abbot was Diamarc. The headquarters of the Benedictine Order in 1944 was at Sant' Anselmo in Rome. The chair of the Abbot Primate was held at the time by Abbot Fidelis von Stotzingen, a German, and, according to the Commander of the German XIV Panzer Corps - General von Senger - a friend of his (von Senger's)

Article - "Monte Cassino" in "New English Review Magazine Illustrated" Vol. II (new series) No. 4 April, 1949

Vatican Appeal for Preservation of the Abbey

M.G.S.619.3
A.F.H.Q. File
5913
5 Nov. 1943

On 5 November, the Military Government Section⁽¹⁾ at Allied Force Headquarters advised 15th Army Group that H.M. Minister to the Holy See⁽²⁾ had been asked by the Vatican to intervene with the British Foreign Office in order to save the Abbey of Monte Cassino. A similar appeal had been made to the Germans: Osborne had heard that the Germans "had already occupied Monte Cassino and sent the monks away" and had accordingly informed the Cardinal Secretary of State that if the Germans used the Abbey "the Allies will be obliged to take whatever counter-measures, aerial or otherwise, that their own military interests may require;" this was reported with the request that A.F.H.Q. would take whatever steps were possible for the preservation of the Abbey. 15th Army Group signalled Fifth and Eighth Armies, instructing that the Papal domain at Castel Gandolfo and the Abbey of Monte Cassino were both to be preserved if possible, but that "consideration for the safety of such areas will not be allowed to interfere with military necessity."

A.F.H.Q.
File 5913/O.1478
5 Nov. 1943

F/Italy/10(Vol.I)
Rome Open City
(2.8.43 to
24.3.44) S.I.C.
File No. 410
7 Nov. 1943

Information from
Cabinet Historical
Section.
25.11.1949.

On 7 November, Sir David Osborne reported to the Foreign Office information from the Vatican that the German Embassy had written to say that "regular German troops" would not occupy the Abbey, and that he was then asking the Vatican whether the German assurance covered the occupation or utilisation of the Abbey or its territory by any German military authority or element whatsoever. There is no evidence to date that a really satisfactory answer was ever received on this point from the Vatican before the decision to bomb the Abbey or before the actual bombing. By 12 November, 15th Army Group had issued the instructions given them. A.F.H.Q. promised to advise the Group when a reply was received to the request by Osborne just mentioned.

General Eisenhower on the Military Principle

The matter did not come into prominence again until 29 December, when General Eisenhower signalled all commanders stressing the significance of Italian monuments, but reiterating the military principle involved. He stated:-

"If we have to choose between destroying a famous building and sacrificing our own men, then our men's lives count infinitely more and the building must go.... Nothing can stand against the argument of military necessity. That is an accepted principle....."

A.F.H.Q.3913
File
Sig.8464
6 Jan. 1944

He went on to enjoin the need for meticulous discrimination.

On 6 January, Fifth Army H.Q. had no trace of having received the A.F.H.Q. message of 4th November. It had been informed through Mediterranean Air Command⁽³⁾ of the

/desirability

(1) Section of A.F.H.Q. dealing with matters affecting Allied Military Government and the Allied Control Commission, whose responsibility it was to care for and preserve artistic and ancient monuments in Italy.

(2) Sir David Osborne

(3) Message A.347 dated 27 October 1943.

desirability of preserving Cassino Abbey. It is clear that a complaint had been received⁽¹⁾ that Fifth Army artillery fire had damaged the Abbey for the message spoke of the engagement of enemy positions in the vicinity and admitted the possibility that erratic bursts may have hit the Abbey. If so, the damage was unintentional and unavoidable. Every effort would continue to be made to avoid damaging it, in spite of the fact that it occupied commanding terrain which might well serve as an excellent observation post for the enemy. The gist of the message was relayed to the Combined Chiefs of Staff for General Marshall. Thus, before he left the theatre on 8 January, General Eisenhower had issued the orders relating to the preservation of Papal property and of cultural and religious monuments (with a proviso on military necessity), which had been received by all ground and air commanders in the field.

Cassino Abbey was at this time well within the front-line area of II United States Corps. Operations following the Anzio landing on 22 January brought the Papal domain of Castel Gandolfo (near the Alban Hills) into the picture as a tactical area of communications behind the enemy lines, and a possible object of air operations. It is necessary at this point to digress and to study the bombing of Castel Gandolfo, for this occasion and the high level Allied rulings arising out of it established a most important precedent directly related to the bombing of Cassino Abbey. The record will make quite clear the attitude of the Allied Governments and the Combined Chiefs of Staff to decisions made in such cases by the Supreme Allied Commander Mediterranean.

The Castel Gandolfo Precedent

Castel Gandolfo

It was the desire of the Holy See that all Papal property, as well as Rome itself, should come under the "open city" provisions. The British and United States governments had agreed that Papal property was to be respected as neutral. Their instructions to General Eisenhower were clear to the effect that this immunity was to be always subservient to military necessity, stressing that he was empowered to take what action was considered necessary, if action against such property were deemed essential to the conduct of Allied operations.

In the village of Castel Gandolfo in the province of Rome and 13 miles roughly S.E. of that city, lay the Pontifical Palace and the Villa Barberini, both Vatican properties.⁽²⁾ The grounds of the Papal estate ran in a long strip north and south from Castel Gandolfo Village to the outskirts of the town of Albano and included the Barberini Villa and other buildings. Albano and Castelli Romani⁽³⁾ had both been to a great extent evacuated. The Papal buildings harboured some five thousand civilian

/refugees

(1) Probably from the Vatican through the Foreign Office and C.C.S.

FAN.322 22 Jan.1944 (2) Included in Article XIV of the Lateran Treaty; the CCS to Wilson Pope's summer residence

(3) The nearby wine-growing district.

Foreign Office
S.I.O. File
F/Italy/10
(Vol.I)

Holy See/64/IN
No. 64
2 Feb. 1944

refugees from the area. There were nuns in the convent just outside the estate walls and the religious colony included colleges and the cathedral. The area lay in the midst of the battlefield.

Air Commander-in-Chief's Instructions on Operations in the Albano Area

MEDCOS 27
2 Feb. 1944

At some time before the afternoon of 2 February (1) (following discussions with the Commander of 15th Army Group and the Commanding General of the Tactical Air Force), the Air Commander-in-Chief despatched the following signal to the Supreme Commander Mediterranean:-

"Certain areas in Italy pertaining to the Vatican have been on a restricted basis as far as air operations are concerned. The desire to hold these areas inviolate has been strongly represented by both the United States and British Governments. The exception has been in case a tactical emergency should arise which would necessitate such operation in our own protection or in support of our vital ground operations. This situation has now developed in the Albano - Castel Gandolfo area wherein is located the Vatican farm and summer residence. This area is now in the midst of the battle area and contains essential road communications. I have discussed this with Alexander, who feels that we cannot prejudice the success of the Rome operations by providing in the middle of the battle a sanctuary for the opposing Germans. I have instructed Cannon to attack targets in this restricted zone only when in his opinion and in that of Alexander it is absolutely necessary, but have given him freedom to operate when this condition is met."

C.O.S. (44) 32nd
Mtg. (c)
3 Feb. 1944

General Wilson concurred in this decision of General Eaker and advised his concurrence to the British and Combined Chiefs of Staff on 2 February. The British Chiefs of Staff noted "with approval" this signal and later (2) confirmed their agreement with both views and decision.

Air Operations in Albano Area 1 and 2 February 1944.

No. 7 A.A.C.S.
War Diary
1 and 2 Feb.
1944

M.A.A.F. O.R.B.
Appx. E/Ops. 2 and
M.A.T.A.F. O.R.B.
Appx. E/Ops. 32 1
and 2
Feb. 1944.

A tactical emergency therefore now existed in the Albano area. On 1 February, the weather in Fifth Army sector was hazy, with low cloud, so poor, in fact, that the only army support flown was one medium bomber and two fighter-bomber missions. Twenty-three U.S. Mitchells (3) were airborne, with Albano road junction as their target. They dropped eighty-two 1000lb. bombs. One report stated that all bombs fell in the target area and that the road was believed to be blocked. Another testified to a good average of hits on the road junction and the main road S.E. of it, as well as hits in Albano town. Three aircraft were holed by flak, the local build-up of which was observed to be considerable.

/During

FAN. 322
22 Jan. 1944.
CCS to Wilson

(1) No copy of the original signal can be traced in U.K., but it probably exists in Gen. Eaker's files held by U.S.A.F. and is probably dated 1 February.

(2) See COSMED No. 27 dated 12 Feb. 1944.

(3) From No. 321 Group

During the forenoon on 2 February thirty-six U.S. Mitchells⁽¹⁾ attacked the same target with one hundred and twenty-seven 1000lb. bombs. They claimed to have well covered the target, and scored many hits in the town and out the main road and the N. side of the road junction. Twelve aircraft were holed by flak.

Z.O. 11 5 Feb. 1944
quoting text of
Tel.No. 35 -
Vatican to State
Dept. (U.S.)
dated 2 Feb. 1944

Ground Reports by Vatican on Results of Albano Air Attacks

On 2 February the Vatican reported to the U.S. Minister to the Holy See that on 1 February in the afternoon attack on Albano one bomb hit the Convent, killing seventeen nuns; others hit two colleges with victims; the apse of the Castel Gandolfo cathedral was damaged; also that on 2 February five bombs fell in the domain killing one and injuring five. Sir David Osborne, learning of the affair, asked the Foreign Office to warn the Allied High Command in the Mediterranean.

Chiefs of Staff's favourable Ruling on Air Operations at Albano

COS.MED. 27
12 Feb. 1944

On 8 February, the Foreign Office, to whom the Castel Gandolfo affair had been referred, advised the Chiefs of Staff's Committee of their findings. After recalling the Allied policy that the diplomatic immunity of Vatican property should not be allowed to interfere with bombing during the assault, the following ruling was given:-

"It follows that if the C-in-C. is allowed this latitude in the treatment of Vatican properties in Rome during the assault on Rome, he should be allowed a similar latitude in regard to these similar properties during the assault on the localities in which they are situated. In other words, the C.-in-C. was not only within his rights but within his instructions in permitting such action to be taken as resulted in bombs falling on these two properties (i.e. at Castel Gandolfo).

F.O. File F/Italy/
10 (Vol.I) Rome.
Open City. 2.8.43/
p.103. 24.3.44.

COS.MED. 27
12 Feb. 1944

On 11 February, the Combined Chiefs of Staff relayed the ruling to General Wilson, at the same time enjoining on him all reasonable care. On 12 February, the British Chiefs of Staff confirmed the signal just quoted, mentioning a new fact, namely that the German Embassy had assured the Vatican that Kesselring had ordered that the immediate surroundings of the Papal villa should not be used by the Germans for any defence construction or storage of war material. In particular, they emphasised that there were no legal grounds why particular care should have been taken to avoid hitting the convent outside (although contiguous to) the property. ~~(recorded and the views therein expressed.)~~

Report of heavy Civilian Casualties during Air Attack on Albano 11 February 1944.

M.A.A.F. O.R.B.
10 Feb. 1944

On 10 February, Allied heavy bombers were diverted to tactical support of the Anzio beachhead. Among the areas involved was Albano which was attacked by thirty-six U.S. Fortresses, two of which were lost. Among the results of the bombing were the deaths of many civilian refugees.

/The total

(1) Also from No. 321 Group

Signal No. 88
Sir D. Osborne
to Foreign Office
14 Feb. 1944.

The total was put as high as five hundred⁽¹⁾ by the Pope, who was greatly distressed at the unfortunate end of so many homeless who had accepted his hospitality. It was his hope that certain towns would come to be regarded by both belligerents as reserved for use of the sick, wounded and refugees, and therefore inviolable.

Other incidents occurred from time to time and the correspondence between the parties concerned continued to accumulate. General Wilson continued to enjoy the support of Foreign Office and Chiefs of Staff. The main points emerging as affecting the damage caused by air attacks in the area were that General Wilson, on whom the responsibility was placed by the Allied High Command, was entitled to attack Papal property if in his opinion the situation warranted it, and that in this action he was supported by the Government and all the Chiefs of Staff. A precedent bearing a certain parallel, if not complete pattern of similarity to that of Monte Cassino Abbey had been created and was fresh in the minds of the Mediterranean Allied commanders by 12 February when the first ideas of an air attack on Cassino Abbey were under discussion.

The Military Occupation of Cassino Abbey and
its Territory Prior to 15 February 1944

Military Occupation not a decisive Factor in Request for
Bombing of the Abbey

Main 4 Ind.Div.
No.433/1/G
12 Feb. 1944

"The Pattern of
War" by Lt.Gen.
Sir F. Taker 1948
Cassell.

It will be clear from the foregoing pages that the question as to whether or not any German military units were in occupation of the Abbey or its territory before the air attack of 15 February, carried little or no weight in the decision that heavy preliminary bombing was necessary. The views of the Commander of 4th Indian Division expressed on 12 February leave no doubt that it was as a military unit forming part of the whole feature of Monastery Hill that the Abbey and its territory was viewed. The whole philosophy of the idea is implicit in the paragraph of his letter to the New Zealand Corps Commander of 12 February quoted a few pages above. The tone of the discussions makes it evident that General Taker, who saw modern warfare, like that of the past, as a succession of sieges, and the heavy bomber as the current version of the old siege train, viewed the problem as a soldier, realistically, proposing the air operation as an alternative to an engineering operation, as one which should lead to the annihilation of any enemy hopes of holding on to the Monastery Hill position as such.

It will be noted that as from the publication of the prisoner-of-war's evidence on 12 February (taken on 9 February) there is a build-up of recorded statements to the same effect, which seems to point to a belief in at least some Allied quarters that proof of German occupation before the event would in some way reinforce the decision to bomb the Abbey

/German

(1) Comparing these figures with the civilian casualties at Cassino Abbey, the evidence suggests that although serious in the latter case, they did not equal those at Castel Gandolfo, and it may be proved in time that most of those at Cassino were the result of deliberate German manipulation of the situation.

German Guarantees of Non-occupation of the Abbey

Sir D. Osborne
No. 410
7 Nov. 1943

On 7 November 1943, the Vatican reported a German Embassy promise that the Abbey would not be occupied by "regular German troops." On 14 February 1944 the German Ambassador to the Holy See transmitted to the Abbot Primate of the Benedictine Order the statement that German military authorities asserted that there were no defence works at Cassino Abbey, nor artillery mortars or machine guns or any troop concentrations in the neighbourhood of the Abbey. Everything possible, he said, had been done to prevent Monte Cassino from becoming a traffic point. On 15 February, a further statement was handed to the Vatican amplifying this and reaffirming that there were (at that date) no artillery, mortars, machine guns or German troops in Monte Cassino Abbey or its immediate surroundings. By 21 February, however, they had announced their occupation of the Abbey ruins.

Sir D. Osborne
No. 108
20 Feb. 1944

One report, on "fairly reliable authority," reached the British Minister to the Holy See that "whereas some time in 1943, the Germans had agreed to respect a 300 metre neutral zone round the walls of Cassino Abbey, in January they ceased to observe the agreement and set artillery within this zone." There is no evidence yet available to support or contradict this report.

"Reflections on the Cassino Battle" Irish Defence Journal
Feb. 1949 p.64
(in W.O. Library) and
"Monte Cassino" New English Review Magazine Illustrated
Vol. II
(New Series)
No. 4 April 1949

A striking piece of testimony in support of the German contentions appeared recently in the form of two articles by General von Senger, commander of the German XIV Panzer Corps in the Cassino Sector at the time of the bombing. He affirmed that there were "no Germans in the Monastery grounds, for Field Marshal Kesselring had given express orders that troops should not be permitted to enter the sanctuary, in order to avoid giving the Allies any excuse for destroying it." He could not testify personally that this decision was communicated to the Allies. (1) Not only did Kesselring, he said, prohibit German soldiers from entering the Abbey, but posted a guard at the gate to ensure that his orders were carried out. (2) He admitted one exception. On Christmas Day he himself attended Mass, held by the venerable Abbot Diamare in the crypt for a couple of hundred refugees. Von Senger was assured of no complaints of the behaviour of either of the opposing forces.

Italian Statements on German Occupation of Cassino Abbey

"Tomaro due Anni di Storia" Vol. 2
Chp. 22 Note 7 on p. 466 (in course of publication in Italy)

Two statements were made by Italian ecclesiastics that there were no German troops in the Abbey at the time of the air attack. They were quoted in the official Italian history of the 1939 - 1945 war, now being published in serial form in Italy. (3) The first, by the Abbot, Gregory Diamare, states:-

"I give testimony to the truth that in the boundaries (recinto) of this holy monastery of Monte Cassino, there have never been German soldiers. There were only for a certain time three gendarmes (gendarmi) whose sole purpose was to make respected the neutral zone that had been established round the monastery, but these were withdrawn for about twenty days" (prior to the bombing).

/The second

(1) There is no evidence to date that it was, in this or any other form.

(2) The only evidence available of the posting of guards will be seen later to have a more sinister implication than Von Senger's.

(3) In neither case is it given to whom the statements were addressed or given, but Von Senger's later evidence will suggest an answer.

The second, by Father Oderizio Graziosi of the Diocesan Administration⁽¹⁾ reads:-

"I,----- who escaped from the terrific bombardment of Monte Cassino, effected by American aeroplanes on 15 February ----- do declare in faith:- (inter alia)

1. What happened in the Abbey corresponds to a criminal action not determined by any warlike movement.
2. -----
3. In the inside of the Abbey, and throughout its whole perimeter (cercate perimetre) there were no German troops or warlike preparations (appareamenti) of any kind."

M.A.A.F.
Microfilm
Reel 14 No.11
(INT)
(A.H.B.)

Supporting up to a certain point the testimony of the ecclesiastics and General Von Senger's statements, there is an important report issued by H.Q. Fifth Army - G.2 on the interrogation of four Italian women who were in the Abbey before, during and after the air attack of 15 February and who were picked up on 16 February near Cervaro by the Americans. They saw no guns within the Abbey, nor any German soldiers except two German officers who came up occasionally to treat wounded civilians. On the road leading up the mount they saw two light tanks about 300 metres from the Abbey and a mortar behind a funicular station at the foot. On the eve of the bombing, two Germans (whom they believed to be officers) visited the Abbey, conferred with the Abbot, and left. At a few minutes after 0600 hours on 15 February when, after reading an Allied leaflet warning of the impending air attack, the civilians were preparing to leave on the advice of the monks, two German officers and an interpreter, they stated, came to inform the Abbot that under no circumstances was any civilian to leave under pain of being shot. Two German sentries were posted at the gates.

Allied Reports of German Occupation of Abbey prior to 15 February

MEDCOS 64
4 Mar. 1944

When, on 11 February U.S. II Corps passed command of the sector to New Zealand Corps, they had already recorded the following information on the German positions on Monte Cassino: on 6 February a tank was seen to be dug in to cover the approaches to the Abbey; the enemy defences were extremely well prepared and bunkers had been dug in to cover the Abbey approaches: on 8 February, enemy resistance to their attack in the area was extremely severe; small arms and machine gun fire was received from carefully sited emplacements and pillboxes very close to the Abbey. On 9 February they quoted a report by an Italian civilian; this man stated that he had been frequently in the Abbey during the month previous to his departure on 7 February and that there were thirty machine guns and some eighty soldiers in the building; resistance had been stubborn, especially in the area surrounding the Abbey where the enemy held strong positions "encircling" the Abbey.

On 10 February, one of the few pieces of primary evidence was recorded, to the effect that the Battalion Commander of the 133rd U.S. Infantry Regiment reported a telescope in the middle row of windows on the east face of the Abbey. Enemy were stated to be moving around the base of the building on the north side; on the slightest movement of our troops in the vicinity of the Abbey, heavy machine gun and mortar fire had been received.

/The same

(1) Also Secretary of the Diocesan Office of Catholic Action

The same day that New Zealand Corps took over command Sir David Osborne again reminded the Vatican⁽¹⁾ that if the Abbey or its territory were used by the Germans for military purposes, the Allied military authorities would be obliged to take necessary counter measures. It will thus be seen that while he was concerned primarily with the diplomatic issues, in the theatre itself it was the tactical needs of the situation that from that time on preoccupied the military commanders, although they, too, were fully posted on the general policy covering the issues involved.

The Air Plan

Form of Army's Request to Air Forces

P.A.I.F. 531 W.D.
H.Q. 4 Ind. Div.
G.S. Planning
Note No. 6
14 Feb. 1944

By 14 February, the request for the use of heavy bombers was passing through the normal channels⁽²⁾ to General Eaker, the C.-in-C. of the Air Forces; 4th Indian Division published its version of what it required from the Air Forces. Two of the targets requested were in the Abbey. The first request was for the heaviest possible weight of demolition bombs for late afternoon on 16 February, with the object of reducing the Abbey to ruins. Reports indicated, it was stated, that up to 14 February Germans were living in the building, including the cellar.⁽³⁾ The second request was for incendiary and smoke bombs on the Abbey, to prevent the enemy from reorganising his defences in the Abbey before dark and to maintain it until dusk in such a manner as not to interfere with other tasks. Further suggestions were for 15 per cent of the weight of air attack available to drop bombs other than the demolition type on mortar and machine gun posts beside the Abbey wall, and for incendiary and smoke bombs on the woods adjacent to, and immediately N.W. of the Abbey, so as to set fire to these woods and prevent the enemy reorganising his defence. At the foot of the outline was printed -

"The success of this operation depends entirely on the strength of the air."

In the same planning note appeared the recorded intention to pull back the forward troops on the night of 15/16 February to a point beyond 1000 yards of the Abbey.

Original Timing of the Combined Operation

When the request was following its normal course to the point of final decision to modify standing

/priorities

H.Q., A.C.M.F. Op.
Instn. No. 42
11 Feb. 1944
(In Appx. E. AAL.
36 Cabinet
Offices)

- (1) Both verbally and in writing
- (2) After discussion between Gen. Clark, Gen. Alexander and Gen. Cannon.
- (3) Thus, by that date, the assumption of German occupation, although not vital to the fundamental plan, was being taken into account.

priorities(1) of strategic air attack, the date of the combined attack on Monastery Hill depended on two time factors - by what date would the weather have allowed the ground to become sufficiently dry to permit the operation of armour off the roads and at the same time be suitable for effective air support? At 14 February the date fixed has been seen to be 16 February.

The Decision to bomb Cassino Abbey

COSMED 51
4 Mar. 1944

Report on the
events leading to
the bombing of
the Abbey of
Monte Cassino
15 Feb. 1944.
Cabinet Hist. Sect.
14 Oct. 1949.

There is no doubt that the request of 4 Indian Division was agreed to, and supported by General Freyberg, General ~~Mark Clark~~ and General Alexander. It had to be discussed between General Alexander and General Cannon; the latter passed it to General Eaker, who alone was empowered to order the Commanding General of the 15th Air Force to use his heavy bombers in support of the land battle. Evidence is awaited from U.S. records as to the exact progress of the request up to this point and it is not yet possible to say for certain whether it was referred to General Wilson(2) for his concurrence or who made the final decision.

No. 7 A.A.S.C.
War Diary
15 Feb. 1944.

Appx. A to 4 Ind.
Div. War Diary
Feb. 1944

At some time on 14 February, it was decided that the attacks on the Abbey were to be made on the morrow, i.e. 15 February (instead of 16 February), so as to eliminate the risk of more doubtful flying conditions on the latter date. 4th Indian Division stated that it was not known to them "until the last minute that the bombers were in fact coming. Although the possibility of their doing so had been 'on and off for days' and the result was that it was not possible to get the information to forward troops on the ground in time for them to adjust their positions to conform with the bomb safety line."

A.H.B. II. J. 1/153
M.A.A.F. Mission
Intentions

The Air Missions Intentions Orders

Events moved fast the night of 14/15 February. Orders for the mission intentions went out, in confirmation, no doubt, of previous verbal messages: At 2150 hours M.A.A.F. gave all air H.Q.'s the Abbey as special target with the object of the maximum destruction of its walls and buildings. Ten per cent of the bomb load was to be delay fused up to 24 hours; a special bomb line was to be furnished. At 2345 hours Tactical Bomber Force H.Q. gave H.Q.'s concerned (down to Wing level) the intentions for the medium bombers, as attacks at 1300, 1315 and 1330 hours. Four Fortress groups were to conduct the morning attack before 1130 hours. The mediums were to cross the coast between Ischia Island and the Volturno River. The intentions for the heavy bombers were not issued until 0114 hours on 15 February. The message, signed by General Twining, detailed four groups of Fortresses for attacks lasting from 0930 to 1015 hours.

/The Air

Sextant C.C.S.
387/3 (136th Mtg.)
5 Dec. 1943.

(1) The actual text of the C.C.S. ruling applying to such cases was laid down at the Sextant Conference on 5 December 1943. The exact wording was as follows:-

"You will provide U.S. Strategic Air Forces under separate command, but operating in your area, with the necessary logistical and administrative support in performance of Operation Pointblank as the air operation of first priority. Should a strategic or tactical emergency arise you may, at your discretion, utilise the 15th S.A.F. for purposes other than its primary mission, informing the C.C.S. and the C.G., U.S.A.A.F. in Europe, if and when that command is organised."

(2) Letters from A.H.B. to Lord Wilson and his Chief of Staff at the time have not led to any helpful information.

The Air Attack on the Abbey

Allied Warning to Immates

The night before the air attack, i.e. the night 14/15 February, leaflets were fired into the monastery, warning the inmates that the bombing would begin the next day. There is confirmation from four Italian women there at the time that one at least of these pamphlets was picked up, read and action taken as a result. It was dropped, they thought, from an aircraft.⁽¹⁾ The exact method of dispatch cannot be confirmed. There is no suggestion from any quarter that warning was not given or received.

Action within the Abbey after Receipt of Allied Warning

H.Q. 5th Army H.Q.
A.C.S. G-2
M.A.A.F. Micro-
film/A.H.B./14 -
No.11 (Int.)

The four Italian women, already mentioned, who were inside the Abbey on 14 February, give the sequence of events thereafter. If they are true, - and the evidence bears certain marks of authenticity - they have a direct bearing on this narrative, especially as regards the actions of the German Propaganda Ministry after the event.

The leaflets were picked up. The Abbot read one; he sent for German advice and discussed the situation with two Germans who were sent up. Seeing that the refugees were growing restless and frightened and wanted to leave the Abbey, the Abbot sent monks (there were between six and ten there) to calm them with an assurance that the Germans had promised to send a message to U.S. Headquarters in order to avoid the bombing of the Abbey. There is no record that such a message was ever received by any Allied unit.

At 0600 hours on 15 February, the monks told the refugees to prepare to leave. It was a few minutes later that the two German officers and one interpreter came and informed the Abbot that under no circumstances was any civilian to leave, under pain of being shot. No fires were to be lit. Two German sentries were posted at the gate.

Air Operations against Cassino Abbey 15 February 1944

No.7 A.A.S.C. War
Diary 15 Feb.1944

During the forenoon of 15th February, one hundred and forty-two⁽²⁾ Fortresses were airborne against the Abbey. One returned early, six returned their bombs to base. The main force of one hundred and thirty-five aircraft bombed the Abbey between 0925 and 1005 hours from heights of between 15,000 and 18,000 feet. Shortly afterwards a force of seventy Mitchells⁽³⁾ and forty Marauders⁽⁴⁾ began operations. For some reason untraceable twenty-three Mitchells returned early to base. The balance of this force attacked the Abbey between 1035 and 1332 dropping two hundred and eighty-three 1000 pound bombs. Eight medium bombers were holed by flak. Three enemy aircraft sighted made no attempt to interfere.

/Artillery

(1) Von Senger stated in the article referred to that a monk from the Abbey had confirmed this information to him personally after the event.

(2) 37 aircraft of 2 B.Gp, 35 of 97 B.5p., 38 of 99 B.Gp. and 32 of 301 B.Gp.

(3) 340 and 321 B.Gp.

(4) 319 B.Gp.

Salerno to the
Alps (1)
(Fifth Army
History) p.114

Artillery Bombardment of Cassino Abbey 15 February 1944

The attack on the Monte Cassino position was supported by New Zealand Corps and II Corps (U.S.) artillery. The Fifth Army history gives the following report of artillery operations against the Abbey. In any assessment of damage it must be recalled that results were those of the combined air-artillery operation.

II Corps fired two-hundred and sixty-six rounds at 1030 hours. During the day ten 240 mm. howitzers and twenty-four 8-inch howitzers fired five rounds each. Twelve 4.5-inch guns and twenty-four 155 mm guns fired four rounds each.

Results of Air and Artillery Attack

Appx.A. to 4 Ind.
Div. War Diary
Feb. 1944

Special Report on
Cassino in the
History of
M.A.A.F. by
Lt.Col. Parton

N.Z. Corps at
Cassino. Brit.
Hist. Sect.
CMF. AHB.

Ground observation and air photographs showed at the end of the day that, with its roof missing and the massive walls shattered almost to ground level, the Abbey had been reduced to a shell. In some cases bombs had gone through to the cellars. Little remained of the delicate stone cloisters, the marble steps, the fine 17th century church. Damage was particularly extensive in the eastern part.

According to Fifth Army History "German troops made repeated efforts to run from the Abbey to safer positions while others took refuge in tunnels and cellars." (2) The War Diary of No. 7 Army Air Support Control states (3) that an Indian Observation Post reported that two hundred enemy troops came out of the buildings during the bombing at 1115 hours. A German message in clear was picked up by Allied 'Y' intercept, during the air attack on the Abbey. It ran: "bombed out, am clearing out." It does not follow that the unit initiating it was in the Abbey.

By the time the news of the switch of the air attack from 16 to 15 February reached the appropriate formations, it was too late to withdraw certain units of 4 Indian Division in daylight from their exposed position. A few casualties were incurred, but ground reports are at one in confirmation of the general accuracy of the air bombing.

Infantry attacked that night under heavy enemy fire, but failed to take Point 593 and other objectives.

M.A.A.F. and
D.A.F. O.R.B.'s/
Ops. 15, 16,
17 Feb. 1944

Although the needs of the Anzio bridgehead called for maximum air support in that area, an effort at support and

/bombardment

(1) This is a condensed version of Fifth Army History in 9 parts, (printed in Italy) - a copy of which is held in Cabinet Archives. For a somewhat severe criticism of this book, refer to Military Affairs, September 1949, Vol.XIII, No.2, pp.119/120 issued by the American Military Institute. It makes certain statements conflicting with known facts and gives no documentary references in support.

(2) Not supported by any documents.

(3) No confirmation of this statement can be found in any of the War Diaries of 4 Indian Division and it was not included in Gen. Wilson's signal summary of evidence of German occupation before 15 Feb. 1944.

bombardment of what might be enemy positions in the Abbey was afforded on 16 and 17 February. On 16 February, in response to an urgent call for support by Fifth Army, Desert Air Force aircraft crossed the Apennines in bad weather to bomb the Abbey. Of seventy-two Kittyhawks airborne, three of six missions got through and forty aircraft dropped 14.5 tons of 500 and 1000 pound bombs, claiming forty-three direct hits. On 17 February, among other aid to Fifth Army, thirty-five Kitty-bombers and sixteen Warhawks bombed the Abbey, with what appeared good results.

M.A.A.F. Micro-
film Reel 14
No. 11 (Int.)
(A.H.B.) and
Von Senger articles
as above

Events in the Abbey 15 and 16 February

There are only two sources available as to any record of what was happening on the German side and in the Abbey - the report of the four Italian refugees and Von Senger's article. Location and study of the war diaries of German formations and the German Propaganda Ministry will no doubt round off the narrative in time.

The refugees, locked in and left to their fate by the Germans, suffered serious casualties (by no means the first) on 15 February - the Abbot was found pinned under wreckage, still living. During the day, the underground rooms were made available to the refugees, many of whom had lived, it was stated, on food traded from the monks to them by a middleman. In answer to an appeal for guidance the Abbot is reported to have told them to do "whatever they pleased." The first offer of evacuation came after the heavy bombing, at midnight. Again the Germans ordered that no one was to leave, (on that occasion 0600 hours was the zero hour given). The Germans promised to evacuate from then the monks, wounded, women and children in trucks, leaving the rest of the survivors to make their way on foot in the direction of Rome. It would have been impossible to evacuate them on the 14th on receipt of the Allied warning said General Von Senger, without a local armistice.

During the night of 15/16 February some refugees made their own way out of the ruins of the Abbey. The four Italian women (whose testimony is still being used) were picked up by American troops a few miles off. The Abbot, his monks and the balance of refugees proceeded, in spite of danger from shellfire, to cross the hills towards Monte Cairo and descended a valley somewhere near Piedimonte. Von Senger had the Abbot and one monk picked up and brought by car to his headquarters at Castelmassimo,⁽¹⁾ where he stayed the night. In conformity with orders received from the German High Command, Von Senger induced the Abbot to join him in a dialogue before the microphone; therein the Abbot is reported to have deplored the irreplaceable loss of so many treasures of art. On the Abbot's request, he was dispatched with an escorting officer to the Benedictine Order's headquarters at Sant'Elmo in Rome. On the road the car, said Von Senger, was waylaid by agents of Goebbels,⁽²⁾ who took him to a radio station and after keeping him waiting for a long period without food, induced him to make another statement to their formula. The old Abbot declined to make a further statement, coloured by political bias, which the Foreign Office agents pressed on him, and was eventually conducted to Sant'Elmo and left in the keeping of his own order

/Repercussions

(1) To the north of Frosinone

(2) German Propaganda Minister

ReperoussionsGerman Accusations of Allied Vandalism

The German Propaganda Ministry made great play of the destruction of the Abbey, both to the world public and in the Vatican. The German-controlled Italian Press made the utmost capital out of the event, even giving the report of an apocryphal audience of the Abbot with the Pope and of a conversation said to consist of an offer by a member of the U.S. Legation at the Holy See to the Cardinal Secretary of State of financial assistance in the reconstruction of the Abbey which was declined by the Cardinal.⁽¹⁾

Sir D. Osborne
Nos.107 G.108
21 Feb. 1944

On 21 February, Sir David Osborne discussed with the Vatican the discontent felt in that quarter over the "affairs" at Cassino Abbey, Castel Gandolfo and Rome. The Vatican attitude was studiously moderate and offered no support to German efforts to exploit the situation for propaganda purposes. The question of German occupation did seem, however, of importance to them and they appeared not to consider the military conception that it was the Monte Cassino position as a whole that was the objective of the combined air-artillery-infantry attack. Unbiased opinion in Vatican circles seemed unanimous in the conviction that there were no Germans in the Abbey.

One important possibility was suggested by Sir David Osborne, namely that German paid informers reported the presence of Germans in the Abbey to Allied military authorities; thus furnishing propaganda material if we bombed it and also enabling them to use the ruins of the Abbey (as they had announced) for military purposes afterwards. By 23 February, the walls of Rome and Vienna were plastered with posters condemning the attack on the Abbey.

There is plenty of evidence for a case pointing to a deliberate trick on the part of the Germans resulting in both a diplomatic and tactical triumph. To reinforce this case there is the reported action of closing the Abbey gates on the refugees soon after it was known that the attack was inevitable, leaving no troops inside, followed, immediately after the bombing, by an intensive propaganda exploitation of the event, the waylaying of the Abbot on 16 February by Goebbels agents, and the full military occupation and arming of the Abbey. It cannot yet be affirmed that this was the case, but further research may well reveal confirmation that it was.

The Call for Evidence of German Occupation

The Foreign Office began enquiries which led to the dispatch of a signal from the British Chiefs of Staff to General Wilson on 4 March. He was asked to produce proof of the military use which the Germans had been making of the Abbey. The search for evidence began; all headquarters were called on to assist. The various reports (some of which have been mentioned) were collated. The Office of

COSMED 51
4 Mar. 1944

/Strategic

(1) The monks at Monte Cassino told the author of this narrative in September 1947 that reconstruction then going on was assisted by U.S. financial gifts.

O.S.S. Memo A.A. 1
11 Mar. 1944
M.A.A.F. Microfilm
Reel 14 No. 11 (Int)
in A.H.B.

Strategic Services (U.S.) was called in, sent in an officer to investigate gun sites reported inside the Abbey, but were only able to report two machine guns some 400 yards outside and that they could find little "ammunition" for an answer. The report of the Indian Observation Post that some two hundred Germans were seen to run from the Abbey and the Fifth Army statement to the similar effect were no doubt investigated, but rejected. On 9 March the Supreme Commander signalled to the British Chiefs of Staff and to Washington for the U.S. Chiefs of Staff his findings to that date. In that signal he took a definite stand, which he adhered to thereafter. There was no doubt, he stated, that the Abbey area was part of the German main defensive position controlling the Liri Valley Gap. If our attacks were to succeed, it was necessary to neutralise this area. The air attack was, he said, justified. What evidence was available was to be reduced to the statement that the Allied authorities on the spot had irrefutable evidence that the Abbey was part of the main German defensive position, but the Germans were not to be given the chance of refuting this in detail. On 15 March he held a meeting and directed a follow-up signal to the British Chiefs of Staff, pointing out the failure to that point to obtain definite proof of German military occupation before 15 February.

Failure of New Zealand Corps Attack

N.Z. Corps at
Cassino Brit. Hist.
Sect. CMF. AHB/II
J. 11/58/6

A ground attack in considerable strength was launched on the night of 17/18 February. When morning broke a few units were clinging precariously to their small gains. The attackers from the south gathered momentum, crossed the Rapido River and took the railway station. Some held on there, others were thrown back across the river. Monastery Hill, which the Indians compared to Keren,⁽¹⁾ remained in the hands of the Germans.

The second battle for Cassino was lost, so was the third, but in the Spring it fell. Monte Cassino Abbey is being rebuilt.

Commentary

In the foregoing pages an endeavour has been made to present the facts as a military jurist would view them, for it is of great importance that, in such a case, fundamental definitions should be agreed on. The facts that it was at Cassino Abbey that some of the texts of the ancient manuscripts of our Bible and famous classical texts were translated and that this house was one of the western world's greatest repositories of spiritual capital, need not remain unappreciated, while it is being pointed out that Cassino Abbey and its territory formed part of the main German defensive position and, therefore, had to be reduced. Even if, (and this cannot at this stage be proved), not a solitary German put foot in Cassino Abbey or on its territory before 15 February 1944, those few acres of ground provided a potential enemy refuge. They were part of a complex; they were a military unit, a position to be treated as a whole. Without possession of it, military control of the mountain was impossible. In the sweep of operations up Italy towards victory in some problematical future, to the Allied forces the entire country was potential enemy territory. They had Hitler's own word for it, for had he not directed the Germans to fight for every inch of ground? While it is likely that Von Senger and
/other

(1) In Abyssinia

other Germans were no less appreciative than the Allies of the spiritual value of Monte Cassino Abbey, it is improbable, knowing what we do of the philosophy of the Nazis and observing how quickly after the event they occupied the Abbey and the Propaganda Ministry's alacrity in embroidering the theme, that German exploitation of the situation was anything but cold-blooded and calculating.

GENERAL PLANS FOR REDUCTION OF CASSINO

General Alexander's Appreciation of Air Role

A. C. M. F. /G. 330/
Para 3(h)
22 Feb. 1944
A. H. B. /II. J. 11/
58/2/p. 76

Ibid.

In the appreciation submitted to the Supreme Commander on 22 February, (1) General Alexander wrote that Allied air superiority was a battle-winning factor. Land operations must be framed to take full advantage of it; tactical objectives must include the necessary airfields, to give scope, and to aid in the maintenance of that superiority. Provided it was prolonged and continuous, the air effort against enemy communications should be decisive. In the coming major offensive (mentioned in the next sub-section), air effort combined with artillery on suitable targets, would enable land forces to reach objectives with minimum losses. He concluded that, whenever direct air support was not vital, anti-air force and anti-communications operations were the correct policy, and that whenever the Army's tactical objective was a suitable air target, the Army's tactical plan should be framed to make full use of combined total air and artillery bombardment, followed by an immediate assault. Plans were to clear the Cassino area, preparatory to deep penetration of the Liri Valley, and to extend the Anzio bridgehead; if these two plans succeeded, to keep the enemy on the run. From the Air Forces he wanted the maintenance of their superiority over the battle area, sustained attacks on the rail system, full support of the Anzio bridgehead and total air effort against important land objectives preparatory to assault, whenever those objects were suitable air targets.

Army Commander's Conference 28 February 1944

Minutes of Army
Commanders Meeting
28 Feb. 1944
Sect. C. in AHB/
II J. 11/58/2

Six days later, the intention of storming the Cassino spur was again affirmed and the need of a central control of air support to both armies discussed. The Commanding General of M. A. T. A. F. pointed out that Strategic Air Force's priorities began with Pointblank targets, and that co-operation with Tactical Air Force was third on the list, although he had a call on Strategic Air Force in emergency. The air power available was sufficient to meet the plans. As for simplified control, the most practical plan seemed to be for XII Air Support Command to control all operations west of the centre of Italy and the Balkans. He wanted airfields in the beachhead and near Cassino. In the mean-

/while

G. 330
22 Feb. 1944
enclosing
A. C. M. F.
Appreciation
No. 1.

(1) The appreciation (written by General Harding) gave the plan for the future conduct of the campaign in Italy. It was now unlikely, the appreciation read, that the enemy would be driven north of Rome as a result of the general offensive now proceeding, (to which, incidentally, Eighth Army had contributed with the loan of several divisions and diversionary operations). He wanted a re-grouping of forces, all the American and French in Fifth Army and all the British, Dominion, Indian and Polish in Eighth Army.

while, he was building up in Corsica; he pressed for clear rulings on the needs for the invasion of Southern France.(1)

The Idea of an all-out Aerial Bombardment of Cassino

The suggestion of a mass air bombardment of Cassino followed by an infantry attack and a secondary tank operation came from the Army Commanders, and was supported by the Army Group Commander. Failure to take the position by ground action and indirect air support, as well as the theory, still strongly held in Army circles, that air bombardment might, on occasions of offensive action, function in an artillery role, were the immediate background of the demand.

15th Army Grp.
M.A. 1109
20 Feb. 1944

On 20 February General Alexander stated that he had discussed the situation with General Freyberg and the next phase would be an assault on Cassino, following the heaviest possible air and artillery concentrations on the target. Our advantages in air, artillery and tanks had been much negated by bad weather to this point.

History of MAAF
P.175 by the
Historian of
M.A.A.F.

The air point of view was partially expressed by General Eaker when he pointed out to General Freyberg that bomb craters would make it impossible for tanks to operate. General Freyberg replied that bulldozers would quickly clear a path. This, it is true, was only a minor point, for tank progress with the strength likely to be available at the crucial point would not be an early major feature of the operation. The tanks would have a long and difficult path to travel before they were, if at all, ready to take to Highway 6; even then, the marshy land to either side of the highway would prevent any advance except along the road itself. On 6 March, nine days before the event, General Eaker wrote to General Arnold:

"Little useful purpose is served by our blasting the opposition unless the Army does follow through. I am anxious that you do not set your heart on a great victory as a result of this operation. Personally, I do not feel it will throw the German out of his present position completely or entirely, or compel him to abandon the defensive role, if he decides and determines to hold on to the last man as he now has orders to do....."

DETAILED PLANS FOR THE REDUCTION OF CASSINO

Ground Plan

The general plan was divided into three stages, firstly the capture of Cassino town, secondly the seizing of Monte Cassino by simultaneous attacks from the east and west, and thirdly the establishing of a limited bridgehead across the Rapido River in the area San Angelo to Cassino, where sufficient tank and artillery forces could be concentrated for a final breakthrough into the Liri Valley. The first two stages were, then, the role of the infantry, the last only the role of the tanks. It had been demonstrated that, owing to the defensive system and the calibre of the defenders, ground forces alone could not capture the town by direct assault without suffering heavy casualties. At that time, Allied Army doctrine incorporated, as had just

/been

(1) Operation Anvil, later Dragoon.

N.Z. Corps
Operation
Instruction
No. 4

been proved at Anzio, two principles to which it attached great importance, namely economy in its own forces and a methodical system of build-up, to what were considered safe levels, before any important offensive action was undertaken. It was hoped, therefore, by means of an intense and concentrated air bombardment, followed by a heavy artillery concentration, to so stupefy and demoralise the defenders, that the ground forces could attack with the minimum of loss, in spite of the enemy's superior observation system.

It was the season of variable weather and the governing factor in the choice of D Day was the weather. Tanks needed three dry days in succession before they could operate over the generally marshy ground. In detail the plan was subdivided to include air and artillery operations. The first phase was to be the air bombardment, the second the artillery bombardment and the third the infantry and tank attack. Before dawn on D Day, Allied troops were to withdraw about 1000 yards; then, just after 1205 hours, when the aerial bombardment had ceased, the troops were to advance into Cassino under cover of an intense rolling barrage.

Air Plan

The Bombardment
of Cassino
M.A.A.F.
15 Mar. 1944

No. 7 A.A.S.C.
War Diary

The Air Plan specified attacks on Cassino Town at ten or fifteen minute intervals by eleven Heavy Groups of M.A.S.A.F., and five Medium Groups of M.A.T.A.F. in the forenoon, the object of these attacks being the complete reduction of Cassino Town. A time schedule commencing at 0830 hours and lasting until 1200 hours was chosen. There was to be no bombing of the town after 1205 hours. An afternoon programme of less weight was arranged, but, in the event, abandoned. Particular attention was to be paid to the destruction of all buildings within the town proper.

TAF/69/Air
11 July 1944
AHB.IIM/A41/1c
and
B.Ops/6431 MAAF
25 June 1944
AHB/II/70/69

No. 57 Mitchell Wing was to attach whistling devices to some bombs. Fighter bombers remained on call by the Army. The Time Schedule for air attacks, with the actual times over target is given at Appendix 18. All the 1000 lb bombs were to be fuze 0.1 seconds nose and 0.025 seconds tail. Normal operational altitudes were specified, namely 15,000 to 16,000 feet for Heavy Bombers and 7,000 to 9,000 feet for Medium Bombers. Intelligence anticipated opposition by the more than eighty dual-purpose 88 millimetre and 137 millimetre guns in the area and from up to eighty enemy fighters within range.

Air Target Areas

Ibid

The assigned target area, contained within a 1250 foot radius of the centre of the town, was divided among the Heavy and Medium Groups; the 'A' (or Northern) half being designated principally for the Mediums and the 'B' (Southern) half for the Heavies. These two areas were attacked alternately, thus allowing for manoeuvring of the attacking Groups between the Initial Point and the target. Only thus could a saturation of the defences be attained. No specific aiming points were assigned. These facts will be borne in mind later, when considering the results of the bombing.

Routeing and Artificial Landmarks for Bombers

Ibid

Before completion of the operation plan, XII A.S.C. asked Fifth Army whether an artificial landmark could be made available to bomber pilots who were not fully conversant with

/the Cassino

M.A.A.F.
Microfilm
Reel 4 x /File 51
LUDLOM Op.

the Cassino area (this applied to a majority). It was suggested that smoke should be displayed at the mouth of the Garigliano River, which pilots could first identify and then follow up the river, turn north at the junction of the Rapido and Garigliano Rivers and approach the town from the south. Fifth Army stated there would be no difficulty in making such an arrangement. The sequence of events from this point will now be given in detail, for the following reason. Without anticipating the report on the operation itself, it must be stated here that the bombing by the Strategic heavy bombers was anything but a model of precision, one group failing to find the target and others bombing far outside it and causing serious Allied and Civilian casualties. It was decided not to have any artificial landmarks or radio control set up to guide the heavy bombers. It is left for consideration whether this decision, in view of the unfortunate course of the operation, was not an error of judgment.

Strategic Air Force's Rejection of special Navigational Aids.

Microfilm 4x/51
Signal 23/239
C.G./XII.A.S.C.
to
C.G./M.A.S.A.F.
23 Feb. 1944

Microfilm 4x/51
Signal - Twining
to XII A.S.C.
23 Feb. 1944
Ref.EA.424F

Microfilm 4x/51
Signal Ref.
EA.424F MATAF to
XII A.S.C.

Twelfth Air Support Command asked Strategic Air Force, on 23 February, if any special radio control or navigational markers would be of particular value to them. For example, a line of coloured smoke along the base of Monte Trocchio - Venafro, or at any other point desired, could be arranged for. A quick reply was requested and obtained the same day. When and if Strategic Air Force attacked Cassino, said General Twining, it could identify the town without special navigational aids. This over-confident attitude was somewhat modified by the following sentence, which suggested a line of coloured smoke along a special bomb-line; so as to assist in preventing the bombing of friendly troops or Allied Headquarters. M.A.T.A.F., the same day, asked XII Air Support Command for details of the plan for the use of coloured smoke, so that the Mitchell and Marauder Wings could be warned.

Cancellation of Limited Bomblinc Marker Plan

LUDLOM
Microfilm
Sig.C.G.
XII A.S.C. to
C.G. MASAF
24 Feb. 1944 in
reply to E.697
and E.172

LUDLOM
Microfilm
Sig. C.G. XII
A.S.C.
to
C.G. T.A.F.
24 Feb. 1944

Apparently XII Air Support Command ran into trouble when it took up the Army's assurance of no difficulty, for the next day XII Air Support Command tried to explain to Strategic Air Force that there was difficulty in providing sufficient quantity of smoke to meet even their limited request for the marking of a special forward bomb line. The provision of smoke for such purposes was an Army commitment. A different version of the facts was given to Tactical Air Force, the same day, by Twelfth Air Support Command. This time, the trouble, they said, was (not that the Army could not provide sufficient smoke to give continuous cover, but) that it was not considered advisable to mark frontline troops by smoke for the period of the Cassino attack. In this way all suggestions of every kind of navigational aid had been disposed of, although it had been the practice for some time on both Army fronts, as has been recorded, to identify ground positions and do everything possible to improve recognition and communications between ground and aircraft.

Strategic Air Force's Attitude to Ground Identification.

LUDLOM
Microfilm -
Memo to S.A.S.O.
from Maj.J.S.
MATAF
20 Mar. 1944

Some evidence that the commanders of Strategic Air Force had not given the matter of ground/air identification the same consideration as the Tactical air commanders, appears in a report made to S.A.S.O. Tactical Air Force on 20 March of an interview with General Dorn of Strategic Air Force. Speaking of aids to target identification, he did not think

/any

any coloured light system would work, for it was too difficult to recognise and did not allow for any changes in the axis of attack necessitated by changes in the weather or in the the action of preceding units. When the accenting of material or man-made features for positive orientation was suggested to him, he agreed that this might be useful. At a conference with Army Air Liaison Officers the previous night, it had been confirmed that the Army could execute such jobs, at 24 hours notice, with bulldozers.

B.Ops/6431
MAAF
25 June 1944
AHB/II/70/69

There were now a number of important omissions in the plan. There were, as has just been made clear, no route or bomb line markers; there were no specific bombing altitudes adapted to the particular task given. There was no radio link on the spot between Fifteenth Air Force and its formations operating, although there was communication between bombers and a XII Air Support Command ground station.

Briefing of Bomber Crews

Bombardment of
Cassino
B/Ops/6431/MAAF
25 June 1944
AHB/II/70/69

The briefing of bomber crews was very thorough. Photos in large quantities were issued to all groups concerned, sufficient to cater for the needs of all squadrons taking part. The axis of attack in all cases was perpendicular to the front. To attain the weight of bombing deemed necessary, some "Freshman" units, newly reported to Fifteenth Air Force and not yet up to standard in bombing proficiency, had to be included. The type of operation was a rare one for the Strategic Air Force. It did not habitually work in close co-operation with the ground forces and was not, as a force, as experienced and practised as the Tactical Air Force in such operations.(1) All this was foreseen.

The Bombing Time Schedule

Ibid and
Report by
7/9 A.A.S.C.
15 Mar. 1944
(Cabinet
Archives)

Examination of the Time Schedule shows a 15 minute interval between attacks. Normally, with such a limited target in calm air conditions, such as prescribed, it would not be practicable to compress attacks into smaller intervals. The needs of manoeuvring and the fact that smoke and dust would obscure the target were known. It was clear, but did not play as full a part as it might have done in the air calculations, that not only should the intervals be reduced to the absolute minimum, but that any deviation from the timing would render the bombing less concentrated and potentially saturating, and allow the enemy more time to recover from physical and psychological shock. Early estimates of the tonnage of bombs to be dropped on Cassino Town began at six hundred and seven hundred and fifty tons, to be dropped in as short a period as possible.

Artillery Support Plan

N.Z. Corps at
Cassino
AHB/II.J.11/
58/6

In assessing the facts of this combined operation, the weight and effects of the artillery bombardment must not be lost sight of, for it did a great deal to increase the debris; so adversely affecting the general situation. The heavy artillery barrage would, it was hoped, paralyse the defence long enough to allow 6th New Zealand Infantry Brigade, supported by an armoured regiment and assisted by a powerful volume of fire from anti-tank guns on the left flank, to capture the centre of the town and Castle Hill, thus freeing the northern approaches from close observation.

/As the

(1) Visibility of the bombardier and navigator was good in the B-17 and deficient in the B-24.

As the last bombs fell on Cassino a heavy concentration was to cover the whole town for 49 minutes to allow the troops withdrawn from the northern portion of the town to advance to the start line and take up their vacated positions. It was a preparation of pre-arranged fire on enemy strong points, observation posts etc., on a time schedule, extremely dense long-range counter-battery fire, assisted by continuous observation and adjustment by tactical reconnaissance aircraft. The rolling barrage from 1200 to 1410 hours was allotted to one hundred and forty-four twenty-five-pounder guns of N.Z. Corps.

Army Plan for Use of Tanks

Ibid

O.3 11 Mar.1943
4th Indian Div.

The planned role of the tanks in the earliest phase was follow-up and diversionary. The first tank exploitation of the hoped-for infantry advance into the town was not envisaged until the morning of D. plus 1 Day. The diversionary role mentioned was that laid down in 4th Indian Div. Message O-3 of 11 March. In the period between the February and March attacks on Cassino, Indian engineers constructed a mile-and-a-half long tank track from Cairo village to Madras Circus, involving a climb of 1000 feet through terraces which, judging by the enemy's surprise at their appearance, he had judged impassable to tanks. It was planned to confuse the enemy by employing the patch of country favourable there for tank employment. The main tank forces were not lined up in static mass directly behind the troops, but were in course of formation; part of the ground attack involved the crossing of the Rapido with all supporting arms. These main tank forces were not brought into full play until later; assistance from tank formations, who were hindered by the debris, was never intended to, and never actually did, prove a decisive factor in a situation which could only be consolidated by infantry, and in which the most important period was immediately after the end of the air bombardment.

The Choice of D Day

The plan had been intended for execution on 24 February, but not until 15 March had the right conjunction of weather ensued, allowing three dry days in succession so that tanks could operate and a fine day for the Air Forces. The interval of nearly three weeks of waiting imposed a severe strain on the Indian and New Zealand troops involved.

AIR AND ARTILLERY BOMBARDMENT OF CASSINO - 15 MARCH 1944

Air Bombardment

No.7/9 A.A.S.C.
Report on the
Bombing of
Cassino
23 March 1944

B.Ops/6431
M.A.A.F.
25 June 1944
AHB/II/70/69

The first Group (No.340) of No. 57 Wing Mitchells was over the target at 0832 hours and the second at 0844 hours. Both achieved good and accurate concentrations in the East part of the town. Then, for 147 minutes, followed in succession the Fortress and Liberator Groups tabled at Appendix 18. The time table went awry from the entry into operations of the heavies. The first group arrived over the target 21 minutes, instead of 15 minutes, after the Mitchells. Although the total span of time covered by the heavy assault varied by only three minutes from the 150 minutes scheduled, the succession of intervals 30, 8, 9, 1, 18, 14, 41, 5 and 12 destroyed the harmony of the plan. The air crews of the first Group reported bombing short and left of the target from 22,000 feet. The ground reported better aiming and that bombs fell in the town, as well as south of it. When the second group arrived, 35 minutes late, smoke covered the entire area. The last Group of Fortresses was over the

/target

target at 1001 hours. The first Liberator Group was over the target at 0952 and the last at 1120 hours. One hundred and one Marauders from No. 42 Wing flew over in three Groups, well timed, and bombed with great precision until 1200 hours.

In the afternoon programme the heavy bombers did not participate. Operations opened at 1300 hours. From then until 1500 hours eighteen tons of bombs, including sixteen 1000 lb. bombs, were dropped on Cassino Railway Station by sixteen Kittyhawks/Warhawks, eight Thunderbolts, and twenty-five Invaders, with general accuracy. From 1345 to 1630 hours, forty-four tons of bombs including fifty-six 1000 lb. bombs were dropped in the vicinity of enemy positions on the south side of Cassino by eight Thunderbolts, eight Invaders and eighty Warhawks/Kittyhawks, most bombs falling in the target area. From 1500 to 1700 hours, ten tons of bombs were dropped on positions on the slopes of Monastery Hill by eight Invaders and twenty-four Warhawks/Kittyhawks, and other miscellaneous targets were attacked effectively during the afternoon by forty-seven Boston A-20s and nineteen Warhawks/Kittyhawks.

Weight of Bombs employed

Ibid.

In all, two thousand, two hundred and fourteen 1000 lb. bombs were dropped during the forenoon, representing a weight of nine hundred and eighty-eight tons. The bomb plot confirmed that 47% of the bombs aimed at Cassino hit within one mile radius of the centre of the town; although only 8% fell within the 1000 foot circle round the town centre.

Wide Range of Heavy Bombing

Ibid and
Microfilms/
M.A.A.F.
Reel
4 x/File 51

Outside the one mile radius there was a good deal of erratic bombing by the heavy bombers. Analysing results as between heavies and mediums, reference to Appendix 18 will show that whereas the attacks by the mediums were generally punctual, concentrated and accurate, heavy bombers were frequently at fault in all these respects. Of the group of heavies who failed to find the target, twenty-three returned to base with their bombs, and two jettisoned theirs into the sea, although the weather was clear and there was no wind. There was, however, dust and clouds of smoke over Cassino after the first groups had flown over.

Thirteen Liberators of No. 451 Group, owing to rack failure in the Group Leader's aircraft, dropped forty bombs in friendly territory at Venafro, Pozzili, Montaquilla, (G.921195), (H.0823), (G.905227), (H.033196), (H.020183) and (H.020196) - all within our own lines and generally in the French sector, and in the Command Posts of Eighth Army and French Expeditionary Corps. Some twenty military personnel were killed and eighty-five wounded. In Venafro town, some sixty/seventy-five civilians were killed. The positions given above show individual erroneous bombing as far north as Isernia and as far east as Trocchio and Cervaro. The bomb rack failure was brought forward by General Dorn, at the discussion already mentioned, as one of the causes of the incidents of bombing within the bomb-line. Another mentioned explicitly by him was the generally poor air discipline on the part of two Groups, which led to the replacement of one Group Commander. It can be readily seen that the action of the leading aircraft being the principal cue for the rest of the Group and the line of vision forward being so poor in the Liberator at the time, mistakes were bound to follow.

/Observers,

Observers, as well as General Dorn, testified to the poor air discipline of some formations. The Officer Commanding No. 7 A.A.S.C. records that whereas the medium bombers always maintained close formation when approaching the target, the heavy bombers were all over the sky. ~~(One complete Group failed to find the target.)~~ General Dorn considered the Cassino air operation well planned, but rather forcefully and uncheerfully, but of his own freewill, admitted the shortcomings of some Heavy Groups. Steps were taken without delay to carry out a series of corrections to the Liberators, so as to improve the visibility for the bombardier and navigator.

Artillery Support Operations - 15 March

Artillery support for the opening of the attack on 15 March was given by a total of six hundred and ten guns of all calibres, (including some tank destroyer guns), which were employed to fire from the forward slopes of Monte Trocchio on to houses and strong-points in Cassino. The Artillery programme began at 1200 hours, as the last bombs were about to fall on Cassino, and continued for four hours, during which twelve hundred tons of shells were fired. The programme fell into three parts. A creeping barrage by eighty-eight guns covered the entry of the infantry into the northern outskirts of Cassino, and gave them direction as they advanced through it from Zero to Zero plus 130. Overlapping the creeping barrage was the second part - concentrations, by two hundred and ninety-four guns, on known enemy defences, timed so as to fall always south of the barrage as it advanced. Thus, on the final barrage line, these concentrations were falling in an area between the Baron's Palace and the Colosseum. They were fired from Zero to Zero plus 240. The third part was a counter-battery programme fired by one hundred and ninety-six guns, (assisted by X Corps and French Expeditionary Corps artillery). Other guns fired timed concentrations.

Marked photographs were issued to forward Observation Officers in the town, showing numbered buildings and groups of houses, but during the fighting it was often difficult to give maximum support to the fighting in the town, owing to the danger of shelling own troops. Smoke was used on a number of occasions (and reported by air formations), in order to screen the enemy's observation from the high ground west of Cassino, and counter-battery and counter-mortar fire were used to reduce the heavy and effective fire maintained by the enemy on the troops in the town. The enemy, however, enjoyed such superior observation, as largely to offset the advantage in number of pieces possessed by New Zealand Corps. Fighter aircraft carried out artillery reconnaissance missions throughout the entire operation.

Effects of the Heavy Rainfall

Following the afternoon overcast, heavy rain began to fall at night and filled in craters on the main approach roads and elsewhere. The work of New Zealand Corps Engineers thereafter was heavy and usually carried out at night under concentrated fire, involving heavy casualties. Bridges and culverts were often necessary to overcome these obstacles, as the sodden state of the surrounding country prevented the use of diversions, except after a large expenditure of labour and materials. The enemy artillery from Monastery Hill caused additional damage. The rain that night reduced the debris to the consistency of dough and made its removal practically impossible. It was seldom possible to use unarmoured mechanical equipment and the presence of bull-dozers drew fire

/on them

N.Z. Corps at
Cassino
Appx.C/P.39
AHB/II.J.11/
58/6

5th Army G-2
Report on the
Effects of
Bombing and
Shelling of
Cassino -
Annexe
I/App.B2
AHB/II.J.11/
58/6

on them and troops in that area. Operations would probably have been more successful had the Allies possessed properly-designed armoured bull-dozers. To add to the difficulties, extensive mine-lifting operations, hampered by enemy fire and the state of the ground, were necessary.

GROUND OPERATIONS AT CASSINO, 15 MARCH 1944

Advance of 6th N.Z. Inf. Brigade - 15 March

A.H.B./II.J.11/
58/6

2 New Zealand
Operation Order
No. 41
23 Feb. 1944

When the air bombing ceased at 1200 hours and the barrage opened, 6th New Zealand Brigade began to advance on a front of one battalion. The Army Commander deemed that to have deployed on a broader front or to have assembled a greater number of troops between Villa and Cassino under the observation of the Germans on Castle Hill, would have run a grave risk of heavy casualties in the very early stages. (The rate of advance laid down was 100 yards in one minute, as far as the north end of Cassino, and thereafter 100 yards in ten minutes.) 25th N.Z. Infantry Battalion led, passed our original line at about 1300 hours, pressed on into the town, swung west and attacked Castle Hill, which they captured by 1630 hours. 26th N.Z. Infantry Battalion followed closely and by 1700 hours were about 150 yards from the first objective, Highway Six. 24th N.Z. Battalion was then ordered in to help 26th Battalion.

Partial Allied Success by Dusk on 15 March

AHB/II.J.11/58/6

7/9 A.A.S.C.
Report

(Cabinet Archives)

In a limited sense, the combined operation had succeeded by dusk on 15th March. The air bombardment had destroyed Cassino; the infantry plan, although a little behind schedule owing to the heavy going through debris, had developed according to expectations; but the non-acceptance of greater risks in the formulation of the plan and the lack of weight in the attack prevented complete success and consolidation, inasmuch as it allowed the Germans time to recover from their shock and remain certain positions.

Just as dusk was falling the torrential rains began, which lasted through the night and ruined any chance of success. Operations due to continue through the night were handicapped by total darkness and 6th N.Z. Infantry Brigade, stumbling into mud-filled craters and crumbling debris, could make no headway in clearing the town. The enemy, emerging in depleted numbers, but still full of fight, from cellars, tunnels, shelters and pillboxes, returned to reoccupy a number of strong points. 5th Indian Brigade entered the town behind 6th N.Z. Infantry Brigade, after a difficult fight via Monastery and Castle Hills. They too were handicapped by darkness and it was not until 1400 hours on 16 March that they had taken Hangman's Hill in the area. They failed to take Hairpin Bend, dominating the roads leading into the town from the north and the whole hillside.

Effect of the Bombardment on the Enemy

5th Army G-2
Report -

Annex I/Appx. B.2
AHB/II.J.11/58/6

7/9 A.A.S.C.
Report

The combined force of Paratroops and Panzer Grenadiers in the Cassino area was estimated at 1700/1800 men as at 22 February. By 15 March, these were about nine hundred and fifty men of 3rd Regiment of the 1st Paratroop Division defending Cassino and Monastery Hill and a few Grenadiers. They had a few tanks, no anti-tank guns, but were equipped with 8.8 cm. Rocket Launchers and "Faust Patrone," which they

/considered

considered more effective in close fighting. Highly trained, fervent Nazis, more than normally intelligent and resourceful in isolation, these young soldiers fought brilliantly throughout the period with only small reinforcements.

After the bombing, a good many prisoners were interrogated, including a few of the battalion in the town proper. A general psychiatric report was prepared from the available evidence on 18th March. It was stated that the bombing had only slight effect on the Germans mentally, and pointed out the unusually high morale of the paratroopers. Their prepared positions had protected them to a great degree from concussion and given the individual considerable sense of security. Also, varying with each prisoner, a few hours elapsed between capture and examination. War neurosis was relatively infrequent among prisoners in any case, since the prisoner did not face the prospect of return to active combat duty. The screamers attached to the bombs from the mediums were wasted on the Germans. Only 2nd Battalion caught the full weight of the bombardment and suffered heavily. The other companies, in 1st and 3rd Battalions sat out the bombing under ground. Only seventeen Ps/W the first day and twenty-four the second were taken and these were mostly Grenadiers who had moved down from Monte Cassino to help the battered 2nd Battalion of paratroopers. Prisoners paid tribute to the effectiveness of the bombing and artillery fire; the latter caused more casualties, after the former had reduced cover, they said.

Allied Casualties *The 2nd New Zealand Division's casualties the first day were eighty-two.*

~~Allied casualties the first day were only four killed and eleven wounded. The Cositintrep for the period 1200 hours on 15 March to 1200 hours on 16 March gives twenty killed and one hundred and eleven wounded for the whole of the Main Front, exclusive of Anzio Beachhead. These slight losses in the critical hours after the air and artillery bombardment give an indication of the scale of the ground attack and the extent to which it was pressed home. It is a fact that the Allied troops fought manfully under very trying conditions. One New Zealand Brigade estimated that under ideal conditions (i.e. no enemy fire) it would have taken bull-dozers 48 hours to clear a single path through Cassino. The failure to press home the attack in sufficient strength was a mathematical error, in time and volume, which disregarded the principle that a hundred casualties to-day may on occasions save a thousand next week.~~

AIR AND GROUND OPERATIONS AT CASSINO 16 - 24 MARCH, 1944

Ground Operations in the Town - 16 March

Conditions had worsened by dawn on 16 March. Communications were bad, rain spoiled many infantry wireless sets and enemy snipers hindered the laying of line. Tanks, a few of which had come forward a little into the town the previous day, were still out of touch with the infantry, and the engineers estimated that it would take two days to clear a path through to the centre of the town. Most craters, some of which were 40 - 50 feet wide, needed bridging. Infantry, struggling to clear Highway 6, were joined at 1000 hours by six tanks and by evening had penetrated as far as the 'T' - junction where Highway 6 turns south. On the other side of the town tank support was not available until late afternoon.

/Scissor-

N.Z. Corps at
Cassino

AHB/II.J.11/58/6

*Quarterly report by
A.D.M.S., New Zealand
Corps, Medical Series
of Diaries, Cabinet
Historical Archives.*

Marshal of the
R.A.F. Sir John
Slessor
Interview
15 June 1948

N.Z. Corps at
Cassino

AHB/II.J.11/58/6

Scissor-bridging tanks were hard at work all day, however, and some tanks reached 26th Battalion by evening. More were called up. Infantry were now near the Continentale Hotel.

Air and Ground Operations at Cassino 16 March to 17 March

Ibid and
TAF/69/Air
11 July 1944.

From 16 March onwards, air operations were linked to the difficult but vain struggle to capture the enemy position at the head of the Liri Valley. The entry of six tanks into the town and the confused fighting all day, led to no decision. Fighter bombers engaged enemy positions in the area, while medium and light bombers attacked reserve areas and supply dumps, flying between them some three hundred and twenty-five sorties. The air effort increased slightly the next day, - 17 March. Allied tanks attacked at dawn in the south-west corner of the town. The enemy's knowledge of the terrain and his still superior observation enabled him to put down heavy accurate mortar fire. On the Allied side, supporting fire was difficult to provide, owing to the lack of knowledge of the progress of our forward troops, while tanks were restricted in their movements. After a day of confused fighting, by evening the enemy had lost the railway station, but still held a number of strong positions, including the Continentale Hotel.

Air Support at Cassino 18 - 23 March

Bombardment of
Cassino
M.A.A.F.
15 Mar. 1944.

B.Ops. 6431
M.A.A.F.
25 June 1944.
AHB/II/70/69

For five more days, infantry and tank attacks on the Continentale Hotel and other strong points continued, against stiffening resistance and without any appreciable success. By 21 March it seemed as if deadlock had been reached; but the enemy was known to be stretched almost to breaking-point, had incurred grave losses and was running short of supplies. The attack was therefore pressed again and a few gains recorded. On 23 March, after long deliberation, the attack was abandoned. From 18 March through to 24 March, fighter-bombers attacked daily in variable weather. The Kittyhawks and Warhawks engaged were occasionally joined by a few Invaders and the targets were the routine ones, with the exception of the small-scale attack of 20 March on the H.Q. of 1st Parachute Division, which promptly moved. The total of sorties on 23 March, when the attack was abandoned, was one hundred.

Air Supply for the Relief of Allied Troops

Ibid

Over the period 18 - 24 March, the Air Force carried out a series of supply dropping missions, (a type rare in the Italian Campaign), to relieve Allied troops isolated on Point 435 (Hangman's Hill) and on Point 202, down the slope between this hill and town. The missions, although not entirely successful, enabled the troops to hold on to important positions until relieved. The supply of troops of 5th Indian Brigade, including one or two battalions of the 4th Essex Regiment, four to six battalions of the 9th Gurkha Rifles, as well as a company of 24th New Zealand Infantry Battalion, became vital by 17 March. They were making repeated attempts to capture key features from positions on Castle and Monastery Hills. Their line of land supply was under fire and controlled by formations of Germans. Delivery by hand and by mule was inadequate. A programme of air supply was hence resorted to. Supplies were dropped on Point 435 on 18 March by forty Invaders and from 20 to 24 March on consecutive days by twenty and thirty Invaders. The New Zealanders on Point 202 were supplied on 22, 23 and 24 March by eight Invaders daily. The

/ground

ground was particularly unsuited to the operations and many of the containers, though, on the whole, accurately dropped, bounced down the steep rocky slope out of reach. Between 19 and 24 March, about 50 per cent of containers dropped were received, enough to maintain the operational efficiency of the Gurkhas, although they were subsisting on short rations. At times, no other means of supply was open.

Allied Decision to abandon the Attack

N.Z. Corps at
Cassino
AHB/II.J.11/
58/6

On 20 March General Alexander signalled to both Army Commanders the alternatives of deciding within 36 to 48 hours, whether to continue with the operation or to call it off and consolidate such gains of ground as were important for a later renewal of the offensive. After fruitless attacks on 21 and 22 March, the operation was called off. Castle Hill and the eastern part of the town were consolidated; the isolated troops on Hangman's Hill were withdrawn. The policy for the meantime was to be one of active defence and vigorous patrolling. Enemy resistance had hardened and he had reinforced many strong points still holding out.

Material Results of Air and Artillery Bombardment

5 Army G-2
Report
15 Mar. 1944
AHB/II.J.11/
58/6
Annexe
1/Appx.B.2

As recorded, the Cassino area had often been bombed from the air and been subject to intermittent but heavy artillery fire, so that few buildings at the time the air bombardment began were in a condition to afford adequate cover for either men or equipment. After the air attack, the town was left, as it still is at the time of writing, a scorched weal, over which clouds of smoke and dust hovered for many hours. The bombing and shelling of Cassino, although a surprise to the enemy, did not greatly overcome his resistance or considerably reduce his morale. It undoubtedly reduced many German strong points and caused some casualties, but it did not destroy his skilfully deployed observation system. His machine guns, mortars and artillery were only partially neutralised and the heavily fortified area of the defending infantry, well dug in, was not cleared. All routes for vehicular traffic were destroyed, blocked and cratered. The strong opposition from flak and fighters did not materialise.

CONCLUSIONS AND LESSONS FROM THE THIRD BATTLE FOR CASSINO

Conclusions on the Cassino Operation

The Bombardment
of Cassino
M.A.A.F. Report
15 Mar. 1944
B.Ops. 6431
M.A.A.F.
25 June 1944
AHB/II/70/69
TAF/69/AIR
11 July 1944

By 26 March ~~the Allied casualties during this third battle alone had risen to over 3700 officers and men.~~ Allied troops were in possession of nine-tenths of Cassino Town and held a substantial bridgehead across the Rapido, advances previously unachievable. There seems to have been substantial agreement among the ground commanders that these limited successes could not have been gained without the preliminary air bombardment. The air bombardment destroyed Cassino but not the enemy resistance. The overall objective was not achieved. Analysis of various aspects of the air and land operations forming complementary parts of the combined overall attack reveal defects in conception and execution and a physical background favourable to the defence. Analysing well-considered views arrived at in detachment and removal from the realm of controversy, the following facts are now clear.

The scale of bombing attack was heavier in weight than was required and, added to the massive artillery fire, caused greater material destruction than was desirable from the land forces' point of view. Allowance should have been made for /previous

previous destruction caused by Allied shells and bombs, as well as demolitions by Germans. The destruction of the defenders of the town was not accomplished, because of the system of deep shelters, the solid nature of the surface shelters, (some with concrete roofs), and the use made of the underground tunnel complex. The Army took too sanguine a view, in spite of Air Force representations before the event, of what air action could do to reduce resistance, and was not prepared to, and did not, attack in sufficient strength, immediately after the cessation of bombing. ~~The negligible casualties for 15 March are to some extent an index of the scale of attack and the extent to which it was pressed home.~~ The Germans, on the other hand, employed all of their inferior forces and displayed great mobility on every sector.

The morale of 1st Parachute Division was, like that of the New Zealand and Indian Divisions, superb; but it must not be argued from this that the Germans would have lost the battle with any other troops defending. Only on 4 March had A.F.H.Q. concluded that the German soldier in all states of training was fighting well, stubbornly and obediently, that he was at that date a formidable opponent and, by and large, not ready to give in. This resistance at Cassino prior to and on this occasion was a model of mastery in military exploitation of terrain, and of offensive and defensive warfare. The Allies had not even the consolation of a moral victory. The Germans fought manfully and generally respected Red Cross regulations. At the height of their strength there could have been hardly more than ten German battalions engaged. The main reinforcements came in at the later phases of the fighting, when the Parachute formations had suffered crippling losses.

Lessons learnt in the Great War of 1914-1918 from long term artillery concentrations such as that at Messines were not applied to the Air in this case. Frustration played a heavy role in the strong views expressed by Army authorities and the reluctant accession of Air authorities to the execution of the plan on such a scale and in such a manner. The technique of the combined attack was evidently not suitable in detail, distribution of weight and timing to solve the particular problem of Cassino.

Air Lessons Learnt from the Combined Cassino Operation

Ibid
and
Interview with
Sir John Slessor
and
Letter from Gen.
Eaker to
S.A.C.M.E.D.
12 April 1944
quoted in History
of M.A.A.F. by
M.A.A.F.
Historian

Certain lessons were learned from the Cassino operation and tabulated in April 1944 by General Eaker, in May 1944 by M.A.A.F. and in July 1944 by M.A.T.A.F. Since various reports have been written in which some of the earlier interpretations, hatched in a climate of controversy, have been drafted in a certain ambiguity and in renderings mutually contradictory, it is right and opportune here to summarize the more objective decisions on what lessons were actually learnt at the time by those responsible for the conduct of the campaign. The extent to which these lessons were or were not applied to Western Europe may be studied in the R.A.F. Narrative of Operations in Western Europe.

Letter from
Gen. Eaker to
Gen. Wilson
HQ.MAAF/2010/Pt.
II Encl.

The bombing of an enemy strongpoint such as Cassino must be followed by a determined, vigorous ground attack, in the shortest possible time after the last bomb is dropped. In this way alone could the destruction and shock be fully taken advantage of. Such bombing was only a means to an end; it could not flatten a point, but would of necessity create new obstacles and protection for the enemy; it could not at that time, with the air weapons then in use, seriously affect an
/enemy

enemy protected by deep shelters. Such bombing must inevitably (this lesson was nothing new) create impediments to the advance of troops and tanks.

An Air Force would tend to carry out an operation best when it was trained and experienced in that type of operation. If Heavy Bombers were again used in a similar operation, bomb leaders and leading navigators should fly over the target the day before, in order to become familiar with the terrain and to select the best bomb run. Bombing at Cassino was from too high an altitude; in future bombing altitudes should be specified. There should be direct contact between heavy bombers and one of their own observers in the battle area. Angles of approach should be specified and clearly visible bomb-line markers provided. The interval between Groups should be decreased; enemy losses due to the greater compression of the attack would thus be correspondingly heavier. This particular heavy bomber attack would have been more damaging to enemy morale if either more concentrated in time or on an ascending scale working up to a climax.

Everything possible must be done to bring about a thorough understanding on the part of the ground forces of the powers and limitations of air forces. Army and Air personnel should be exchanged for their mutual education in the other's media. Commanders must have a clear conception of the difference between the emergency and justifiable defensive use of heavy bombers, (as at Battipaglia and Eboli), and their use in offensive operations. The heavy bomber's normal use should be, on targets remote from the battlefield. The general principle should be, he felt at the time, that all arms and weapons should be kept to their normal roles and diverted to other tasks only in rare instances of real emergency. So long as adequate Tactical Air Forces were available heavy bombers should not, therefore, be used in close support operations.⁽¹⁾

Summary of other important Air Events December 1943 -
March 1944

During the months of December, January, February and March, 1944 a number of important air events, not dealt with fully in this narrative, are worth recording. Reasons of time and space do not permit exploitation of all facts, nor the operations of all units. This narrative confines itself to matters bearing on operations and those in particular which reveal tendencies and important objects striven for and obtained, leaving as prejudicial to continuity the reiteration of routine operations or close analysis of activities ancillary to the main offensive effort.

The first Thunderbolt (P-47) operation in the Mediterranean Theatre was reported on 5 December. This month saw an increase in air support from Italy to the Yugoslav partisans and the move of Fortress and Liberator squadrons to Italy. On 7 January, Eighth Army units isolated by snow were relieved by air supply. About one

/hundred

(1) The study represents General Eaker's views at the time and must not be construed, any more than any other report, as of universal application at all times and under any conditions.

S E C R E T

- 305 -

hundred Fortresses struck a blow at German surface craft at Pola Naval Base on 9 January. The air attacks on Bulgaria increased in momentum and U.S. Marauders flew their first night operations on the night 10/11 January. Both sorties and bomb tonnage total attained record levels for the theatre in January. Eighty per cent of the tonnage was dropped on Italian targets and of this 54 per cent was on communications, 19 per cent on Army support and 18 per cent on airfields.

Anzio absorbed most of the air interest in February, but not all. The first bombing operation by Venturas based in the Middle East and the first reported night operations by R.P. Beaufighters were carried out on the night 1/2 February. On 14 February weather conditions were clearly indicated by a report that cameras froze on photographic reconnaissance flights. Twenty-second February saw the first raid on Germany in conjunction with Britain-based forces, 24/25 February the first R.A.F. penetration into Austria and the first double attack on Greater Germany by R.A.F. from Britain and the Mediterranean. The next day - 25 February - saw another double event of note. The raid on Regensburg marked the first combined attack by Britain and Mediterranean-based forces on the same target, as well as the largest force despatched by M.A.A.F. on a single target.

In February, considering the constancy of difficult weather conditions, sorties were well maintained at round about thirty-four thousand, that is 23.6 per cent below January's figures, a reduction general to all duties. The highest monthly tonnage was recorded for direct support operations; the figure, 5414.7 tons, represented 64.6 per cent of the total weight dropped on Italy and was registered as a result of the employment of heavy bombers in a tactical role. Although shipping targets showed only 2 per cent of the total, it must be borne in mind that a high proportion of the aircraft engaged in these profitable operations were fighter-bombers and the tonnage therefore represents a large number of attacks; and secondly that many attacks were carried out by machine gun, cannon, 75 m.m. shell and rocket projectiles.⁽¹⁾

D.A.F. Marauders operated for the first time on 2 March; the same night, U.S. Havocs flew for the first time over the battle area. Leigh Light aircraft operated on the night 9/10 March in co-operation with the Navy, in a U-boat "kill" off Ponza Island. Florence was attacked for the first time, after careful study of the implications, on 11 March, and Vienna on 17 March. The raid already recorded on Udine area airfield of 18 March saw the record of over forty-seven thousand 20 lb. fragmentation bombs dropped.

Medium Bomber
Operations
1 Jan. -
28 Aug. 1944
H.Q. XII A.F.
15 Feb. 1945

M.A.T.A.F.
Signal A.106
13 Feb. 1944

An unforeseen opponent made her appearance on 21 March, when ash and cinders from Vesuvius put Monte Corvino airfield out of action for six days and damaged many aircraft of 340th Medium Bomber Group. Hurricanes of No. 6 Squadron operated for the first time with rocket projectiles on 29 March.

Total sorties for March exceeded February's by 30 per cent, the bombers (reinforced by Liberators) attaining a 60 per cent increase. Army Support tonnage dropped to 27 per cent. Tactical Bomber Force was disbanded with effect from 1 March, 1944.

/The Work

(1) R.P.

The Work of Coastal Air Force

Coastal Air
Force
Ops. O.R.B.'s

Ever since the invasion of Italy, Coastal Air Force had protected convoys at sea and in harbour, defended the ports from air attack, conducted a continuous offensive against the enemy's air and sea transport and his undersea craft and rescued many Allied and Axis airmen from the sea. Forces were being built up on Corsica and Sardinia for future as well as current operations. Sorties tended to rise monthly and results of strikes against shipping and ports were satisfactory. For example, from 15 to 31 March, the losses of enemy shipping amounted to twenty-four small vessels sunk (including one tanker and nearly fifty damaged). A new feature which had developed during the winter months was the "Swamp Hunt" for submarines, a combined operation between aircraft and naval units. Although the number of submarines in the Mediterranean was not large, the effect of driving packs or individual submarines out of waters frequented by Allied shipping and the overall deterrent effect was felt to justify the elaborate nature of the operation.

THE ZUCKERMAN AND INTERDICTION THEORIES

New Interpretation of the Role of the Air Forces

Results at Cassino hastened a restatement, already overdue, of the role of the Air Forces. This was embodied in M.A.T.A.F.'s Bombing Directive No. 2 of 19 March 1944. This document established the concept of interdiction, but did not specify exactly what particular targets were to be attacked. It incorporated the main effort of the fighter bombers. Operation Strangle, the air interdiction of the enemy's supply routes, came officially into being as from 19 March 1944, although it may be said to have existed from 15 March onwards, the day the Army was directed to accept the switch of emphasis from direct support to anti-communications operations. It began as an intensification of the anti-communications war, but was later referred to as the introductory phase of the Allied Spring Offensive, (1) which opened on 11 May 1944.

The Zuckerman and Interdiction Theories

The British scientist Professor S. Zuckerman, Scientific Adviser to M.A.C. and M.A.A.F., submitted a report from M.A.C. Bombing Survey Unit H.Q. at Palermo on the effects of Allied air bombing of land communications in the Sicilian and the Italian campaigns. This report, (2) "Air Attacks on Rail and Road Communications," covering operations up to October, 1943, and, issued on 28 December 1943, contained conclusions on the proper use of air power against communications. Four of the conclusions must be noted here and checked with the conclusions after operations Strangle and Diadem, and those after Exercise Thunderbolt, held in August 1947.

1. If the measure of success of air attacks on enemy rail and road communications is taken as the destruction of the means of communication, then the offensive carried out against rail targets in Sicily and Southern Italy must be regarded as an outstanding success. If, however, the measure

/of

(1) Operation Diadem

(2) The full text of the General Conclusions is given at Appendix 19.

Report on Operation Strangle
M.A.T.A.F.
24 July 1944
(Parcel
(A.H.B./35/List 4
Bombing Directive
No. 2 M.A.T.A.F.
19 Mar. 1944
Medium Bomber
Operations
1 Jan-28 Aug. 1944
XII A.F.
15 Feb. 1945
AHB/II.J./11/12
History of
M.A.A.F. Dec. 1943-
Sept. 1944
H.Q. M.A.A.F.
A.F.H.Q./G.B1/01/
11 a-52 Letter
from Col. Ford
5 Jan. 1944

Air Attacks on
Rail and Road
Communications
28 Dec. 1943
AHB.II/70/153
Report on Air
Ministry Exercise
Thunderbolt
Part 1/Item 17.

L E G E N D

-  FIELD GUN
-  A.T. GUN
-  M.G. POSITION
-  PILL BOX
-  BUNKERS
-  FIRE TRENCH
-  SLIT OR COMM.
-  WIRE TRENCH
-  MINES
-  ANTI PERS. MINES
-  TELLER MINES
-  MORTARS
-  STRONGPOINT
-  BLOWN BRIDGE
-  CRATER
-  DUGOUTS

SOURCE

BLUE AERIAL PHOTOGRAPHS.
AS OF 20 MARCH 1944.
BROWN OTHER SOURCES

of success were taken as the complete cutting and blocking of the railway lines and roads, then the offensive could be regarded as having partly failed in its purpose. There is little indication that the attacks prevented the enemy from moving from place to place within the limits imposed by the capacity of transport at his disposal. The strategical effect of destroying the enemy's means of rail communication is best achieved by attacks on large railway centres which contain important repair facilities and large concentrations of locomotives and rolling-stock. The sub-targets (e.g. tracks, rolling-stock, warehouses, repair sheds, etc.,) in a large railway area are very concentrated; as a result, the general risk of damage from bombing, if the attacks are carried out in adequate strength, is very high A far more costly air effort would be needed to achieve a tactical success, in the sense of a sudden blocking of communications at any given series of points, than has proved necessary to produce the strategical effect of reducing traffic potential by the destruction of rolling-stock, and repair facilities.

Railway and road bridges are uneconomical and difficult targets, and in general do not appear to be worth attacking except where special considerations demand it in the tactical area.

C.S.19369 D.A.T.
2 Feb. 1944 signal
by Air Marshal
Sir R. Peck.

M.A.A.F. A.213
24 Dec. 1943

The Zuckerman theory arising from the research received wide acceptance. Air Ministry issued a detailed endorsement of it, saying that it confirmed experience gained in Britain and in the Mediterranean. From his analysis Professor Zuckerman proceeded to specify recommendations regarding future target policy, which won the approbation of Mediterranean Air Command. On 24 December Air Command Post issued an order limiting air attack to the marshalling yards at Rimini, Foligno, Verona, Genoa, Turin, Vicenza and Voghera and stating that certain marshalling yards were the only points which had a marked and permanent effect, as opposed to tactical interruptions in the flow of supplies. It echoed the report in stating that the effect of cutting particular tracks was far more apparent than real.

Misinterpretation of the Zuckerman Report

From the moment of its publication a vital misinterpretation arose which was subsequently almost universally used by the critics of the Zuckerman Report to the considerable confusion of the issues involved. The Zuckerman Report did not state that attacks on marshalling yards as such would best achieve the strategical effect of destroying the enemy's means of rail communication. It did state, as reference to extracts given above will confirm, that attacks on large railway centres which contain important repair facilities and large concentrations of locomotives and rolling-stock would. These were often in the locality of marshalling yards, and a number, it will be recalled, were suggested as targets for this reason: but the illogical assumption that the Zuckerman Theory gave marshalling yards as such as the best targets should never have been made. That this misinterpretation was deliberate would seem to be borne out by the fact that it was usually the critics who used the phrase "marshalling yards." Clear confirmation of this was forthcoming later in the Spring,

/during

Notes on the
Planning and
Preparation of
the A.E.A.F.
para. 360.

during the long Overlord discussions on the respective merits of the Long-Term Transportation (Zuckerman) and Interdiction Plans. Here again, it was noticed and recorded by the staff of the Air C.-in-C. of the A.E.A.F. that by April 1944 the critics of the Transportation Plan were persisting in referring to it as the Marshalling Yards Plan, a misnomer in view of its actual terms.

Memo.D./28/2
6 Oct. 1943
XII Bomber
Command

Many differed from the Zuckerman Theory, feeling it to be not of universal application and pointing to the Italian rail and road complex as unique in itself, as well as to the changes during the framing of the report, such as an increase in medium bombing precision and improved German expedients. The Theory, they claimed, was not only not of universal application, it did not even fit the peculiar facts of the Italian problem. The point of view of this other school were first expressed on 6 October 1943 in a memorandum signed by Brig. Gen. Partridge, C.O.S. of the Twelfth Bomber Command. An excerpt reads:-

"Present plans call for neutralising the rail transportation system in Northern Italy. In selecting targets for accomplishing this objective, we have, in the past, given high priority to marshalling yards. While these yards are undoubtedly essential for handling the large volume of traffic required to support the civilian population, it appears that it may be possible for the enemy to move the relatively small amount of traffic needed for military supply without using extensive marshalling yard facilities. This could be accomplished by making up divisional trains in the zone of the interior for direct movement to a unit railhead located at any convenient point along a right of way in the vicinity of a highway. Under existing conditions there is no necessity for any consideration of civilian transportation requirements or conserving rolling-stock and locomotives."

Shortly thereafter Twelfth Bomber Command carried out a first attempt to establish a line of interdiction across Italy just above Rome, by cutting bridges. Heavy bombers alone were used from 14 October to 22 November.

The Vital Five per Cent of Supplies

Air Attack on
Bridges and
Marshalling
Yards in Italy
H.Q. No. 2677
H.Q. Coy.
Experimental
U.S. Army
7 Mar. 1944 p.5
A.H.B.II.J.11/1
Vol.VII/IV.

It was estimated, and the figure is sound enough for all practical purposes, that for purely military needs only five per cent of the normal supply rail traffic was sufficient to supply an Army in the field engaged in static warfare. Hence the recurring air problem throughout the campaign of cutting into that five per cent, a problem only solved in the long run by the combined weight of a major air/ground offensive. To be effective, it was held in those days, all rail lines had to be cut, quickly and simultaneously.

Interdiction in Practice

Report on
Operation
Strangle
M.A.T.A.F.

In three weeks of experiment the three major (but not two minor) rail lines down Italy were successfully cut. According to General D'Aurelio, former Chief of the Italian Liaison Staff with Field Marshal Kesselring, who reached the Allied lines shortly after, the Germans considered abandoning Rome in consequence. The bad weather and other commitments caused the abandonment of the interdiction programme on 28 March. If D'Aurelio's evidence were true, it might appear that the Allies Intelligence failed then, in not appreciating that the time was ripe for an offensive. This /is not

is not the case and D'Aurelio's evidence was misleading and ill-founded. The actual state of German supply during this period was as follows.

"Diadem"
A.H.B.
II/J.11/1

German Supply State

A.F. H.Q. G-2
Summaries

Ammunition supply had been well maintained by keeping down expenditure and drawing on local sources. Fuel was a weak spot in his economy and crisis had arisen where Allied air attacks dislocated the rail system, compelling road transportation of troops. Although the effects of air raids were serious, they were not fatal, for there were always the relieving factors of small coastwise shipping (which carried between 15 and 20 per cent of essential supplies) and inland water transport in the North, enabling the front-line divisions to keep their heads above water. Bad weather made rail repair easier but hindered coastwise traffic. Air supply was out of the question. The Army needed two thousand one hundred tons of supplies daily and was getting it. The German position worsened during December, largely because of Allied air action, but when Strangle began the basic supplies were still getting through, although reserves were low.

Increasing Advocacy of Interdiction

A.213
M.A.A.F.
24 Dec. 1943

Spec.Int.Report
No.54/M.A.A.F.
Target Section

On 24 December, the same day as M.A.A.F.'s Order endorsing Zuckerman's choice of six North Italian marshalling yards as the only worthwhile rail targets, M.A.A.F. Target Section issued a report in disagreement with the Zuckerman thesis, emphasizing rail targets other than marshalling yards on the Spezia-Rimini Line. Closely following came first a letter from the G-2 of A.F.H.Q., expressing his section's disagreement with the Zuckerman policy as it applied to Italy, and then a plan from the A-2 Section of XII Air Force outlining an interdictory plan. This letter gave marshalling yards as poor targets in Italy, on the grounds that they were the most easily and quickly repaired targets and not of such vital importance to the Germans as were his normally-used through trains; marshalling yards offered the largest concentration of lines to be cut, and raids on them consumed locomotives and rolling-stock the Allies would need; there was evidence that trains were marshalled outside Italy. It went on to discuss the alternatives - power stations, electric installations, bridges and viaducts, deciding that the last-named were the only type of target for completely interdicting the Italian railway lines.

Memo J.C.S.
1024
M.A.A.F.
11 Feb. 1944

Compromise between Zuckerman and Interdictory Policies

The Deputy C.-in-C. of M.A.A.F., Air Marshal Sir John Slessor, took the first step in reconciling the apparently conflicting policies, when he called for a review of bombing policy generally, asking the question whether M.A.A.F. had explored every possibility and calling for an investigation into interdiction. The Director of Operations agreed to initiate a study of alternative targets, quoting the official acceptance to that day of the Zuckerman Theory. The two met the next day - 14 February - and decided to incorporate the two theories in a new bombing directive, stating that the objective of the proposed air attacks on communications was to take advantage of the enemy building-up south of Rome and to force him to withdraw at least to the Pisa-Rimini line, by making impossible the supply of his armies in the south. A

/division

division of tasks between the various Air Forces was also agreed upon - Strategic was to handle the Zuckerman "marshalling yards," Tactical the interdiction of rail lines and Coastal (an essential part of the proposition) the interdiction of sea-lanes. After review by the Air C.-in-C., the new policy was put into effect on 18 February. The new directive established interdiction as a military concept, but showed no general agreement as to the specific rail targets to be attacked.

M.A.A.F. Operation
Instruction No.8
18 Feb. 1944

MAAF/S.6653/INT
29 Feb. 1944

Air Attack on
Bridges and
Marshalling Yards
in Italy.
H.Q.2677 H.Q.
Company Experi-
mental. U.S. Army
7 Mar. 1944.
AHB.II.J.11/1
Vol.VII Tab. O.

AHB.II.J.11/1
Vol.VII Tab. R.

The discussion narrowed down on 29 February. On 7 March, the U.S. Army discussed the question as to whether experience prior to the fall of Naples was a reliable guide for attack in 1944. It produced evidence of what it felt was a paucity of supporting facts and faulty conclusions in the Zuckerman Theory and asserted the greater effectiveness and economy of attacks on rail bridges. This view was accepted by M.A.A.F. and on 1 April, in a letter to General Devers, General Eaker expounded the new doctrine:-

"All our experience in attacks on communications in this theatre has shown that even the most successful bombardment of a marshalling yard does not cut traffic for more than a few hours. Attacks on marshalling yards are valuable more because they destroy concentrations of goods, rolling-stock and repair facilities. We have found that a more permanent way to cut lines is by attacks on bridges and viaducts, which are more difficult to repair. As I believe I have mentioned to you, we are now engaged on a new concerted programme of attacks on German communications. Under this programme, the mediums of the Tactical Air Force have as their objective to cut and keep out all the lines supplying the German front. For the past seven days this has been achieved. The heavies, meanwhile, are being held to hit the marshalling yards in Northern Italy beyond the reach of the Tactical Air Force and where the dammed-up German supplies accumulate as the result of the cutting by the medium bombers further down the peninsula. The heavy bombers are going to continue to help in this programme whenever weather prevents their higher priority targets being attacked."

Report on
Exercise
Thunderbolt
Vol.1/Item 17
Aug. 1947

Looking back on the campaign, over three years later, Sir John Slessor appreciated both the dangers of all-out interpretation of either theory at the expense of the other, and the need for both in a comprehensive policy, linked with and supported by aggressive land tactics. As he stated in August 1947 at the Thunderbolt Exercise⁽¹⁾

"In the choice between the plans, time was the deciding factor - which plan could win the build-up race in the time available. In Diadem, interdiction was successful, but the build-up race was nearly lost. By using the Air Forces in a different way a Transportation Plan⁽²⁾ might have proved successful, but this was by no means certain. An Interdiction plan is very

/effective

(1) Air Ministry Exercise held in August 1947 in U.K. to study the strategy and conduct of the combined bomber offensive from January 1943 until the end of the war in Europe, with particular reference to Spring 1944, and to deduce lessons from this campaign which can be applied to future strategy and operations.

(2) Strategic bombing of repair and maintenance centres in accordance with the Zuckerman Report.

effective during the actual fighting and when the enemy is being forced to expend his war supplies, but it does not prevent him building-up, or at least maintaining, reserves before the land battle commenced. The main thing was to be flexible, not to regard the Transportation and Interdiction plans as alternative, only complementary."

M. A. A. F. Operation
Instruction No. 8
18 Feb. 1944

Meanwhile the planning of Overlord was progressing and the theories advocated in Italy were being again advanced as rivals. The line-up of the opposing exponents of the various plans for air action to prevent enemy build-up against the invasion of N.W. Europe hardened.

The Long-Term Transportation Plan for Overlord

Professor Zuckerman left the Mediterranean in January and joined the staff of the Air C.-in-C. of the Allied Expeditionary Air Force as Scientific Adviser. His report, which had been given the blessing of Air Ministry, came to the fore during the discussions on the strategic plan for the delay of enemy reinforcements by rail in the course of Operation Overlord.⁽¹⁾

THE ITALIAN RAILWAY SYSTEM

Italian Railway Lines

Report on
Operation
Strangle
M. A. T. A. F.
24 July 1944
A.H.B. Parcel
No. 35/List 4.

Italian railways were particularly vulnerable to air attack owing to the great number of bridges, tunnels, viaducts and embankments, built by Italian engineers under difficult conditions of terrain. Four zones controlled the maximum overall rail capacity for all supplies. These were, proceeding from north to south, the Frontier zone, the Spezia-Rimini zone, the Cecina-Fano zone and the Montalto-Orvieto-Pedaso zone. Seventeen lines entering Italy, with a transport capacity of some eight to twelve times his minimum military requirements, were to be attended to by Strategic Air Force. Operation Strangle was primarily concerned with the other three. Each of these three zones had, if fully working, a capacity up to two hundred trains of eighty thousand tons daily maximum, and each zone contained a number of transverse lines across it, six, four and five respectively.

Advantageous Position of the Enemy Rail System

Ibid

The advantages to the Germans of this complex system must be appreciated, if the weight, length and timing of Operation Strangle is to be fairly measured against results. Unlike Sicily and Southern Italy, the system of repair facilities, big rail centres, marshalling yards and rolling stock bases proved too extensive to be put out and kept out by air attack on the scale available. In German-held Italy there were at least forty-eight of these major bases and one hundred and seventeen others with more than ten tracks, and a multitude of small sidings. From Rome northwards, there were five shops capable of handling major steam locomotive repairs and eleven for major electric locomotive repairs. Some eighty shops were available for minor repairs; some of these could stretch to major repair work. Nine shops north of Naples handled major car repairs and twenty-four private plants most of the minor repairs. Any lack of facilities /was

(1) See R. A. F. Narrative - N.W. Europe

was foisted on to the civilian population. Even had every repair shop in Italy been destroyed, basic repairs essential to the conduct of operations could still be carried out north of the Alps. The general situation would be then only slightly affected, for stocks stood high at this time.

MAAF/S6653/INT
29 Feb. 1944
A.H.B.II/J.11/1
Vol. VII

Allied Intelligence believed that the Germans held some three thousand five hundred⁽¹⁾ rolling-stock in Italy, a figure which could then be replenished from upwards of an estimated total of sixty thousand held in Western Europe and from factories, although the demands of the Russian Campaign were heavy. Military needs in Italy were guaranteed for probably another three years, assuming the daily need of fifteen trains a day for basic requirements. With some four/five hundred new locomotives coming off the lines each month, the situation should be comfortable. The freight car problem was (it was believed at the time) just as easy. The Axis held, it was thought, about two million freight cars in Europe, of which some ninety-five thousand were in Italy. At the contemporary rate of attrition existing stocks would, it was calculated, last another two and one-half years. The withdrawals from Russian territory released a considerable number of locomotives for use elsewhere. The fact that a considerable portion of Italy's railways had been electrified made power stations and transformer stations profitable targets, but the huge reserve of steam locomotives which could be substituted would take the sting out of this form of attack.

Enemy Supply Situation as affected by Air Attack

Appreciation by
Intelligence
Section
H.Q., M.A.A.F.
27 Apr. 1944
A.H.B. II.J.11/1
Vol. I/Tab.D.

On 15 March it was estimated that the enemy mustered eighteen divisions in Central Italy, nine in the main defence line and nine in the bridgehead area, apart from his air force units in the Rome area. Intelligence put the daily average of these forces' consumption at some four thousand tons, a figure including only supplies transported by one means or another from Northern Italy or Germany. He was bringing down about seven hundred tons daily by sea, (five hundred tons on the west coast and two hundred tons on the east coast), and some three thousand three hundred tons by the railways, assisted by M/T. lifts over points of interdiction and a limited amount of long M/T. hauls. Up-to-date information on the over-all stocks held by C.-in-C. Southwest was lacking, but was estimated by Army Intelligence on 24 March at some ten to twelve days supply. He had, it was believed, some thirty days ammunition and ten days fuel. Fuel, therefore, was to him the limiting factor, in spite of strict economies, but his situation was not really serious unless we could force his consumption up.

It was believed that if the weight of air power initiated could be maintained, and an Allied attack in force be made on the whole length of the front, his commitments, which could be closely gauged, would increase to such an extent that he would be short to the extent of some one thousand three hundred tons daily and a crisis would develop for him. Coastal shipping might be raised as high as nine hundred tons daily, but the remainder would have to be handled by railway or M/T, so menacing the fuel supply and creating an ideal situation for a policy of railway interdiction.

/Selection

(1) All figures given in this and the following paragraph are taken from the Allied Intelligence estimates made in the period early 1944.

Selection of Rail Targets

Report on
Operation
Strangle
Pt.I. Para.9
M.A.T.A.F.

The most vulnerable points in a rail system were considered to be bridges, marshalling yards and large signaling installations, repair shops and rail tracks. Bridges were hard to hit, but if hit, formed a block which took from a day to several weeks to repair. Marshalling yards were good targets, but a through route could be usually cleared in from three to forty-eight hours; to ensure a durable block, every one of a number of parallel lines had to be cut. It had been calculated that in the three lunar months ending 22 January 1944, more than four hundred and twenty-eight tons of bombs had been dropped for every complete blockage achieved with marshalling yards, as against one hundred and ninety-six tons for every bridge destroyed in the same period. By May the one hundred and ninety-six tons for a bridge had, by reason of increased accuracy, dropped to sixty-two tons. There was much less shunting in yards than in peace time and traffic was handled largely at small sidings and at off loading points on the open line. Repair shops, chosen by Professor Zuckerman, would it was considered, pay good dividends; and success at these points would bring a slowing-down in operational efficiency. By attacking a large number of rail tracks simultaneously with the repair shops, a severe strain could be imposed. Moreover with so great a choice of rail track stretches, the enemy could never cope with the problem of providing sufficient flak defences to meet all commitments. Due consideration was given to the high quality of bombing by our medium bombers; the priorities of attack reflect the choice of this category to attack major bridges, marshalling yards and repair shops; the fighter-bombers were to attack active trains, troops and major bridges under repair and secondary bridges, in these orders.

Enemy Road and Sea Communications

The bombing of the railway would, it was considered, throw a greater burden on the roads and canals. It was planned therefore that, throughout the operation, fighter bombers and night-bombers should work constantly over the whole road net of Central Italy, with the object of destroying M/T and disrupting organised movement both by day and night. This section of the plan would be handicapped in its execution by the poor strength of Allied night-flying aircraft, particularly American. The west and east coast shipping services have already been referred to. In addition to the actual sea lanes, a close watch would have to be kept on the numerous small ports used by the enemy as unloading points both for ships and barges. No great hopes were, however, centred on ports as targets, as it was known that the Germans were masters of the art of dispersal.

WEIGHT AND ZONES OF INTERDICTIONARY OPERATIONS

Report on
Operation
Strangle -
Plan and Conduct
of Operations
Pt.II

Zones of Operations

The main plan for Operation Strangle concerned the Tactical Air Force. The Strategic complementary effort will be considered separately. The limited range of Tactical aircraft fell within the boundary of the area where logistical factors counted most for the enemy. The successful interdiction of the rail system in the area south of Pisa-Rimini would impose the maximum strain on road transport. The principal enemy dumps were north of this line. South of
/the line

the line, repair facilities were limited and there were numerous good targets, but the main system was complex, with numerous alternative routes, all of which would have to be disrupted. Twelve lines ran north-south and six east-west, with numerous by-pass lines, particularly in the central area. All lines across the Boot of Italy had to be out, for military traffic could be easily diverted. Whenever possible main lines were cut at points more than one hundred miles from the Anzio area, so as to impose maximum strain on enemy M/T, already inadequate and short of petrol. The forces available(1) to the Commander, Tactical Air Force - Major-General John K. Cannon, were the 42nd and 57th Bombardment Wings, Twelfth Tactical Air Command and Desert Air Force.

Role of Air Forces in Operation Strangle

Ibid.
Bombing
Directives
Nos. 1 and 2
M.A.T.A.F.
25 Feb. and
19 Mar. 1944

The Bombing Directive of 19 March made certain alterations to the mission of 42nd and 57th Bomb Wings. Both medium Wings were therein given the primary task of attacking railroads south of and including the Pisa - Florence - Pontassieve line, and west of and including the Pontassieve - Arezzo - Orvieto - Orte line. Alternate targets were set on the Ventimiglia - Genoa - Spezia line for the 42nd Wing, when weather precluded operations in Central Italy. Secondary objectives for medium bombers were the ports of the west coast, normally chosen when weather indicated.

Twelfth Tactical Air Command (then still called Twelfth Air Support Command) was assigned to areas south of Rome to the battle area, the Rome - Orte - Terni line, the Orte - Orvieto line, the loop line through Viterbo to Rome and the Rome - Montalto Di Castro line. Desert Air Force was assigned to the Terni - Perugia line, the Terni - Foligno - Fabriano line, the Pescara - Ancona - Fano line and the Terni - Sulmona - Pescara line.

Directive to
57th Fighter
Group
M.A.T.A.F.
26 Mar. 1944

57th Fighter Group (part of the Twelfth T.A.C.) was assigned to three zones. Zone 1, absorbing rather less than 20 per cent of its effort, was the coastal strip from La Spezia south to Montalto Di Castro, extending ten miles to seaward and including the island of Elba and all /waters

(1) The 42nd Bomb Wing consisted of three Groups of B-26s, plus a Squadron of French B-26s, all located on fields near Cagliari, Sardinia. The 57th Bomb Wing consisted of three Groups of B-25s, one located in Corsica at the beginning of the operation and the remainder in the Naples area. By mid-April the entire 57th Wing had moved to Corsica. Twelfth T.A.C. was located in the Naples area (except 57th Fighter Group in Corsica) and was under the direct operational control of M.A.T.A.F. In the Naples area were one light bomber Group (A-20s), two fighter-bomber Groups (A-36s, P-40s and P-47s), and two fighter Groups (P-40s and P-47s). The 31st Fighter Group in Corsica is not included, as it was converted into an escort Group and transferred to Fifteenth A.F. shortly after Strangle began. Two R.A.F. Fighter Wings (Spitfires) were transferred from D.A.F. to the operational control of Twelfth T.A.C. during the operation. Desert Air Force consisted of two bomber wings (one R.A.F. (Baltimores and Bostons) one S.A.A.F. (Baltimores and Marauders)), one fighter Wing (S.A.A.F. (Spitfires)), and one fighter-bomber Wing (R.A.F. (Kittyhawks)), all located on fields near Termoli. Photographs were the task of Photo Reconnaissance Wing.

waters within five miles of its shores: Zone 2, absorbing about 80 per cent of the effort, included all rail and road communications south of and including the Pisa - Florence - Pontassieve line, and west of and including Arezzo and Chiusi junctions: Zone 3 included the rail and road networks above the Pisa - Florence - Pontassieve line, and north across the Appennines.(1)

PROGRESS OF OPERATION STRANGLE

Periodic Status of Italian Railways

Weekly
Interdiction
Status Reports
M. A. A. F. /S. 6697/
INT. II. J. 11/1
Vol. I. A. H. B.

An analysis of the operation showed that by the end of March, the average number of cuts per day was twenty-five, a figure which rose to seventy-five by mid-May. On several days in May this figure exceeded one hundred. By 24 May, all through lines to Rome had been blocked and remained so throughout the period. During most of this time, no through traffic approached closer than 125 miles from Rome, although, over certain periods, German repairs allowed it to get as close as 50 miles.(2) The east and west coast lines were cut early in the operation and kept cut; the Florence - Rome line hence stood out for attack in greater relief. The southern line of interdiction was still open on 6 April, with segments of the Chiusi - Rome and Perugia - Orte - Rome lines operating. On 8 April, the middle line of interdiction was still maintained with minor alterations. By 15 April, all lines across Zone 2 had been cut. By 21 April, all through lines to Rome remained blocked, although part of the Empoli - Siena - Chiusi - Orte route appeared to be still open. All other lines across both the middle and southern zones of interdiction remained closed. Much non-operational weather made continuity difficult and by 21 April, there were only thirty-one confirmed blocks plus twelve claimed.

During the following two weeks all through lines to Rome and the Eighth Army front remained closed, as the intensity of the attack and the efficacy of enemy repair increased. By 6 May, fifty-three blocks existed, of which twenty-one were bridges the repair of which would take one week or more. On 11 May, the date of the opening of the Allied offensive,(3) all routes were satisfactorily blocked as far north as the Cecina - Fano line, and the Urbino - Fano line was blocked at Possombrone. Below Chiusi and Foligno the blocks remained effective; no through traffic reached any point closer than 50 miles above Rome. By 18 May, all routes in the Italian peninsula were satisfactorily blocked and at this date lines were cut or claimed cut at no less than ninety-two points. Photographic coverage of every line every forty-eight hours was attempted, so that each block could be hit again as soon as it showed signs of repair.

/Confirmation

(1) See Maps 9 and 9a.

(2) Figures quoted are minimum and confirmed by photo reconnaissance (which covered about 60 per cent of the area at any one time), as well as by other sources.

(3) Operation Diadem.

Confirmation of the daily State of Railways

Status of Italian
Railways 16 Mar.
to 3 June 1944.
Chief Engineer,
State Rlys.
Italian Ministry
of Communications
A.H.B. II.J.11/1
Vol.VII/Tab.EE

An enemy document of great value fell into Allied hands later: this was the daily state of Italian railways compiled by the Chief Engineer, State Railways, Italian Ministry of Communications, which gave all relevant data except on the East coast route. This important piece of evidence, (given at Appendix 20) covered the period from 16 March to 3 June 1944, and proved that Allied estimates of damage done were, if anything, on the conservative side.

Enemy Repairs of Railways

Operation
Strangle para. 25
M.A.T.A.F.
O.R.B. Appx
D/SASO/7
A.H.B.IIM/A.41/1c

German engineers and forced labour squads under the Todt Organisation carried out the most vigorous repair operations all through the operation and it may be said that their efforts succeeded, up to the Allied victory before Rome, in guaranteeing the basic supplies to the front lines. The enemy became expert in gauging the zonal effect of a series of cuts and, after neglecting a badly damaged area for many days, would repair quickly, and simultaneously, several multiple cuts. During the period up to 13 April, he was active in the central area and along the west coast from Piombino northwards, after the lapse of weeks of general neglect. Activity broke out again in the north central area above Ancona. From 22 April to 6 May, particular diligence was evident to our reconnaissance aircraft along the Florence - Chiusi and Rimini - Ancona segments. The enemy never completely abandoned any stretch of line until the opening of the offensive in May.

A good deal of information was collected from prisoners-of-war on repair methods, revealing the volume of expert knowledge possessed by German personnel. A party sent to assess damage would include experts on signals, track building, electrical installations and water supply. Their report would be forwarded to Railway Construction Battalions, which allocated labour and materials and fixed a time limit for the job, which was invariably kept to. All breaks and craters were counted and measured. There was plenty of equipment available. As an index of their efforts, it was stated that in the case of a bomb crater on a rail track 16 feet in diameter and 5 feet deep, only four to six hours were needed to fill in the crater and relay the track.

Ibid
Para. 26

Enemy Trans-shipment by Land

Repair was not enough. Ingenious systems of trans-shipment were devised when a break occurred⁽¹⁾; the enemy would bring trains to opposite sides of the break and impress any Italians, carts and animals available. Road transportation was, as noted, in short supply. Enormous numbers of personnel were pressed into service for loading and unloading military material. By 1 May, M/T, petrol, tyres and replacements requirements were in a very strained condition, for M/T functioned as far north as the frontiers to

/supplement

The German
Supply System in
the Field
Hist.Sect.C.M.F.

(1) The following organisations were employed in the repair of the railway lines:-

Railway Engineer Regt. z.b.V.7
The Field Operation Battalions (FBAs) of W.V.D. Italy.
Todt Organisation, supplying more than 16,000 workers.
Bohemian/Moravian troops (strength about 4,000)
Technical troops

supplement rail and sea traffic. Shuttling from trains to M/T fell off more or less progressively and road movement increased in sympathy. In the Pescara sector the enemy's position was very difficult. He was obliged by the Allied strafing of roads to use obscure mountain routes. North of Rome an elaborate system of trenches and foxholes for distressed drivers was dug along the roadside. M/T travelled only at night and with dimmed lights; spare parts for Italian vehicles were often impossible to obtain, owing to attacks by Allied aircraft on parent factories at Turin and Milan.

Flak in Operation Strangle

Ibid
para. 27

Until the third week in April, flak did not seriously deter Allied aircraft. From 20 April, moderate to intense heavy flak was encountered all along the main line between Pontassieve and Arezzo. Many heavy railway flak guns were brought in and sited near the principal bridge targets; their fire damaged photo reconnaissance aircraft at high altitude. There was, too, considerable light flak. In the North, however, flak was neglected. The South was rightly seen to be the vital area and from this time accurate heavy flak was the rule all along the line from Chiusi to Orte. Rome was another sensitive point and here there was plenty of light flak to greet our fighter bombers.

Enemy Fighters in Operation Strangle

Ibid
para. 28

The Luftwaffe effort throughout was only a token one. Against the Allied numbers any attack was suicidal. The few groups of fifteen up to thirty-six aircraft, (Me.109s and F.W.190s) encountered refused to attack, almost without exception. When the Terni areas were attacked, the local fighters scrambled, not to fight, but to avoid destruction on the ground. The only patrols were met between Orvieto and Rome. The few advanced German landing grounds were under constant Allied supervision and a few airfields were attacked during April - Perugia and Viterbo twice by Mitchells, Perugia again by Spitfires. Foligno, Furbara and Canino were also harried. A successful sweep over the Udine airfields in the Po Valley was carried out in April by Strategic U.S. Lightnings, with U.S. Thunderbolts and U.S. Mustangs as top cover.

Enemy Trans-shipment by Sea

Ibid
para. 49

Sea trans-shipment, to which the enemy had constant recourse, was mostly carried out by F-boats - shallow-draft landing craft about 120 feet long. They ran from Genoa, La Spezia and Leghorn to Piombino, San Stefano, Orbetello and smaller Tyrrhenian ports, often unloading on beaches remote from ports. Bad targets from the air and travelling as they did at night, they remained an insoluble problem for our Air Forces, deficient, as already observed, in night-flying aircraft. The two squadrons of Bostons and two of Baltimores detailed worked hard to keep up the continuity of attack, but were inadequate in strength. It was decided later by T.A.F. that more efficient night harassing aircraft were needed, with a crew of three, a powerful free gun turret and a medium bomb load capacity; they should have a high rate of climb for work in such mountainous country. Every possible effort was, notwithstanding the handicaps, made by the Air Forces to slow down sea transport. At first, the larger harbours were profitable bomber targets, but as time passed, these targets, /as well

as well as smaller anchorages, were handed over to fighter-bombers. Night harassing of unloading points was carried out by the light bombers as soon as any activity was observed, with the object of preventing the clearance of the port before dawn, so creating accumulations of stores suitable for bomber or fighter-bomber attacks by day.

Strategic Air Contribution towards Operation Strangle

Ibid

Towards the end of March, Strategic Air Force went into action against the rail routes entering Italy, by bombing junctions along the Milan - Venice lines, as well as on parts along the east coast route. On 22, 28 and 29 March, nearly eleven hundred and fifty American heavy bombers, escorted by U.S. Lightnings or Thunderbolts, attacked the marshalling yards at Verona, Mestre, Turin, Bolzano and Milan and a few against East coast railway bridges. Great damage resulted everywhere, local industrial targets were set alight, and most through lines were blocked. In particular, the heaviest load to that date dropped by Strategic Air Force - one thousand and sixty-one tons - fell on 28 March. On 24 March, weather preventing a mission to Steyr in Austria, one hundred and thirty-nine escorted U.S. Liberators turned to bomb alternatively marshalling yards without much success, but they created serious blocks at the bridges north of Giulianova.

At night, Wellingtons and Liberators, in the third week in March, had some success in the North, especially at Milan - Lambrate, where one hundred and forty craters blocked through traffic and two hundred goods wagons were destroyed, as was confirmed by air photographs. The heavy raids were fairly costly in aircraft, owing to flak and fighter attacks, but, on the other hand, fighter interception proved expensive to the Germans, whose losses mounted steadily.

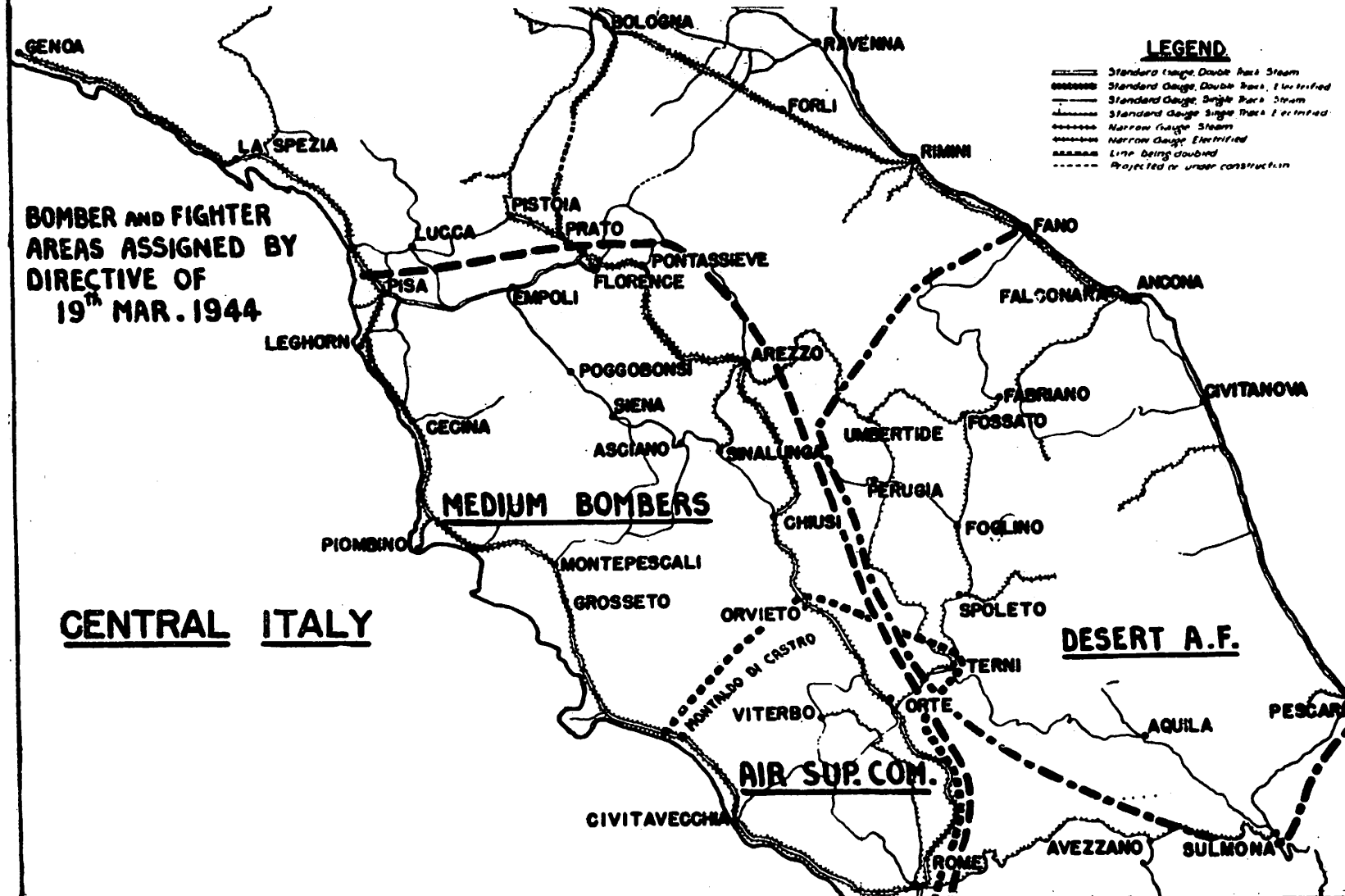
Report on
Strangle
Operation
M. A. T. A. F.

In April, the bulk of the bombing was carried out by Tactical Air Force, but the Strategic Air Force made large-scale attacks on marshalling yards on the Udine - Florence line, bridges over the Tagliamento River and at Fano, and marshalling yards at Ancona, Milan and Alessandria. Most of the strategic effort in April and May was linked to the overall plan for the strategic bombing of Europe; these operations, therefore, come within the scope of another narrative. As a part of the general offensive against enemy aircraft production indirectly affecting the Italian campaign, attacks were made on works at Milan/Bresso, Turin and Reggio Emilia. Opportunity was found in early May for raids by U.S. Liberators on Castel Maggiore and Parma, by Wellingtons and Halifaxes on Alessandria and by Liberators on Piacenza, targets in all cases being marshalling yards.

All day strategic raids by Fifteenth Air Force tied down an important number of German interception fighter squadrons to North Italian bases, thus reducing the fighter potential over the battle areas. On 2 April, for example, single-engined fighters from northern bases put up sixty/seventy sorties against U.S. heavy bombers raiding Steyr in Austria. To meet the threat of night-bombing Wellingtons a twin-engined night fighter unit of thirty aircraft was transferred on 5 May from Munich to Northern Italy to provide cover over the whole Upper Italian area.

/ENEMY

R. A. F. NARRATIVE OF THE ITALIAN CAMPAIGN OPERATION STRANGLE



A. H. B. I. MAP. No. 285.

ENEMY AIR ATTACKS ON ALLIED COMMUNICATIONSAllied Supply Build-up

"Diadem"
M. A. A. F.
AHB: II.J. 11/I

The Allies could not complain of any such crippling of their supply systems as their Air Forces were inflicting on the enemy's, and stocks were built up for the Spring offensive with little enemy interruption. Beaches, roads and railways were active day and night although many were in range of enemy airfields.

The Threat to Sea Convoys

Owing to the extreme range of the enemy's long range bomber airfields and his rapid switches of force, we were unable to prevent the planning and execution of bomber raids on our Mediterranean convoys, still a vital medium of supply; and although the German striking force had lost its old mastery, it could still render passages extremely precarious and sometimes get home a shrewd blow. But for the vigilance of Coastal Command, the steady, inconspicuous patrolling, losses in convoys would without a doubt have been far heavier. Between the night of 8/9 March and the night 11/12 May, seven serious attacks on convoys were made in the favourite hunting ground from Algiers to Bougie. The greatest number of aircraft actually attacking was recorded on 8/9 March, when some fifty Do.217s and He.177s made a fruitless attack on shipping north of Algiers, losing five of their number. All the rest were unsuccessful, or comparatively so, with the exception of a raid by fifty-sixty aircraft on the night 20/21 April on a convoy between Algiers and Bougie. On this occasion, although the enemy lost four aircraft to night-fighters and ship's gunners, he sank three merchant vessels and a destroyer, and damaged two other merchant vessels. The enemy bombers had been diverted from attacks at Anzio: thereafter the effort over Anzio declined in sympathy with the German appreciation that further attempts to eliminate the beachhead must await the arrival of reinforcements.(1)

/April

(1) Approximate totals of serviceable German Air Force aircraft at 24 April 1944:-

Italy, South of Spezia

Fighter Bombers	30
Single-engined Fighters	45

Italy, North of Spezia

Long Range Bombers	60
Single-engined Fighters	65

Southern France

Long Range Bombers	45
--------------------	----

The following scales of effort by Luftflotte 2 in Italy were made:-

18 Apl.	122 Sorties	21 Apl.	87 Sorties
19 "	26 "	22 "	60 "
20 "	187 "	23 "	234 "

The aircraft weekly scale of effort in Italy at this time was about 120 sorties per 24 hours. The higher scales of effort were due to scrambles against Allied bombers flying over Northern Italy towards the Reich.

April was a busy month for the German long range bomber force, which was recorded active on seventeen nights in a total strength of some one hundred and fifty aircraft. On five occasions, they were observed minelaying at Anzio, another activity our Coastal day and night aircraft were able to reduce to a minimum. They attempted only one raid of any dimensions on an Allied port. This was on the night 24/25 April, when Naples and Capodichino airfield were visited by about fifty Junkers 88s, without suffering any serious damage. The Germans were growing progressively more skilful in the technique of evading our radar screens. (1)

ASSESSMENT OF THE SUCCESS OF OPERATION STRANGLE

Assessment of
Air Operations
against Enemy
Communications in
Italy. M.A.A.F.
Intelligence
Section
16 June 1944
'Diadem'
Vol.VII/B.B.

Direct Results

From a study of enemy documents and the evidence of railway officers it became known in due course that the number of cuts existing on any particular day rose steadily from an average of twenty-five at the end of March to one of seventy-five in mid-May, after which date the number fell somewhat owing to the advance of our ground troops into enemy territory where multiple cuts existed. The distribution of the cuts, by systems of targets, was maintained in such a manner that at no time after 24 March did any through traffic reach Rome. Most of the through traffic was interrupted 125 miles from the capital.

Railroad officials in Rome testified later that from the very beginning of the operation rail traffic into Rome was reduced to a trickle. Some rail traffic edged its way southward each time blocks were repaired, but its tonnage was insignificant. Intelligence compiled from interrogation of prisoners was almost unanimous to the effect that personnel moved down to the Florence area by rail, thence continued to Rome and the front by M/T or, in the case of some large units, on foot, a state of affairs which prevailed from late March onward. The report of the Chief Engineer, Rome District, Italian State Railways whose Status Report is given in Appendix 20, revealed several acts of sabotage by Italians. It confirmed Allied appreciations that in many cases all blocked points on a particular segment of line were dead-lined to be opened simultaneously by the German engineers. This Chief Engineer, in personal interview, stated that destruction of bridges produced the most effective results, whereas marshalling yards were not as profitable under the given conditions, because there was little marshalling of military trains. These moved straight through the yards, damage to which was confined largely to civilian goods. The direct effect of interdiction was to force the enemy off the railroads and on to the roads, over most of the area between (but not including) the Pisa - Rimini Line and the front. This was clearest by the end of May, when the Germans had virtually abandoned large sections of line, concentrating on repairs to certain chosen segments only. Two of these which had an escape value as well as a supply value were the main line from Chiusi north through Florence to Bologna and the route to the northeast from Foligno via Fano and Rimini to Bologna.

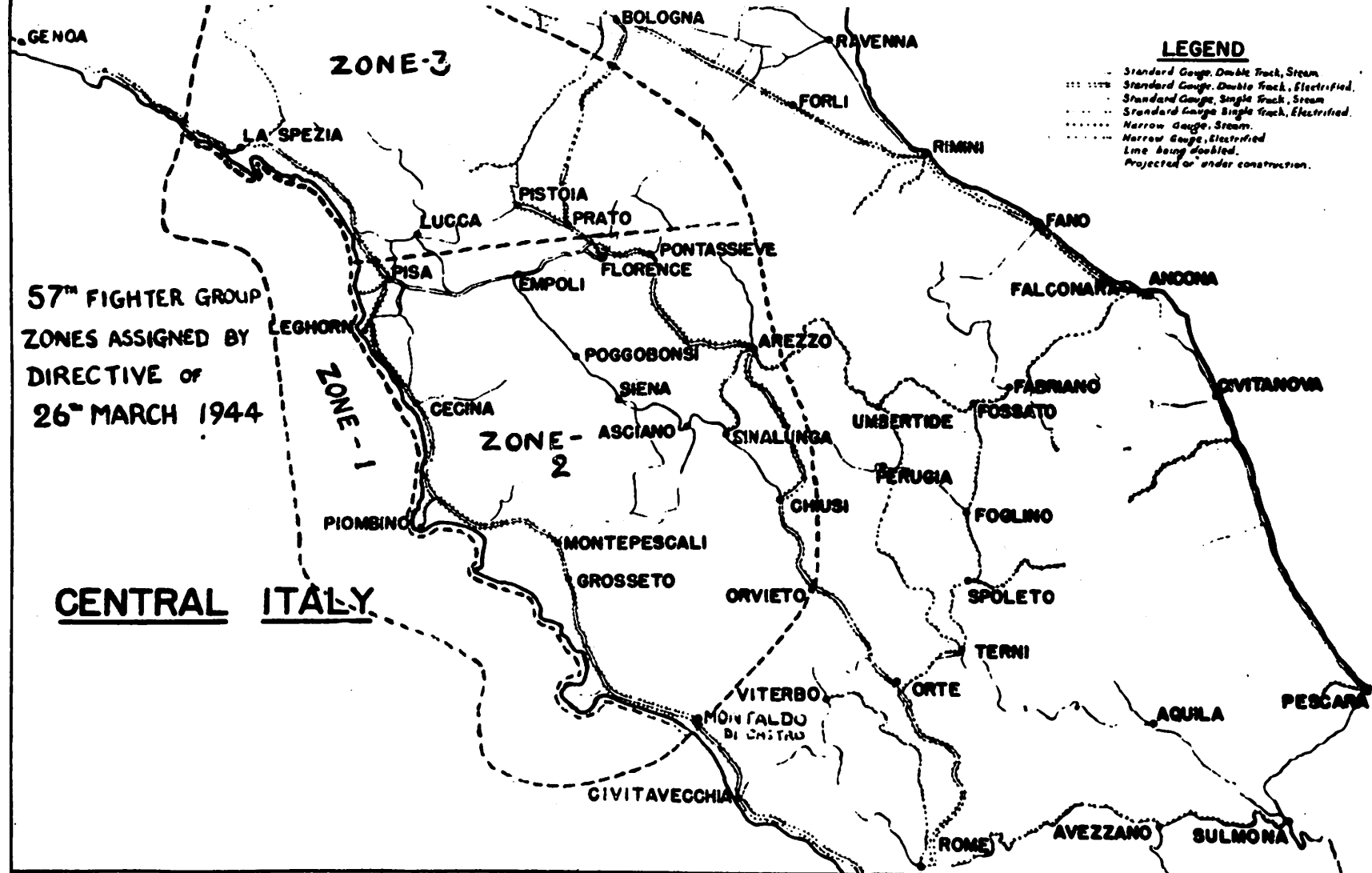
Air Force
Participation
in 'Diadem'
D.Ops.M.A.A.F.
31 July 1944

Ultimate Effects of Operation Strangle

At the beginning of March, the enemy had substantial supply reserves in his depots and forward dumps, accumulated /during

(1) See Signals Monograph, Vol.IV Radar in Raid Reporting.

R. A. F. NARRATIVE OF THE ITALIAN CAMPAIGN OPERATION STRANGLE



A.H.B.I. MAP No. 284.

during the bad winter weather, when flying had been impossible for many days on end. So long as he was not being forced to fight, he was able to maintain his stocks just above danger level. Operation Strangle was a success inasmuch that long before D Day for Operation Diadem (11 May 1944) it reduced those reserves so that the enemy troops were short of food, fuel, clothing and certain types of heavy ammunition. The full harvest of interdiction matured from the first day of the ground offensive, when the critical enemy motor transport situation created by interdiction began to deteriorate. The requirements of maintaining the extended lines of communications on a motorised basis demanded the progressive withdrawal of more and more M/T units from the forward communications zone. Prisoners in large numbers repeated the same story: they did not have the right material at the right time and place. The increasingly fluid front called for constant re-adjustments, which could not be made for lack of transport. Interdiction of roads by day slashed the road capacity, by forcing the enemy to run his vehicles by night, up to 11 May. Thereafter, the Allied Army's advance caused enemy evacuation of some areas and reinforcement of others. Transport was now forced to operate by day and here, again, the Air came into play by bombing the road convoys, with the substantial results given later in the chapters on Operation Diadem.

Von Pohl Series
of P/W Interro-
gation Reports
No. A595
C.S.D.1.C.
(Air) C.M.F.

The Germans admitted the serious hampering of the supply and reinforcement system. To some extent the Luftwaffe was able to alleviate the situation by the introduction from March onwards of light motorised flak (in particular quadruple flak batteries on self-propelled mountings) and by employing dummy convoys as traps for low-flying aircraft: but there was not nearly enough flak to cover all routes, nor were there nearly enough aircraft to intercept the Allied air attacks. In addition to German workers, there were fifty-three thousand Italian soldiers in German service and on the west coast alone fifty thousand Italian civilians co-operating under greater or less threat. All over the country there were large labour forces employed solely on repairs to air damage to rail lines and roads.

Report No. 20
Hist. Sect.
(GS)
Army H. Q.
Ottawa.

After the opening of the offensive on 11 May, there was plenty of evidence from enemy sources that the extended Strangle operations not only harassed supply, but interfered with the movement of troops needed in other sectors and rendered the fixing of arrival and departure time-tables a farce. The place for consideration of the full sequence of events will come later in this narrative, in the assessment of results at the end of Operation Diadem in Volume II.

C H A P T E R 9

THE SPRING 1944 OFFENSIVE AND THE CAPTURE OF ROME⁽¹⁾THE SITUATION AFTER THE THIRD BATTLE OF CASSINORe-grouping of the Armies

Allied Strategy
Br. Hist. Sect.
Cent. Med.

Although the three assaults on Cassino had failed, certain solid advantages remained with the Allies. It was now vital to re-group and to build up supplies. A second stalemate therefore ensued in the Western Zone: in the Eastern Zone the already three-month old stalemate continued. General Alexander met the disappointment universally felt by explaining that the date for a resumption of the offensive was influenced by the Armies' ability to prepare the stage for an all-out, sustained offensive, which would assist Overlord in drawing in and destroying the maximum number of German divisions. The Armies, Navy and Air Forces had made a substantial contribution to this plan for diverting German attention to what was soon to become a secondary theatre, for they were at this time holding down twenty-three German divisions, including many of the best in the German Army. The Air Forces had retained and extended and were more scientifically exploiting their superiority. A change of Army boundaries took effect from 26 March. On 11 May, when the offensive began in the sector from the Tyrrhenian Sea to the confluence of the Liri and Garigliano Rivers, Fifth Army had two corps in line, II American Corps and the French Expeditionary Corps. X Corps was transferred from Fifth to Eighth Army. Eighth Army's sector extended from Fifth Army's right boundary to a line running from the highest peak of the Maiella through Gran Sasso, northwest.

Early A.F.H.Q. Decisions for an all-out Offensive

Allied Strategy
Br. Hist. Sect./
C.M. AHB.II
J.11/58/9

It had been made clear from the outcome of the battles at the end of 1943 that, given the approximate equality of forces on both sides, the only hope of a successful offensive lay in the swift and secret concentration of maximum forces against vital objectives, so as to obtain the necessary local superiority to overcome the enemy's resistance. The configuration of the terrain dictated the need for the decisive blow to be struck west of the Apennines, where alone there was room for manoeuvre and where lay the most important military objectives at the time. This principle, that the west coast must be strengthened at the expense of the east, was accepted, a decision strengthened by the failure of Eighth Army /to make

(1) For an authoritative German version of the offensive, the student should not fail to study Appendix 24. This is a translation of a section of the narrative by Von Schramm - (Tenth Army Historian) and is compiled from actual war diaries. It figures as Appendix A in H.S. Report No.20 (981.A.10 (D.II)) issued by Hist. Sect. (G.S.) Army H.Q. Ottawa.

to make any appreciable progress towards Pescara. Operation Shingle had involved the moving, by February, of four divisions from the east to the west, and the existence of the Anzio bridgehead, no less than the obvious difficulties of a return to General Montgomery's original conception of a wheel through Pescara on Rome, made it certain that the spring offensive would be delivered on the axis of the Liri rivers. Final acceptance of this plan was urged in General Harding's appreciation of 22 February and decided on at a Conference of Army Commanders on 28 February. Plans proceeded and at the Army Commanders' Conference of 2 April at Caserta, the seat of H.Q. Allied Armies in Italy, the tasks of the two armies, the date of D Day, the timing of the several assaults and the reinforcement of the bridgehead were all decided.

Combined Chiefs of Staff's Directive to Supreme Allied
Commander Mediterranean Theatre

COSMED 90
19 April 1944.

The decision to launch an offensive conformed with the notions of the Combined Chiefs of Staff as to what operations in Italy would best assist the entry into N.W. Europe. On 19 April a fresh directive was sent to General Wilson. The object was defined as to give the greatest possible assistance to Overlord by destroying, or containing, the maximum number of German formations in the Mediterranean. This need of containing German divisions as far as possible from N.W. Europe was again reflected in the methods laid down for the attainment of this object.

As early as possible, an all-out offensive was to be launched in Italy. Before Overlord D minus 5 Day, the greatest possible threat to contain German forces in Southern France was to be carefully developed and fully maintained for as long as possible after D Day. Plans were to be made for the best possible use of the amphibious lift remaining in the theatre, either in support of operations in Italy, or in order to take advantage of opportunities arising in the South of France or elsewhere for the furtherance of the object and to press forward vigorously and wholeheartedly with all preparations which did not prejudice the achievement of the fullest success in the Italian offensive.

E/154(Final)

Discussions had been proceeding within A.F.H.Q. for some time as to what was to follow an offensive. If the Germans withdrew at their own rate to the Pisa - Rimini line in reasonable order, this would free up to four German divisions for use in Normandy, even allowing for heavy casualties: the Allies, too, would have a reserve thrown up, which would give them the degree of flexibility they would need for following operations, either in Southern France or in the Balkans. The use of these reserves would depend on available sea lift. General Eisenhower could not foretell the outcome of the Normandy landing, nor promise any given tonnage of landing craft on any given date; therefore General Wilson was unable to forecast the exact nature of the operations to follow Diadem; the only operations certain of execution were those cover schemes of deception falling under the general heading of Operation Zeppelin.

Mediterranean Allied Air Forces Action in Support of Overlord

Ibid
Annexure A.

Discussions as to what the Air Forces could do to render maximum aid to Overlord resulted in general agreement that while the Tactical Air Force was almost entirely committed to the Italian land battle and the war against enemy lines of communication in Italy, the Fifteenth Strategic Air Force could

/do

do a great deal. The Allied Commander-in-Chief summarised the possibilities in his signal of 23 April to the Combined Chiefs of Staff. Therein he gave an outline of his intentions and ideas on the implementation of the policy laid down in the directive just referred to above. Air action to support the deception threat to Southern France would have to conform to the general bombing plan for Overlord and would be co-ordinated with Supreme H.Q. Allied Expeditionary Force (S.H.A.E.F.). In addition to any action that might be called for against objectives in Southern France, the Strategic Air Force from the Italian theatre should be able to assist Overlord by pinning down German fighters in Southern Germany and Southeast Europe, by interfering with rail communications from Italy, Hungary and the Balkans to Northern France, by accentuating German difficulties in the Balkans and supporting the Russian offensive in the East. Those air operations already successfully adding to the enemy's difficulties on the Dalmatian coast and supporting our cover plans in the Adriatic and Aegean would be intensified, combined with action by light naval forces and raiding parties. As for the success of the approaching offensive he felt sanguine on one point at least. The preparatory air offensive - Operation Strangle, already in progress for some weeks - had achieved a degree of success against the enemy's communications and supply which should make it at least extremely difficult for him to offer prolonged resistance to Diadem.

Army Plans for the Offensive

Ibid

It was decided that the Eighth Army should break through the enemy's main front into the Liri Valley and advance on Valmontone⁽¹⁾ and that Fifth Army should secure the Ausonia defile and advance via Esperia to the south of the Liri Valley, and that the Anzio force should break out of the bridgehead and advance to meet Eighth Army at Valmontone. Although General Alexander did not at the time know the date chosen for Overlord, he was given to understand that a date for the Italian attack in early May would suit General Eisenhower. For the sake of troop movements good moon was advisable, so D Day was tentatively decided on as 10 May. The prospects of an operation against Elba Island⁽²⁾ were also discussed. D Day Operation Diadem was finally fixed for 11 May and H hour at 2300 hours. The break-out from Anzio was prepared for D plus four. If there were insufficient air forces to meet the needs of both Armies, priority was to go in the first phase of the attack to Eighth Army, and in the second, (the break-out from Anzio), to VI Corps. A deception plan for a simulated amphibious landing against Civitavecchia was designed and deceptive wireless traffic and troop training manoeuvres begun. Camouflage and intensive security measures were planned, a vital factor being the concealment of the entire Canadian Corps.

/PLAN

(1) In the C position, on Fourteenth Army's right flank.

(2) Operation Brassard.

PLAN FOR AIR PARTICIPATION IN OPERATION DIADEM

The Object and Role of the Air Forces

M.A.A.F.
Operations in
Support of
Diadem Vol. I
A.H.B. II.J.11/1

The Outline Air Plan, (1) defined the object of the Air Forces in Diadem operation as making it impossible for the enemy to maintain his forces on his actual line in Italy in face of a combined Allied offensive. To attain this object the following specific tasks were to be undertaken; by counter air force operations, to maintain the Luftwaffe in Italy in its contemporary state of ineffectiveness; by the co-ordinated effort of all available air forces to maintain the existing interruption of supply movement, caused by interdiction and, by intensifying the air effort, render the enemy unable, through shortage of essentials, to offer sustained resistance to the assault; lastly, to carry out normal close support operations.

The Air Plan - Preparatory Phase

Ibid

Air Operations were treated as in three phases, - Preparatory, Assault and Sustained Offensive. The Preparatory Phase, from 15 March to 25 April, was characterised by almost universal concentration on interdiction. The Assault Phase, from 25 April to D Day, saw a complication of effort pattern. Airfields would become of importance, as on previous comparable occasions. German air strength was to be reduced, by Tactical aircraft attacking the advance bases south of the Pisa - Rimini Line and by Strategic heavy bombers and fighters attacking bases in N. Italy and S. France.

The effort against communications was to continue, with improvements now possible because of the situation created by the pre-Diadem phase. Congestion had resulted in marshalling yards in the Po Valley: heavy bombers were to exploit this. Medium bombers were to destroy all marshalling yards, railway services and important installations south of the Pisa- Rimini Line, and vital bridges. Fighter-bombers were to join the mediums against bridge targets and were to hold up repairs, as they were made, and continue to cut tracks and destroy trains. Roads were to be bombed, as well as the motor transport using them, all round the clock. This programme would naturally force the enemy to increase his coastwise shipping. Strategic Air Force were to stage heavy attacks on the ports of San Stefano, Piombino, Leghorn, Spezia, Genoa and any new ports expediency thus rendered interesting. Tactical and Coastal units were to hamper movement of vessels and strike shipping and unloading facilities. Light bombers were to do the same during hours of darkness. Enemy supply dumps behind the lines were to be constant targets, with fuel and ammunition on first and second priority respectively.

The Air Plan(2) - Assault Phase

Ibid

The plan here became more abstract. Much would follow the course of events and it was only possible to give each Air Force the general lines of action. Tactical Air Force
/was

(1) Issued by H.Q., M.A.A.F. on 28 April 1944.

(2) Details of plans for the second and third phases were consolidated in Operational Directives Nos. 10 and 11 of 10 May and Operations Order No. 35 of 12 May and its annexe No. 1 of 11 May 1944.

was to support the offensive; Strategic Air Force was to revert to its normal role, standing by to exploit any especially good targets which might be thrown up by a rapid enemy retreat. Coastal was to carry on with its anti-shipping agenda. The anti-communications commitments of all air forces remained throughout.

Unification of Air Control and Operational Areas⁽¹⁾

Ibid

It was decided that, owing to the limited area of the battlefield, unification of air control was necessary until the Allied armies were beyond Rome. Under command of the Commanding General Tactical Air Force, the Commanding General, Twelfth Tactical Air Command was made responsible for control of all air forces supporting the two armies. Control was exercised through two operational staffs - one attached to Eighth Army H.Q., (comprising mostly D.A.F. personnel) and one attached to Fifth Army H.Q. (comprising mostly Twelfth Tactical Air Command personnel).

For the interdiction of enemy movement the following areas were allotted to the T.A.F. formations. To Twelfth T.A.C.⁽²⁾ were allotted the general battle area south of Rome and the central strip north of Rome up to Lake Trasimene, with, in addition, the Tyrrhenian coastal area as far north as Lake Bolsena. The Corsica - based 87th Fighter Group (U.S.) took over the west coast area running north from Lake Bolsena with the eastern demarcation line of Lake Trasimene, Arezzo and Florence. To Desert Air Force fell the eastern area, beginning on a line east of Rome to the Adriatic, and running north to the east of Lake Trasimene and Arezzo. Tactical reconnaissance commitments were to be covered by three squadrons under the operational control of Operations A with Eighth Army, and two squadrons under Operations B with Fifth Army. Either section could be switched if necessary.

THE ASSAULT

Eighth Army
Advance to Rome.
Appendices A/B
Brit. Hist. Sect.
Central
Mediterranean.
No.2/5) A.A.S.C.
& No.7) War
Diaries.
Diadem - Air
Operations
M.A.A.F.
AHB/II. J.11/1

Initial Attack

No direct preliminary air attack heralded the opening of the offensive at 2300 hours on the night of 11/12 May. Intermittent periods of silence and a general unawareness on the part of the enemy preceded the opening of a violent counter-battery programme by the entire artillery of Fifth and Eighth Armies. The Poles attacked Cassino and after some initial success were pushed back to their starting point. South of Cassino XIII Corps crossed the Rapido River and by noon on 12 May had fifty tanks across. On 13 May they took San Angelo. On Fifth Army front the most spectacular progress was achieved by the French Corps, who quickly captured Monte

/Majo

(1) Orders of Battle of Tactical, Coastal and Strategic Air Forces are given at Appendix 21. Not only are they of value in studying Diadem Operation, but reveal the changes in strength and the progress of the Air Forces up Italy, as they stood at the end of April 1944. Map 11 shows the relative strength and disposition of the opposing Air Forces, by types and categories.

(2) Tactical Air Command.

Majo, turned north towards the Liri River and Ausonia and cleared the west bank of the Garigliano. On the western flank the U.S. Corps edged slowly forward.

The firm resistance offered to Fifth Army in the first day of the attack weakened on 13 May. On II Corps front the Germans decided to stand and fight it out and hold the Liri Valley, if they could. The Allies bridged the Rapido and pressed home useful gains. The first phase of the assault was over, the second was for 78th Division to cut Highway 6 and isolate Cassino in conjunction with the Poles. The Gustav line was dented, but by no means broken. The capture of Ausonia by the French on 14 May exposed the right flank of the Germans opposing XIII Corps as far West as San Giorgio A Liri. II Corps captured Santa Maria Infante and Castel Lonerato, finally crushing the German right flank as a coherent line. What remained of the German 71st and 94th Divisions pulled away from the gap in their line. The Goums poured through and by 16 May, had captured Monte Revole and stood before Esperia. This town soon fell, followed by Pignataro and Gaeta.

M.A.A.F's Effort on 12 May

Ibid While artillery were shelling enemy positions during the opening night of the offensive, operations, slight but valuable, were carried out by fifty-three Wellingtons, who bombed the ports of Piombino, Ferraio and San Stefano. A few Bostons straffed the Rome/Avezzano roads and a few Baltimores the roads between Terni and Fano. There was nothing done in the air that night to suggest the massive effort which opened the next day and continued until long after the fall of Rome. We lacked the night bomber strength. On 12 September the normal effort was stepped up by over 50 per cent. Nearly three thousand sorties were flown by all types and the average over the first three days of the offensive was two thousand seven hundred sorties, in spite of bad patches of weather.

One hundred and thirty-four Fortresses struck General Kesselring's H.Q. at Monte Sorrate and that of the German Tenth Army at Massa d'Alba, with good results, after parading with other bombers along the front to cheer the Allied troops and dismay the enemy. Just under one thousand tons of bombs were dropped on all main west coast harbours from Genoa to Civitavecchia and on important railway centres. Liberators hit four northern inland marshalling yards, and railways at Orbetello. To hold down enemy air opposition, landing grounds in Central Italy at Ladispoli, Furbara and Tarquinia were attacked by thirty-four Fortresses; Lightnings straffed grounded aircraft at Piacenza. Tactical Air Force sent one hundred and forty French and American medium bombers to destroy enemy command posts in the Pico, Istri and Castrocielo areas and forty-eight light American bombers dealt with others east of Pico and south of Arce. The Adolf Hitler (or Fuehrer) Line stretched some miles behind Cassino, and troops were bound to concentrate along it and behind it at Pico. Three hundred American medium bombers attacked troops and various military targets here and at Fondi and Itri on the Tyrrhenian flank in the Senger position. One hundred and sixty-eight American P-40s attacked roads and bridges round the Pico assembly area and bombed troops opposing the Poles at Cassino. The French squadrons were now flying not only Marauders, but Thunderbolts and a dozen of these joined the operation by one hundred French and American Thunderbolts from Corsica in an attack on rail tracks and bridges in the area north of Rome allotted them.

Ibid The main targets for our fighter-bombers in the early phases of the battle were the two enemy gun areas - the Liri Valley and around Atina, north of Cassino. Light bombers /attacked

attacked gun areas near Pontecorvo, San Giorgio and Cassino and some fifty fighter-bombers helped in this area, as well as over one hundred D.A.F. Kittyhawks and Mustangs at Atina every twenty minutes throughout the day - saturation bombing.

ARMY PROGRESS IN THE FIRST WEEK OF THE OFFENSIVE

The Attack on the Gustav Line

Eighth Army's
Advance to Rome
Brit. Hist. Sect.
Central Med.

XIII Corps began its attack on the Gustav Line on 11 May, engaging in an intense struggle in the valley to establish itself across the River Liri, a very difficult operation. It crossed the river on the night 11/12 May, losing many boats in the swift stream, but effecting surprise; the enemy had been completely deceived as to Allied intentions. It was after this crossing that the Air Force attacks on enemy guns at Atina came as such timely aid. XIII Corps' critical position was relieved by reinforcements, and they slowly cleared the river. The efforts of 8th Indian Division in clearing San Angelo and taking Colle Manderini were supported, too, by the Air Force, who flew this day some five hundred sorties in support of Eighth Army. Crossings continued, with serious casualties, until the establishment of a bridgehead on 14/15 May. Roads from Cassino were crossed and, on 14 May, the Liri Appendix was cleared. 78th Division, after great difficulties and under continuous shelling, crossed the Garigliano river. After three days fighting, the French had entered the Ausonia defile, and Allied bridges were across the Garigliano. XII Corps had fought its way to the Gustav Line in the valley where the defences were thickest, while in the French and American sectors the continuation of the Line had been broken at many points.

The final battle of the Gustav Line began on 16 May, with an attack by British and Dominion forces, and ended in its breach on 18 May. On 17 May, II Polish Corps and XIII Corps went into action, with such success that the escape route for Germans left in Cassino was restricted to the mountain sides and a narrow strip of valley.

The Fourth and last Battle for Cassino

Ibid

Taking advantage of the mist and smoke, troops and armour crossed the Rapido River and pressed on towards the Adolf Hitler Line. After taking Phantom Ridge, the Poles attacked Cassino from the north and west and, on the morning of 17 May, took Cassino Monastery, Massa Albaneta and Point 476. In the afternoon British troops took Cassino Town. This ultimate success, obtained after stiff fighting, came about by Allied pressure on all flanks; there was no longer any point in the Germans holding Cassino in so deep a pocket. It did not, be it noted, fall to a frontal assault. The enemy in this region then went over to the defensive and began his retreat. A sector was passed to the Italian Liberation Corps, who had considerable achievements already to their credit. The attempt to rush the Hitler Line opened on 19 May. The right flank of the German Tenth Army was being driven rapidly back across the Aurunci mountains in considerable disorder. In the Liri Valley battle groups thrown back from the Garigliano were also in confusion; yet the full weight of the offensive was yet to develop. The

/Americans

Americans in the coastal sector made good progress and took Spigno, Itri and several key heights.

Fighter-bomber Cabranks, controlled from the post on Monte Trocchio manned by R.A.F. and Eighth Army Air Support Control Officers, attacked enemy defences continually as a prelude to the capture of Cassino. The formidable defence system is shown at Map No.8.

TACTICAL AND COASTAL AIR OPERATIONS IN THE FIRST WEEK OF THE OFFENSIVE

Tactical Operations

Operations in
Support of
Diadem M.A.A.F.

On 13 and 14 May, U.S. mediums concentrated on both military targets from Pico to Itri and on railway bridges. U.S. Bostons continued the action against command posts. U.S. Invaders and U.S. Warhawks circled the battlefield in search of guns and communication targets. U.S. Thunderbolts used their range to hit communications as far north as Perugia. Corsica was now fully proving its worth as an air base. Its fighter-bombers joined in the war against enemy supply by attacking roads in the Siena and Magione areas. T.A.F. Spitfires patrolled the battle area in strength by day and a few Beaufighters at night. Light bombers - Bostons and Baltimores - continued to intrude round Rome, bombing M/T and cratering roads.

M.A.A.F.
Operations in
Support of Diadem
AHB II.J.11/1

No.7 and 2/5
A.A.S.C. War
Diaries.

Throughout the week, fighters and fighter-bombers continued attacking lines of communications, artillery and mortar positions, command posts and M/T, bombed airfields and maintained a constant service of fighter reconnaissance missions. By day, Baltimores hit guns and strong-points at Pontecorvo, at the southern end of the Hitler Line. Bostons dropped supplies to advanced French troops. Warhawks and Kittyhawks scored direct hits on headquarters at Pico and flew over the battle area daily hitting guns, bridges, roads, mortars and troop concentrations. Mustangs were out on similar tasks. Thunderbolts and Spitfires continued attacking shipping, bridges, yards and tunnels. On 17 May, they hit the runway at Viterbo, Satellite No.2, not long previously covered with fragmentation bombs from Mitchells. It was from here that the small-scale night harassing missions by Ju.87s were dispatched and that a newly arrived Fighter Group from the Po Valley had just begun to operate.

Anglo-American
Offensive up to
the Capture of
Rome - German
Document
See Appx.24

It was not until 14 May that German fighters appeared in any force. Some sixty Me.109s and F.W.190s were engaged by our fighters, who claimed to have destroyed twelve of them. T.A.F. Beaufighters, who patrolled every night, were only able to claim a single Ju.88, destroyed just north of the Tiber. It was evident that now, and only now, that the Army had increased its pressure, was the result of Operation Strangle beginning to show. The Germans were fighting on reduced rations, their railways were crippled and the movement of motor transport growing daily more hazardous.

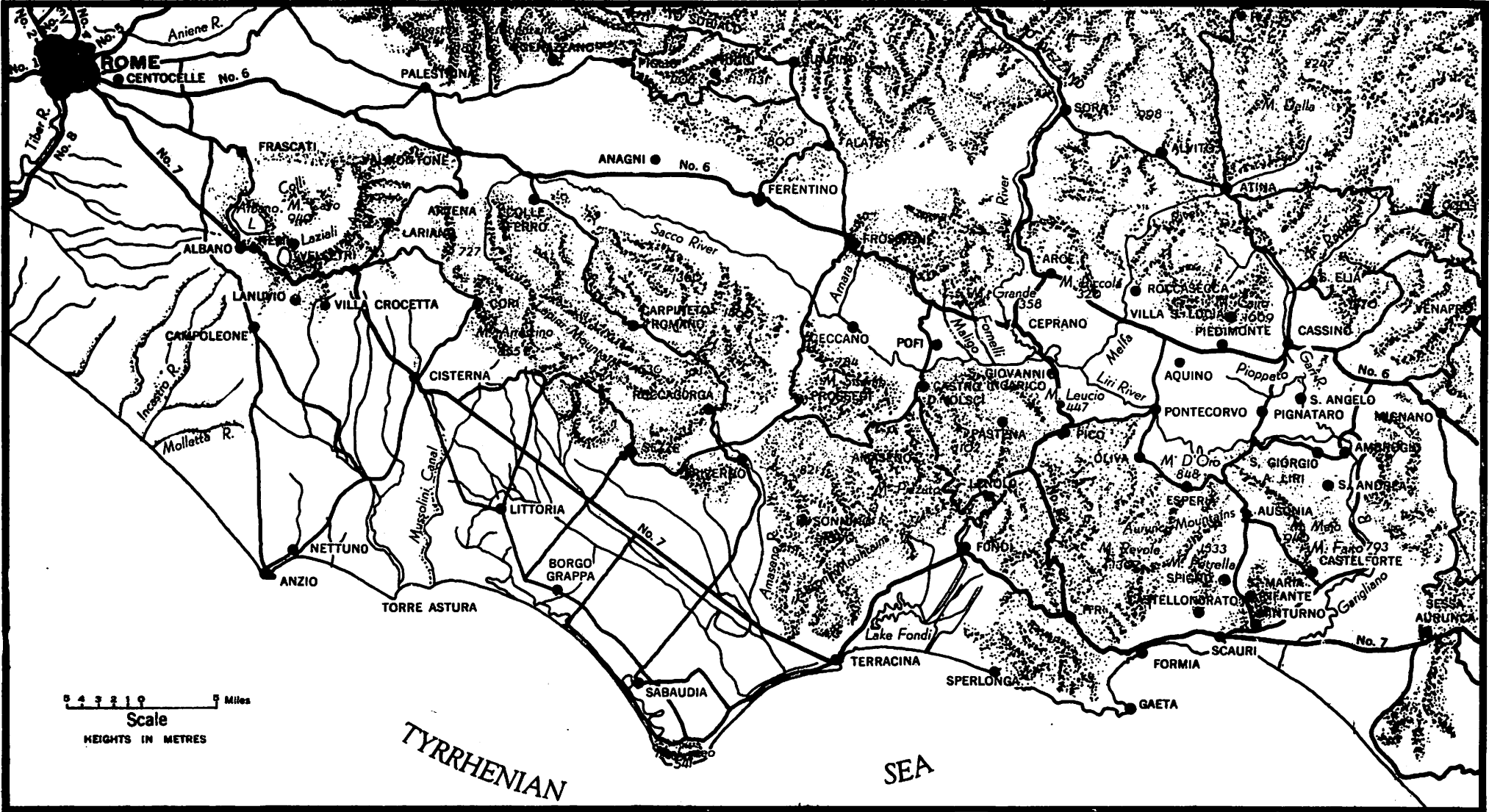
Forward Fighter Control on Monte Trocchio

No.7 A.A.S.C.
War Diary.

Although, as usual, a certain percentage of the fighter-bomber effort was available to handle targets of opportunity, a special Forward Fighter Control (Rover David) observation post - already mentioned - was set up on Monte Trocchio. It was designed to give quicker and more intimate support to the forward troops, and in the first instance to support the XIII

/Corps

R.A.F. Narrative of the Italian Campaign
TERRAIN OF THE SPRING OFFENSIVE 1944



Corps attack and, if necessary, the Polish attack. Cabranks of fighter bombers called in to Rover David, which also co-operated very closely with artillery and its light A.O.P. aircraft and with all tactical and artillery reconnaissance aircraft. Rover David began to operate in earnest on 12 May, controlling nine fighter-bomber missions in the afternoon. Haze and dust made observation difficult. There was still no more than normal road movement observable. The mist cleared on 13 May and virtually complete cover in the Eighth Army sector was maintained by tactical or reconnaissance aircraft. Throughout the offensive, Rover David proved to be powerful and elastic weapon in this set-piece battle. It was found, however, to be insufficiently mobile.(1)

Coastal Air Operations

C.A.F.O.R.B.

This was Coastal Air Force's most active week for months past. They maintained offensive operations over Adriatic convoys; they organised submarine hunts, reconnaissances and harbour patrols. Fighters opened successfully with a bag of five Ju.88s found attacking a convoy off Delys. Their U-boat hunts yielded two kills. At 0545 hours on 14 May, two Allied ships were torpedoed north of Cape Tenes. A hunt was organised, which lasted until 0800 hours on 17 May, when destroyers shelled and sank the U-boat, after it had been straddled by depth charges from a Wellington. A later incident led to a second hunt, which ended successfully on 19 May.

During the Luftwaffe attack of 12/13 May on Poretta and Alesina airfields, Beaufighters made no contacts, but A.A. claimed four certain kills. There was a raid on Naples early on 14 May by about twenty bombers, during which two Ju.88s were brought down by Coastal Beaufighters. Twenty-two attacks were made on enemy shipping in the Adriatic and Tyrrhenian Seas, resulting in the sinking of, and damage to, small craft, merchant vessels, schooners and ferries. A few Beaufighters intruded over Southern France and destroyed a He.III. Coastal lost four Spitfires, two Beaufighters and a Hurricane, but accounted for eight Ju.88s and four Me.109s in addition to the He.III. In Air Sea Rescue operations they saved thirty-four Allied and two German airmen.

AIR SUPPORT IN THE EARLY STAGES OF ALLIED ADVANCE

Allied Advance 15 - 18 May

7 and 2/5 A.A.S.C.
War Diary.
Eighth Army's
Advance to Rome.
Brit. Hist. Sect.
Central Med.
M.A.A.F. Air
Intelligence
Weekly Summaries.

The German crust began to crack on 15 May. By 18 May gains in most sectors were evident. The Gustav Line was breached; the French drove up behind the Hitler Line. The Germans committed their forces too far forward and paid the penalty of exposing them to air and artillery attack. The French had taken Esperia(2) and pressed on to take Monticelli. Farther south they took Campodimele and pushed westwards from the Intri-Pico road. In the lower Garigliano Valley the American troops made fine progress along their coastal front.

/Scauri.

(1) Appendix 22 demonstrates the degree of flexibility already attained at the opening of the offensive.

(2) See Map No.10.

Diadem - Air
Operations
M.A.A.F.

Scauri fell to them on 16 May, then Trivio, Monte Conca and Monte Dragone. Up to 0600 hours on 19 May the count of prisoners taken by Fifth Army since 11 May was three thousand six hundred and ten; those taken by Eighth Army numbered one thousand and five up to 17 May.

Allied Air Operations 15 - 18 May

No.2/5
No.7 A.A.S.C.
War Diary.

The medium bombers did not fly in direct support until 17 May, the day Cassino fell. On that day they flew four missions against road bridges at Frosinone, Ceprano and Fontana Liri. This was the first example of what was to become a notable feature of this operation, the effort of the medium bombers to block the path of the enemy in retreat.⁽¹⁾ Although there was no consistent or large scale movement in this period, there was a general increase in ground movement; of this, light bombers took full advantage.

Rover David operated many successful Cabranks and several targets were found by Artillery Reconnaissance and Air O.P. aircraft. On 16 and 17 May, help was given the Polish Corps by attacks on a large number of mortar positions round Villa Lucia and Piedimonte San Germano. Tanks, vehicles and enemy forming-up positions were also attacked by fighter-bombers. The emphasis of the counter-battery effort, carried out by light and fighter-bombers, shifted from the Atina area to guns, to the east of Aquino, at Pico and Roccasecca,⁽²⁾ liable to hold up progress when Cassino fell. When spotting aircraft were in the air, the enemy usually remained silent. Allied ground pressure forced him off this practice, thus throwing up many excellent active gun, nebelwerfer or mortar targets for attack by our own guns or fighter-bombers.

Scale of Allied Air Effort 15 - 18 May

Ibid

The planned tactical medium bomber effort against communications was curtailed by bad weather, but the tactical light and fighter-bombers were less affected. Corsica-based U.S. Thunderbolts, aided by Spitfire sweeps and escorts, concentrated on road and rail targets, while two hundred plus fighter-bombers sent out on 15 and 16 May added their weight to this programme, as well as attacking camps and landing-grounds just north of Rome. On the other side of Italy, D.A.F. Marauders and Spit-bombers, aided by a few Kittyhawks, flew some two hundred sorties on bridge-breaking (or 'bridge-busting' as it was universally termed) and track-cutting and attacking shipping at Ancona. On 15 May, three hundred plus Twelfth T.A.C. fighter-bombers bombed rear road points and softened-up strong points: U.S. Bostons eliminated dumps. On 16 May, the Allied Tactical air effort rose still higher and further inroads were made on the enemy's transport facilities as the troops fought through the Gustav Line.

LUFTWAFFE REACTIONS IN THE ASSAULT PHASE

Background to Luftwaffe Weakness

Rise and Fall of
the German Air
Force. Air
Ministry.

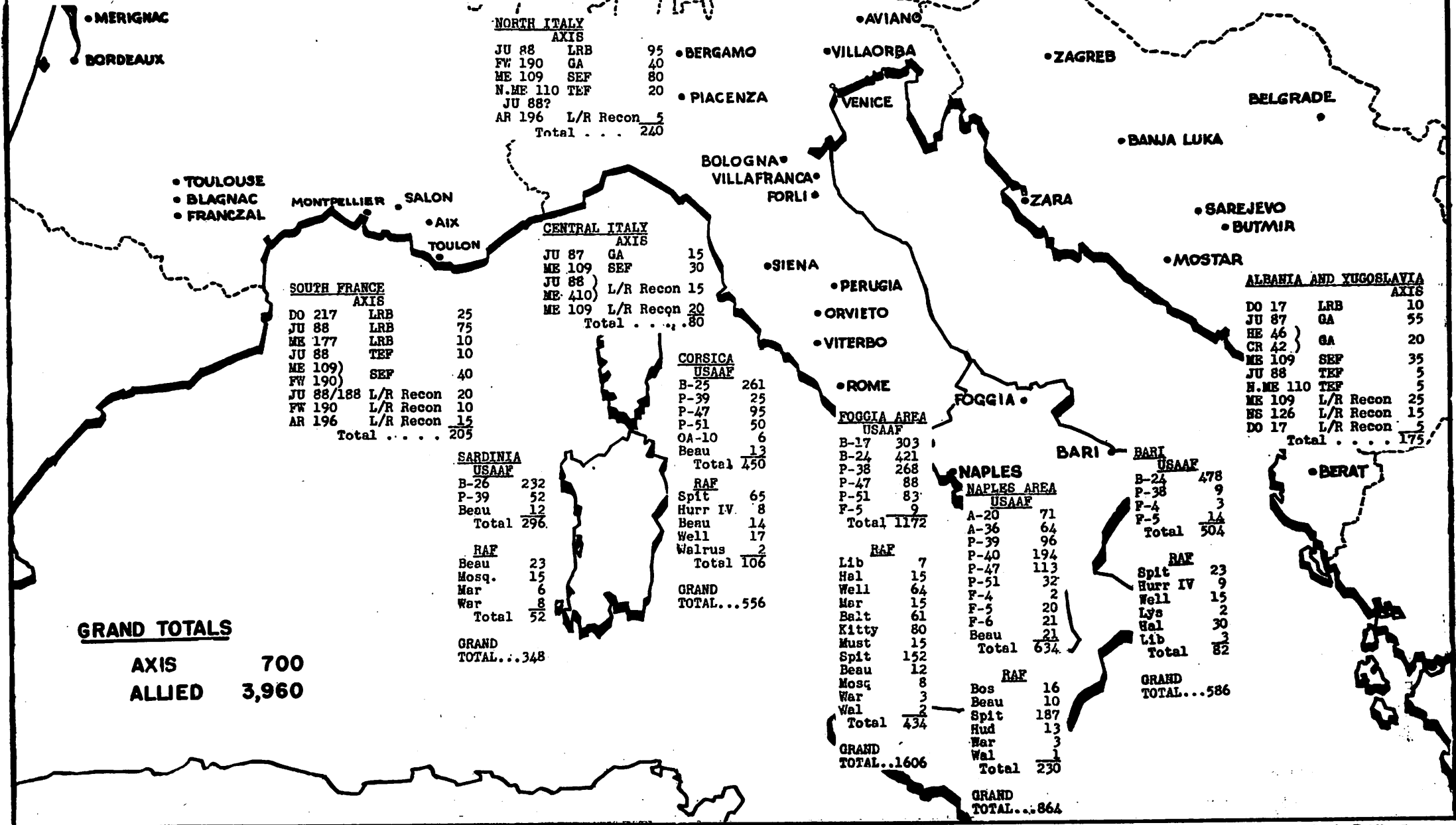
By holding the Allies in the Anzio bridgehead and on the Cassino front, the Germans had enforced a series of hardening stalemates. This had enabled them to return to the purely

/defensive

(1) This is dealt with in some detail in Section 13.

(2) See Map No.10.

R.A.F NARRATIVE OF THE ITALIAN CAMPAIGN AIR SITUATION MAY 12 1944



defensive policy of the previous winter, radically curtailing the scale of air support and again withdrawing surplus Luftwaffe elements for operations elsewhere. Approximately sixty Ju.88s, moved to northern Italy at the time of the Anzio landings, returned to Northwest Germany, and some forty single-engined fighters were transferred from Central Italy to the Balkans, now under serious threat from the Fifteenth Air Force at Foggia.

An attempt was made to reinforce the fighter defences of Italy by the organisation of a small Italian Fascist Republican Air Force under German control. In spite of this move, the scale of effort in April fell even lower than that for the early stages of the campaign. A few harassing bombers were imported, to carry out insignificant night activity over the front lines. The long range bomber force remained inactive. It is now clear why, when the Allies crossed the Rapido and Garigliano River in the early stages of Operation Diadem, the Luftwaffe made no serious attempt to increase its scale of effort and hardly intervened in the fighting up to the fall of Rome on 4 June. The Allied raids on Viterbo and Piacenza airfields wrecked any enemy hopes of intervening in the battle. The Luftwaffe had aircraft elsewhere on which it could have drawn, but was unlikely to do this while three major fears dominated its policy. These were of further Allied outflanking movements on either the Adriatic or Tyrrhenian coasts, an invasion of the Balkans, and of an imminent major Allied amphibious operation against the west coast of France.

Luftwaffe Changes of Policy and Command

Ibid

The first sign in the change of policy was the withdrawal to Northern France of Fliegerkorps II, the command so far in charge of tactical air operations in Italy. This move was followed, early in March, by the withdrawal of Fliegerkorps X, the command responsible for operations in Greece and the Aegean. The Balkan and South Russian fronts were fused under Luftflotte 4. The anti-shipping units in Southern France, which at the time of the operations against the Anzio bridge-head were temporarily under control of Luftflotte 2 and of Kesselring, came under control of Luftflotte 3. From March 1944 onwards there was no Fliegerkorps organisation in the Mediterranean. The centre of gravity had moved to the Western Front. The Germans had so far justified their theory that it was possible to fight a reasonably successful defensive campaign virtually without air support, given favourable terrain. The cream of the long-range bomber force was by now, however, feeling the pressure of the Allied air superiority and slowly declining in effectiveness and strength.

Successful Luftwaffe Raid on Alesani and Poretta Airfields

Ibid and Diadem
Ops. M.A.A.F.

To offset the poor showing of their fighters over the battle area, the Germans could claim complete success for their raid on the night 12/13 May on the Corsican air bases at Alesani and Poretta. Some five/ten bombers staged a diversionary raid on Bastia harbour without causing damage. The main effort was by about fifty aircraft. Allied aircraft were arriving daily on these airfields to participate in Diadem operations. The raid was so very timely that some credit must be given to German Intelligence. Fifteen Ju.88s and He.177s attacked Alesani, destroying eight Mitchells and

/damaging

damaging twelve more on the ground. The Foretta raid paid even higher dividends, for here fourteen Spitfires and one Liberator were destroyed and fifty Spitfires damaged. On both airfields damage was caused to runways, buildings, M/T, fuel and ammunition dumps. Twenty-four personnel were killed and fifty wounded. The attack on the convoy off Dellys the previous night had been a fiasco, costing the Germans some sixteen aircraft. Early in the month a few Ju.87s had been seen in the battle area. Nine bomber raids of small dimensions in the Anzio-Cassino area were all that were reported during the whole of May, apart from two convoy attacks, the raids just dealt with, two on Naples and one on Vis Island emergency landing strip. The average fighter and fighter bomber sorties over the battle area began low and seldom passed the daily average of fifty/seventy-five sorties. Only on eleven days in May did fighters intercept our bombers, and then only in small numbers.

Luftwaffe Activity 14 - 18 May

Ibid

On 14 May, the Germans gave ineffectual support to their front line troops. Some twenty aircraft operated during the day over Cassino, some of them being forced to jettison their bombs. On 15 May, they returned, and to more effect, compelling two Allied fighter-bomber missions to jettison and revert to fighter tactics. The few night bomber attacks already referred to were Ju.88 raids, carried out without success, against the bridges over the Rapido, and round Castelforte and Minturno.

THE U.S. MEDIUM BOMBER EFFORT IN MAY

Medium Bomber Operations

1 Jan.-28 Aug. 1944
H.Q. 12th A.F.
15 Feb. 1945.
A.H.B.II.J.11/12

Operation Diadem

H.Q.M.A.T.A.F.
6 Jan. 1945.
A.H.B.3/14/6

Rail Interdiction - Central Italian Zone

In the first week after the opening of the offensive, repairs were effected on the lines Empoli-Chiusi and Fano-Foligno and considerable traffic moved northwards. Blocks remained effective between Chiusi and Foligno, and no through traffic approached nearer than 50 miles above Rome. By the end of this week, lines temporarily repaired were re-blocked; lines were cut at more than ninety points in Italy. Unfavourable weather from 20 - 23 May hindered the medium effort and gave the enemy enough respite to open up the main Florence-Chiusi-Rome route as far south as Orte North and to some extent the Perugia-Spoleto by-pass. On 24 May, however, the Mitchells cut the Pontassieve bridge. Tactical Air Force was now operating at its peak effort and registered its record sortie total for one day in Operation Diadem - 1791 sorties. The air attacks on communications will now be described up to 4 June, the date when the part of Operation Diadem dealt with in this volume ends. (1) By the end of the second week of the offensive, the southern section of the Orte-Rome line was carrying no traffic. During this week, interdiction of the west coast route was pushed up to Viareggio for a time, but cuts were promptly repaired, a situation which recurred monotonously all through the operations. Of the vital northern Apennine routes, Bologna-Pistoia and Parma-Aulia were open, but Faenza-Florence and Bologna-Prato remained out. Interdiction of this zone was of especial importance, for good roads were few in this mountainous region and the enemy's M/T problem was a serious one. Repairs of marshalling yards were very evident,

/for

(1) Diadem Operations did not end until 22 June 1944 in the M.A.A.F.'s chronology.

for instance, on 19 May the marshalling yards at Faenza and Forli had all their main lines cut, but by 23 May they were open again and a clear run from Bologna through Rimini to Ancona was possible. At the close of 18 May, it was known that all railway lines were satisfactorily blocked as far north as the line Cecina-Certaldo-Incisa-Cesano. The weather was intermittently bad from 19 May to 23 May. The result was a general diminution of the anti-communications offensive in the central areas, although the long-range effort of our heavy bombers was not affected to the same extent. With the clearing weather from 24 May, the medium bombers were again able to achieve a considerable effort.

Ibid

Medium Bomber Effort to 4 June

Over six hundred and eighty medium bombers operated over 24 and 25 May. Part of this effort was directed to the bombing of roads leading northwards from the battlefield, thus hindering enemy movement in and out; in particular, Highway Five was cut at Carsoli. A more important commitment, however, was to end the lull enforced by bad weather in the attacks on railways. U.S. Mitchells and U.S. Marauders, in addition to cutting the lines at Viareggio, blocked the central route again by cuts on the Pontassieve bridge.

During the third week of the offensive, the enemy troops were 'on the road', as General Mark Clark put it. The main medium bomber commitment continued to be the cutting of bridges in Central Italy at the highest intensity. Practically all major bridges were attacked; a recapitulation of the effort and the state of communications would be impressive at this point, but would only represent a focussed view on a single point in a changing situation. Four spans of the Bucine Viaduct, as well as the bridge west of Arezzo were destroyed; and the Pontassieve bridge re-cut. As a result of the combined attacks by the Tactical bombers and fighter-bombers, there were now one hundred and twenty-four cuts in the lines north of Rome, of which forty-seven were major bridge cuts. South of Florence, owing to the very numerous breaks in the line, the Germans were forced to trans-ship their supplies to the front by road transport, which in turn was attacked by aircraft. The mediums also created road blocks in the line of the retreating enemy, so helping to gather concentration targets for the fighter-bombers, particularly in the resistance areas south-east of Rome.

STRATEGIC AIR OPERATIONS IN THE FIRST TWO WEEKS OF THE OFFENSIVE

Operations in
support of
Diadem. M.A.A.F.

M.A.A.F. Air
Intelligence
Weekly Summaries
No. 78/79
A.H.B.II J1/43.

Operations in the First Three days and Nights

The Strategic air effort for the first three days and nights, already touched on, was carried out by some three thousand, five hundred bomber and fighter sorties. In the first morning's attack, the German Corps H.Q. at Massa D'Alba was hit by two hundred 1,000 pound bombs. The local roads were cleared by 1000 hours, but at 1615 hours another raid caused the removal of the H.Q. staff. Seventy per cent of this three days' effort was against the focal points of the enemy railway system. The balance of 30 per cent attack fell on harbours and airfields. The outstanding achievements on the railways were the cutting of the Brenner and Tarvisio lines.

/Complementary

Complementary damage was done at Fidenza, Padua, Piacenza and Trieste marshalling yards. Very timely destruction was effected by the heavy bombers on the F.W.190 bases at Piacenza and Reggio Emilia.

Decline of Effort due to bad Weather

Ibid

Night bombers operated on six nights of the week, attacking Porto Ferrario, San Stefano and Piombino, with good results on three nights. They rounded off the week in direct support of the Army, when they continuously bombed roads, already cratered during daylight by Mitchells and Marauders, so hampering the flow of supplies and reinforcements. Poor visibility prevented the complete success of the operations of the day bombers and the weather deteriorated to such an extent that all operations had to be cancelled on the fourth and fifth days.

Operations against Axis Oil

Oil being a priority need of the German Armies and Air Force, it was the time to supplement the attacks on basic supply centres and refineries in the Balkans by others on depots and distribution points in Italy. On 19 and 22 May, Liberators bombed the port of Spezia, damaging shipping, submarine pens and the electrical works and destroying five oil storage tanks. Another target chosen was the refinery at Porto Marghera, source of an annual production of half a million tons. Its importance at the time had increased because of Allied damage to the Ploesti and Leipzig plants and the sabotage activities of Italian Partisans at the Trieste and Fiume refineries. A raid on 19 May by sixty Fortresses, followed by one on 25 May by sixty-eight Liberators created great havoc and destroyed most of the storage tanks, according to photographs.

Raids on Rail Communications and Reinforcement Routes

Ibid and 205 Gp.
O.R.B.

Although no Strategic operations were possible on two days, and conditions made location of targets and accurate bombing frequently impossible, both tactical and strategical targets were covered. For example, the vital Tarvisio and Brenner main lines were revisited. On the night 14/15 May, Wellingtons had blocked the Casarsa bridge. On observation that on the fourth day thereafter a single line was in operation, thirty-eight Fortresses went back and put two spans out of action. The river Avisio viaduct was also repaired; sixty-eight Fortresses therefore returned with twenty tons of 1000 pounders and hit the east track twice. Almost the entire bombing effort for three days and nights was concentrated on troop movements, communications and military targets in the rear of the battle areas and in central Italy. Roads were successfully blocked at Avezzano, Subiaco, Palestrina and near Valmontone⁽¹⁾ on Highway Six.

Heavy reinforcements for Italy passed through Southern France. To disorganise such movement, three marshalling yards in the Lyons area and the Carnoules yard at Toulon were attacked. Photographs showed that all four attacks inflicted serious damage. At Amberieu there were thirty hits on the tracks and sixty cars were destroyed at Venisseux; Givors and Carnoules lines were cut and installations put out of action. Wellingtons and Liberators, on the nights when weather allowed, bombed transport immediately behind the front. Chaos was created by them at Porto Ferrario and Piombino on the night of 21/22 May, when they attacked during most of the night.

/FIFTH

(1) See Map No.10.

FIFTH AND EIGHTH ARMY ADVANCE CONTINUEDContinued Progress

Ibid
 Anzio Beachhead
 Historical Div.
 U.S. Army
 A.H.B. IIJ11/52.
 M.A.A.F. Ops. in
 support of
 Diadem Vol. II
 A.H.B. IIJ11/1

The Anglo-
 American
 Offensive in
 Italy up to the
 Capture of Rome.
 German Document
 See Appx. 24.

On the Eighth Army front, the Polish Corps, after cleaning up the high ground west of Cassino, captured Santa Lucia and opened an attack on the Austrian troops at Piedimonte. XIII Corps and I Canadian Corps, attacking up the Liri Valley, broke through the Hitler Line between Pontecorvo(1) and Aquino. The French elements in Fifth Army continued their spectacular advance, occupying the country between Pontecorvo and Pico and advancing to the south-west. On the left flank the Americans took Fondi and drove on westwards. The enemy's retreat had by now created favourable conditions for an offensive from the Allied Anzio bridgehead. On 21 May the Senger position was broken and the Germans could plainly recognise this threat of a junction between these forces and those in the Anzio beachhead. If the Allied attack were not halted by 22 May, containing positions round the beachhead would have to be yielded and then nothing but the C (or Caesar) and Campagna Lines would remain before Rome. The former stretched, in various degrees of strength, from the west coast to a point 2.5 kilometres south-west of Valmontone on to a point 14 kilometres north-west of Avezzano and, from thence, more or less directly to the East coast, to the north of the Siegfried Line. The Campagna Switch Line crossed the Albano country, shielding Rome in a N.W. - S.E. direction.

The Anzio Bridgehead Offensive

British Forces at
 Anzio
 Br. Hist. Sect.
 Central Med.

The Anzio bridgehead existed as such for one hundred and twenty-five days, (from 22 January to 25 May), during which period Allied ships and landing craft put ashore 478,407 tons of ammunition, equipment and stores, under M.A.A.F's protective air cover. On 23 May, VI Corps in the bridgehead launched an attack in a north-westerly direction. Following a barrage against enemy defences along the Cisterna front, which opened at 0545 hours, American tanks and infantry attacked, through the smoke, from Carano to the Mussolini Canal. Before noon, Highway 7 had been cut and initial objectives reached. By nightfall on 25 May, Cisterna had fallen and 3rd Division and 1st Special Service units were before Cori, with 1st Armoured Div. troops facing the entrance of the Velletri Gap, leading towards Valmontone. Atena fell on 27 May and VI Corps' advance came to a halt there. Casualties in the operations to this point were twice as heavy as on 16 February. On 25 May, American reconnaissance patrols linked up with beachhead troops on the coastal road about 7 miles east of the Mussolini Canal.

The enemy had erroneously anticipated that the main thrust would come from the beachhead; when it came on Fifth Army main front, Kesselring was forced to pull down the reserves held until then in the beachhead area. By the end of the first week, all his reserves had been thrown in to bolster his crumbling right flank. The beachhead thrust, therefore, imposed a threat of encirclement on the Germans, already committed too far forward when the Hitler Line was cracked. The battle was from henceforward no longer for Rome or indeed any other position, but to save the German Armies from destruction.

/Air

(1) See Map No. 6.

Air Support for the Anzio Break-out

Operation in
Support of
Diadem M.A.A.F.

The Fifteenth Air Force planned massive support to the breakout by bombing rear areas and key points leading to the battlefield, but weather again curtailed the joint Tactical and Strategical efforts alike. For example, on 23 May, of five hundred and four Liberators despatched, only two hundred and seventy-six reached their targets, and of one hundred and forty-seven Fortresses sent only forty were successful; one hundred and ten Marauders had to abandon their missions. The heavy bombers who found their target functioned to good effect in the Grottaferrata, Nemi, Valmontone, Marino, Avezzano and Subiaco areas. Fifty-nine Bostons, fifty-six Invaders, one hundred and twenty-three Warhawks, eighty-seven Kittyhawks, one hundred and four Thunderbolts and a few Spitfires all threw their weight into the battle between the beachhead and the main Army front. A similar effort was put forth on the next following days, except that the heavies were absent on remoter missions.

German Generals' Evaluation of Heavy Bombing in the Land Battle

A detailed analysis of photographic coverage of targets attacked would satisfy a natural interest in local material results; it would, too, reveal a picture, normal at the time, of a considerable range of results proceeding from complete failure to surprising success. Of more durable value would be testimony by informed observers in the German armies as to the over-all effect of our heavy bombing in the land battle. This is fortunately forthcoming from a report on the interrogation of seven German generals and a staff officer on operations from May 1944 to May 1945. While such reports are always treated with a certain understandable reserve, these show no signs of collusion with intent to deceive. While correlation reveals agreement on major issues, there is sufficient variation on local topics to confirm their judgments as individual ones arrived at in detachment.

CSDIC/OMF/M. 297
13 Sept. 1945.
Cabinet Hist.
Sec. Ref.
0100/11 X/3

The Anzio break-out was successful and the German counter-thrusts failed. What results could be expected from the intimate participation of our heavy bombers in the land battle, just detailed? The Commander of the Tenth Army - General von Vietinghoff - testified to the generally great adverse effect on morale of carpets, but when these were laid on front-line infantry ahead of assaulting troops, their effects depended on the state of German defences and the terrain. They always compelled the dispersal of troops, but on the whole their moral effect was greater than the material one. In any case the more sharply they were concentrated on given targets the greater their overall effect. The G.O.C. of No. 305 Infantry Division, more closely in touch with front line reactions, had good reason to say how greatly these bomb carpets reinforced the effects of artillery preparations and was less impressed by the effect in rear targets such as living quarters, assembly areas, H.Qs, bridges, valley bottlenecks and so forth. Nor, in view of the studied dispersal of gun positions forced upon them did their artillery units suffer so greatly as intended. The G.O.C. of No. 334 Volksgrenadier Division supported the point on enforced dispersal, but was more concerned with basic reasons why such attacks were made at all at critical main points of attack (Schwerpunkte). He blamed the fact that Allied reconnaissance aircraft were able to circle at leisure above their own lines to their lack of fighter protection and the weakness of anti-aircraft artillery in the front lines. The shortages of ammunition and petrol for this latter arm concerned him especially. Here if anywhere is the sort of evidence of the results of the Allied use of their air superiority one requires.

/German

German Evaluation of Fighter Bomber and Medium Bomber Attacks

Ibid

The battlefield, they were aware, was closely watched during the Allied attacks, so that the supply of troops by day was almost out of the question. They also constantly hindered the switching or bringing up of reserves, movements of commanders and H.Q. couriers. Their success against gun positions and H.Qs was often considerable, although no H.Q. had been completely and permanently put out of action.

Allied Aircraft in Counter-battery Role

Ibid

The generals were interesting on the results of our artillery observation organisation - already touched on. The tiny Cub aircraft who soared in leisurely immunity over the German lines were among the most dreaded of our weapons, for they not only forced the Germans into elaborate and time-consuming measures, but engendered a contagious and dangerous feeling of impotence, of being perpetually watched. Among these special measures forced on their artillery were the following; disposition of artillery in great depth; employment of many batteries as silent batteries, of moveable batteries and free-lance guns; the construction of numerous alternative positions and dummy points; the wide use of bang simulation; the interdiction of all firing as soon as the Air Observation Post aircraft was seen; and (a very effective move) the turning of detected fire positions into dummy positions. These measures often met with welcome success. Even air photographs often failed to distinguish a dummy position from a live one and when these dummy positions fired bang simulators, they seldom failed to bring down Allied artillery fire. At times of substantial ground attack, the bomb wastage, on this basis, must have been considerable, although, from conclusions already drawn, area bombing would have been even less profitable.

Comparative Efficacy of Air and Artillery Bombardment

Ibid

Among the most revealing conclusions of the German generals were those which compared the effects of air and artillery bombardment. The commanders of both Tenth and Fourteenth Armies agreed that in positional warfare and certainly before a ground attack, the effect of artillery fire was pre-eminently greater than that of air bombing, for the artillery could at most times operate continuously, whereas owing to weather and other factors air attack was intermittent. The system of deep one - and two-man fox holes kept down personnel losses to bearable levels, but the material results were appreciable.

Generally speaking the more intimate individual attention the air forces could bring to bear was more disconcerting than artillery fire. The Allied air forces went frequently astray in the fixing of their bomblines and their superiority was thus not always as fully exploited as it might have been, but it was true that in times of crisis, provided that the air forces were brought into play without delay (a most discerning judgement, this) then air exercised a far more decisive influence on the ensuing action than artillery. Perhaps the most significant admission of all was that of the great influence of our air operations on tactical command.

/Leadership

Leadership worth the name was severely dislocated at all levels, in particular by the activities of fighter bombers. The German commander was deprived of the ability to move forces by day, to initiate surprise counter-attacks, to carry out successful flank thrusts, to concentrate reserves or even to convey messages, in short, deprived of the very ability to lead at all with drive and energy.

The Breach of the Hitler Line 20 - 25 May

The Conquest of
Southern Italy
Br. Hist. Sect.
Central Med.

It was believed that the Germans, reluctant to admit the possibility of defeat, had decided to hold the Hitler Line in strength, at the same time denying the complementary line Pontecorvo - Pico. Confirmation came that this was the case when, about 18 May, Kesselring ordered two infantry divisions to move down from the Adriatic sector, and, on 19 May, ordered all troops remaining in the area south of the Liri and east of Pico to fall back on the Pico - Pontecorvo Line. The Hitler Line, although sketchy in places and dented here and there by French attacks, remained in its entirety an extremely formidable system of defences up to a thousand yards in depth. Its greatest weaknesses were the mediocre quality and inadequate numbers of the troops defending it. The breaching of it was to prove a tactical triumph for the French Corps.

On 23 May, while the French net round Pico was closing, the main Canadian attack went in. After a fierce tank battle, heavier tank forces aided a second assault which had pierced the Hitler Line by nightfall; this result, like so many other gains in these weeks, was only achieved at the cost of high casualties and loss of equipment, in terrain studded with formidable defences. Terracina, Sezze and San Giovanni all fell into Allied hands. Beachhead and main front were merged.

Polish Attack on Piedimonte 20 - 26 May

Ibid

While the Canadians operated against the southern end of the Hitler Line, II Polish Corps began the task of capturing the hill town of Piedimonte, defended by about two hundred and fifty Germans, mostly from 1st Parachute Division. A mixed battle group, known as "Bob Group" was chosen by General Anders from his forces, weakened, as were the Germans, after the Cassino fighting. After a protracted struggle victory came on 25 May, when the Polish flag was hoisted over the town and Monte Cairo. On 26 May the advance by X Corps on the right and XIII Corps on the left began pinching out the Polish Corps, who were now for a short time out of contact with the enemy. The Germans proceeded to retire to their next defence lines - the "C" or Caesar Line, and the Campagna Switch Line.

/TACTICAL

TACTICAL AIR SUPPORT IN THE SECOND WEEK OF DIADEM(1)Exploitation of Air Superiority

No. 2/5 A.A.S.C.
War Diary

Air Operations
in support of
Diadem. M.A.A.F.

Tactical Air Force's Support of the Armies during this week was on an unprecedented scale. Never had a well organised army been so effectively attacked from the air as was the German Tenth Army. All the conditions, except steady weather and an adequate policy of night air attack, were present for the full exposition of the right use of air superiority in warfare. Among other benefits accruing was the complete immunity from air attack afforded the Allied troops, who enjoyed absolute freedom of movement behind their own lines. On 26 May, the Army's appreciation was voiced in a signal from General Mark Clark, which read:-

'Fifth Army Commander greatly pleased with splendid effort of Air Force yesterday. We have put the enemy on the road. Good hunting to all.'

Fatal Effects of Allied Air Attacks on Enemy Road Transport System

Operation Diadem
H.Q. M.A.T.A.F.
28 Jan. 1945
A.H.B. 3/14/6

Evidence from enemy sources has been and will be quoted to prove how efficacious local air attacks were in disrupting the German road system and a specimen will now be mentioned and Army figures quoted to substantiate the statement that the destruction of road transport by air attack, coming at a time of moving battle, was fatal. On 23 July, three hundred vehicles sighted between Valmontone and Velletri were bombed and machine-gunned by aircraft; when the results of this attack were checked by Army counters later, two hundred and eleven vehicles were found destroyed on an eleven mile stretch of road.

Report by Fifth
Army Air
Support Control
to M.A.T.A.F.
Recd.
16 June 1944

When attempting to assess damage to communications, it must always be borne in mind that damage is cumulative as well as local and specific. Evidence of the latter is normally harder to obtain, but enough samples do enable reliable judgements to be reached. In the case of Diadem, an operation which attained great mobility, the Army counted systematically destroyed transport overtaken in the advance. One report available was compiled, on actual ground count up to 16 June, of destroyed German motor transport on specific highways in the Fifth Army sector only. Roughly south of Rome, four hundred and fifteen were counted and north of Rome five hundred and fifty-seven, totalling to nearly one thousand. Remembering

/that

M.A.A.F's Effort in the Second Week of the Offensive

(1) For purposes of comparison, statistics of the second week's air effort will now be given. From 19 to 25 May, 15,024 aircraft were despatched on missions directly connected with Operation Diadem and they dropped 9,664 tons of bombs. Owing largely to the spell of bad weather from 20 to 23 May, the total effort was lower than the previous week's. The prime commitment of cutting, and keeping out, the enemy lines of communications absorbed nearly 7,000 tons of the gross load; the next major commitment of bombing troop concentrations and front-line military targets absorbed 2,368 tons.

In comparative terms of aircraft despatched, Tactical Air Force headed the list with 9,081; Strategic followed with 4,351; then came Coastal with 1,447. Photographic reconnaissance units reached 145 sorties.

that more roads were still to be counted and that the massive Eighth Army area was not included, one is able to approach the statistics of Air Force claims published at the time with a fair degree of confidence. Again and again the records show that Army counts usually proved Air Force claims to have been conservative.

Tactical Air Force claimed with reason that the largest factor in the collapse of enemy transport after D Day was due to the breakdown of local distribution behind the front. This, in turn, was caused by the progressive removal of M/T from the battle area to meet the requirements of the peninsula supply routes. Partial denial of the railways caused the enemy to over-commit his limited M/T facilities in the zone of communications. The weight of the Allied ground/air offensive and the speed of advance made it impossible for him to re-adjust his M/T distribution in time to cover local requirements in the combat zone. After three years of attrition on the Desert and Russian fronts, the German lorry industry had been drastically re-organised and production increased. At the opening of Diadem the position in Italy was, although far from satisfactory, still manageable, but the wholesale destruction inflicted from the air from the opening of the preparatory phase was fatal.

These results were only attained at the expense of a high average of sorties and aircraft casualties. The fact that for the six days and nights of the second week after 11 May, Tactical Air Force maintained a daily average of fifteen hundred sorties by Mustangs, Warhawks, Thunderbolts, Kittyhawks and Spitbombers gives some idea of the pressure maintained. It is perhaps more relevant to glance at the footnote(1) and reconsider the available forces now engaged, which are shown in extenso at Appendix 21.

/Rover

(1) T.A.F. Location List 9 May 44 - Squadrons

XII Tactical Air Command. Naples Area.

A - 20	4 Beau N/F	2	} 34½ squadrons
A - 36	3 Boston	2	
P - 40	7 Spit	8	
P - 47	3 Spit T/R	4	
P - 51 C.T/R	1 Spit S/R	½	

Nationality: U.S.A.A.F. 19/ R.A.F. 12½/ R.C.A.F. 1/
S.A.A.F. 1/ F.A.F. 1.

87th Fighter Wing - Corsica

P - 47	4 Spit	7
--------	--------	---

Nationality: R.A.F. 6/ U.S.A.A.F. 3/ R.A.A.F. 1/
F.A.F. 1

Desert Air Force - Adriatic side of Italy.

Baltimore	4	Spit P/R	½
Kittyhawk	5	Spit S/R	½
Marauder	1	Spit T/R	1
Mustang	1		
Spit	4	Mc.205	1

Nationality: R.A.F. 9/ S.A.A.F. 7/ Polish 1/ Italian 1

57th Bombardment Wing Corsica/Ghisonaccia

B - 25 12 all U.S.A.A.F.

42nd Bombardment Wing Sardinia/Elmas

B - 26 12 U.S.A.A.F. 1 F.A.F.

51st Troop Carrier Wing Sicily and Brindisi

C - 47 & C - 53 7

Rover David

No.7 A.A.S.C.
War Diary

On 20 May, the first of three calls for air support coincided with a German counter-attack in the Pontecorvo area. Bombs fell amongst the advancing Germans, who were then strafed and broken up. On 21 May, three successful missions were flown against a target of fifty tanks. On 22 and 23 May, as part of preparations for the attack on the Hitler Line, guns in the Ceprano - Arce area and mortars near Pontecorvo were heavily and successfully attacked. Other instances of direct support were a series of missions by light and fighter-bombers on guns in the Roccasecca area and heavy attacks on the Melfa line, prior to the Canadian Corps' advance. On 24 May, the battle was moving too fast for Rover David, and aircraft found their own targets in increasing ratio. The control was then directed to follow along the foothills to the south of the River Liri on the right flank of Eighth Army, with the object of assisting the Canadian Corps, and it operated many successful Cabranks there.

Tactical and Artillery Reconnaissance

Ibid

Now that the enemy was being forced into the open, tactical and artillery reconnaissance missions found and engaged a variety of targets. As he retreated, the enemy pulled his guns out of their well-camouflaged positions, thus exposing them to observation. Artillery reconnaissance aircraft also engaged vehicles, tanks, mortars, and spotted concentrations on roads, bridges and at fords. They gave observations on our own artillery concentrations, the accuracy and effect of fighter-bomber missions, the states of roads, bridges and fords, and the positions of our forward troops. Air Observation Post pilots were now able to concentrate full attention on their targets, without fear of enemy air interception. Anti-aircraft artillery covered ground as well as air targets and neutralised all located enemy flak guns within range, while our own aircraft attacked the targets these guns were intended to be defending.

THE ALLIED OFFENSIVE GAINING IMPETUSAllied Ground Progress in the Third Week of Diadem

The Conquest of
Southern Italy.
Br. Hist. Sect.
Central Med.

Progress in the third week of the offensive was so good that by the end of the month the right flank of Eighth Army had reached Sora, on the Avezzano - Arce road; to the south, Arce itself was won and passed after a hard fight. The Canadians drawing up from Ceprano, took the keypoint of Frosinone on Highway 6. The French continued their advance to a point overlooking the Pontine Marshes. The Americans found the going difficult on the flank of the Anzio bridgehead troops, and were held up by the Germans' effort to keep open Highway 6, their main supply and evacuation route. VI Corps armour penetrated on 26 May to Atina, threatening Palestrina and the whole defensive system, south of Rome; this shrewd move was followed logically enough by the capture of Valmontone: the Palestrina Gap had now to be closed. From Valmontone the line to Velletri, fiercely defended, was broken by an Allied attack north of Velletri, and its importance reduced by the attack on Velletri itself, which fell to the Americans on 2 June. The bridgehead troops gained ground to the south-west of the Colli-Laziali hills, main centre of resistance south-east of Rome. British troops captured Carroceto, advancing north-westwards and as far as the Incastro River.

/Air

Air Support of the Canadian Crossing of the River Melfa

Operations in
Support of
Diadem M.A.A.F.

The Allies' principal concern was to forestall the occupation of the Caesar (or C) Line. To this end Fifth Army planned to break through it and advance to the areas of Rieti and Terni. The first move was an attack by the Canadian Corps, who seized crossings over the Rivers Melfa and Liri and exploited in the direction of Frosinone. The troops attacking on the Melfa front halted at the bomb-line to enjoy the sight of a stream of fighter-bombers pounding enemy positions on the other bank.

German Intentions

The Germans could produce no air effort comparable with the Allied day and night onslaught, which, having slowed down supplies to a minimum, was now rendering distribution more and more haphazard. Their small force of F.W. 190s was withdrawn, badly battered, to North Italy. Token reinforcements, quite inadequate to affect the issue, were sent down; a few Ju. 87s and C.R.42 ground attack aircraft put in an appearance and a few Me.110 night fighters were posted to Central Italy. The first two categories mentioned operated at night and Ju. 88s operated against targets in the battle area on four nights of the last week in May, in small numbers, without inflicting any appreciable damage.

The Conquest of
Southern Italy.
Pt. II/F
Br. Hist. Sect.
Central Med.

Kesselring played the Allies' game by ordering forward his last available useful formation in Italy, the Hermann Goering Division, from Leghorn. His appeals for more help were not to go unheeded, even though it came from the threatened West. It was now too late to withdraw in orderly fashion to the Caesar Line. The 363rd and 715th Infantry Divisions suffered most severe casualties at the hands of the bridgehead troops when the Hermann Goering Division came into action, itself having already suffered heavily from daylight air attacks. At Arce and near Valmontone the delaying actions fought, enabled other forces to preserve some form and disengage.

Maximum Air Support

Operations in
Support of
Diadem M.A.A.F.

No.7 A.A.S.C.
War Diary

During the last six days of May, T.A.F. flew a daily average of sixteen hundred and ninety sorties in support of the Armies. The attacks on road movement, the interdiction of railways and day and night close support continued with hardly a break. Fighter-bombers directed by forward fighter controllers were highly successful against 'disappearing targets'. The emphasis of attack in the battle areas in the early part of the third week was against big concentrations of lorries, tanks, armoured cars and other transport, which were congesting the roads from Viterbo to Rome and the pontoons across the Tiber. Later in the week, the emphasis of fighter-bomber attacks on transport veered to those columns escaping from the front to Subiaco and Avezzano. A typical specimen of these activities was an effort on 30 May by the Kittyhawks and Mustangs of No.239 Wing. Catching a group of about two hundred vehicles at Subiaco, stationary and nose to tail, they first blocked both ends of the line with bombs, then flew mission after mission against the column, whose losses were one hundred and two vehicles. Total M/T claims by T.A.F. over the last six days in May were one thousand one hundred and forty-eight destroyed and seven hundred and sixty-six damaged. As usual, claims were conservative; for example, between Cori and Ardena, claims of one hundred and seventy-three destroyed and damaged proved, when checked by Fifth Army troops later, to have been short of the actual count of two hundred and eleven abandoned wrecks, definitely put out of action by air attack. Tactical light and medium bombers kept many rail lines cut, but

/ vital

vital bridges at Orvieto and at Manciano (near Rome), and destroyed the Montalto di Castro bridge. The moving enemy presented a variety of targets. All possible were attacked without respite and any troop concentrations spotted were rapidly dispersed. Each night, an average of forty-eight Bostons and Baltimores operated from dusk to dawn over the east coast harbours and watched roads leading from the battle areas for any signs of movement.

Rail Interdiction at its highest Intensity

Ibid

In better weather, the Tactical U.S. Mitchells and Marauders were now able to operate at full stretch, putting up a daily average of over four hundred sorties, most of them effective. Bridge-cutting was brought to its highest intensity. There were now one hundred and twenty-four cuts in the lines north of Rome, of which forty-seven were major bridge cuts. The Germans were being forced more and more on to the roads. Escorts and fighters seldom met any air opposition. The best combat result recorded was the destruction of three Me. 109s and two F.W. 190s by a few Spitfires on 27 May, over Foligno airfield.

Strategic Air Force, in addition to other big commitments outside Italy, struck out at long-range targets in the south of France affecting the war in Italy. On 26 and 27 May, they dropped two thousand five hundred tons of bombs on the marshalling yards at St. Etienne, Lyons, Nice, Chambery, Grenoble, Avignon, Nimes and Marseilles; results in general showed up on photographs as excellent. These attacks were co-ordinated with the attacks from Britain on the northern French and Belgian railways, which aimed at paralysing the entire French railway system before the entry into N.W. Europe. They also sent two hundred and forty-three Liberators, on 27 May, to bomb the ship-striking bomber forces based at Montpellier and Salon. R.A.F. night bombers flew over one hundred and fifty effective sorties, (excluding illuminators), bombing the roads round Viterbo and the German withdrawal routes in the Subiaco region, thus achieving some sort of continuity, though an ineffectual one, with the day effort of Tactical aircraft, operating against these same targets.⁽¹⁾

/They

(1) M.A.A.F's Third Week's Effort

From 26 May to 1 June inclusive, fourteen thousand six hundred and twenty-eight aircraft were despatched on missions directly connected with the Italian offensive; they completed fourteen thousand three hundred and eighty-five effective sorties. In all, eight thousand six hundred and seventy-four tons of bombs were dropped on these missions. Strategic Air Force's effort, largely directed to targets other than Diadem ones, was one thousand two hundred and one aircraft. Tactical Air Force despatched eleven thousand six hundred and twenty-four aircraft and dropped seven thousand and thirty-one tons of bombs. Coastal contributed one thousand six hundred and seventeen sorties and Photographic Reconnaissance units one hundred and eighty-six sorties.

The distribution of bomb-load dropped South and North of the Pisa - Rimini Line was six thousand eight hundred and eighty-six tons South of it on lines of communication, with one thousand five hundred and ninety-six tons on troop concentrations; North of the line, one thousand one hundred and seventy-five tons were dropped, nearly one thousand tons of it on lines of communication and one hundred and eighty-nine tons on ports.

They also attacked the reinforcement port of San Stefano and the Brenner Pass railway. On 1 June, the line of railway interdiction ran from the Massa bridge on the west coast line, through Aulla, Vergato, Florence, Bucine, to the Cesano bridge on the east coast route. The Fano - Foligno route broke through this general line, however, and was open as far as the viaduct just northwest of Terni.

Luftwaffe Convoy Raid

The Luftwaffe's feeble effort over the battlefield has already been described. Their only offensive action in any strength was an attack by forty-fifty Ju.88s from the south of France against a large east-bound convoy off Algiers on the night 30/31 May, when a merchant vessel was sunk for the loss of five raiders; of the reconnaissance force employed to spot the convoy, Coastal fighters destroyed one Ju.88 and one Ju.188. Torpedo bombers were switched to Norway where, it was adjudged, good targets were more plentiful.

German Admission of Efficacy of Allied Air Attacks on Transport

Anglo American
Offensive up to
the Capture of
Rome - German
Document.
See Appendix 24.

By 28 May the quite favourable supply situation with regard to material existing on 1 May had fundamentally changed, said a report by Kesselring's H.Q. that night. After enumerating eloquent figures of losses, such as twenty-five thousand men, two thousand machine guns, five hundred heavy machine guns, one hundred and forty-eight tanks and so forth, it was admitted that the motor vehicle situation was particularly strained, as their transport capacity was being continually reduced by air attack: furthermore, many still undamaged vehicles were unusable on account of a shortage of tyres and spare parts. Reinforcement of both men and material was vital.

The report definitely attributed a large part of the losses suffered to the mounting effect of Allied air supremacy. No appreciable break worth recording had occurred in raids on the Italian rail system and the Alpine passes. The result was to delay considerably not only the arrival of divisions on the southern front (such as 356 Inf. Div.); but of formations coming from other theatres, (such as 42 Jäger and 20 Luftwaffe Field Division). Lateral movements behind the southern front, too, were greatly impeded. The situation was still more aggravated by night raiders on supply routes in the forward areas. When O.B. SW. appealed direct to Hitler, the latter ordered that night fighter aircraft be used for the protection of road traffic at night. On 1 June, O.B. SW. was told of the decision to transfer one night fighter group from the eastern front to Italy. This was actually done in part, but the small number of aircraft involved made little difference to an already hopeless situation.

German Praise of French Expeditionary Corps

Ibid

A report by an officer of the General Staff Corps dated 27 May paid a special tribute to the troops of the First French Expeditionary Corps, which comprised four formations, three of them Moroccan. These were the only troops that did not shrink from mass hand-to-hand fighting in the Russian style. Fired by every success, they exploited each local gain by prompt pursuit, helping less successful neighbours by lateral thrusts. Quick recognition of a situation and its correct evaluation constituted a pronounced characteristic of French leadership, said the German experts.

/Luftwaffe

Luftwaffe Weakness continuing

Von Pohl
Interrogation
Report No.
A.596/FW.935
A.H.B.6.

The F.W.190 units, after co-operating as fighters with the Me.109s, were soon transferred for rest and re-equipping to Piacenza, for nothing but disaster could follow their continued presence over the battlefield. The only operational units then remaining to the Commanding General of the Luftwaffe in Central Italy (now Ritter von Pohl) were the Nachtschlacht (Night Fighter) Staffel and the three Me.109 Staffeln of the Tactical Reconnaissance Gruppe. A much depleted German fighter force, two Italian Fascist fighter squadrons and the Long Range Reconnaissance Gruppe (transferred at this stage from Perugia to Berganio, was all that remained at the end of May at the disposal of Luftflotte 2.

Flak

Ibid

With improvements in Allied armour and armament, German flak, which it will be remembered was a Luftwaffe organisation, was no longer effective as a front line arm. Instead, its role had gradually reverted to that of a rear area defence weapon. Concentrations of three heavy and three light guns were employed during Diadem to counter Allied armour if it broke through the front line. Flak enabled German troops to effect orderly withdrawals to new positions in the Apennines and assisted the maintenance of a relatively coherent front, but losses of flak artillery mounted fast and after the fall of Rome were to soar rapidly.

THE LAST PHASE OF THE ADVANCE TO ROMEAir Attacks continued

Operations in
Support of Diadem
M.A.A.F.
A.H.B./II.J.11/1

Operation Diadem
M.A.T.A.F.

The Conquest of
Southern Italy
Br. Hist. Sect.
Central Med.
Narrative and
'Allied and
German Strategy.'

Without pause the Air Forces continued to play their full part in the general victorious advance, which led to the entry into Rome, the first Axis capital to fall to Allied arms, on 4 June. The pattern was the same as in the preceding week, with the greatest possible concentration on the German Army in retreat, its M/T, armoured vehicles, gun and troop concentration. These air operations were fully in accord with the terms of Operation Memorandum No.54 issued by A.F.H.Q. on 6 May, where⁽¹⁾ it was laid down that in an assault, calls for close battlefield support by fighter-bombers should be reduced to the absolute essential minimum, so that they may be concentrated at the critical time against enemy movement where it is important - in his immediate back areas where reserves and supplies may be expected to move. The bombers were also being used so as to contribute most to the success of the ground offensive, inasmuch as they were keeping open the cuts in enemy rear communications at the time when he was forced to expend fuel and ammunition on a heavy scale, without the chance of relief or replacement from rear depots. Just prior to the launching of every major attack they destroyed his power of manoeuvre close behind the battlefield, smashing his headquarters and signals system, communication bottlenecks, dumps of fuel and ammunition, tank and M/T repair shops, M/T parks and forward railheads; in short, creating a situation in which the enemy's capacity to move reserves of all kinds to meet the needs of the battle were effectively paralysed.

/While

(1) In para. 15.

While the German armies pulled back, particular emphasis was laid on destroying bridges over the Tiber both north and south of Rome, in an attempt to isolate enemy formations. Enemy casualties mounted rapidly. The original twenty divisions in the German Tenth and Fourteenth Armies, contained by this time, it was estimated, only about the equivalent of eight full strength divisions. Coastal Air Force Beaufighters joined in the attacks on the stricken enemy formations, attacking road and rail north of Rome with bombs, rocket projectiles and cannon. At night, Bostons, Baltimores and Wellingtons created new road blocks and smashed repaired bridges, - on the night of 3/4 June - south-west of Rome and thereafter north of Rome. The retreating enemy was kept up-to-date with the situation by the dropping of thousands of news pamphlets.

On the day Fifth Army troops entered Rome - 4 June - heavy bombers, in addition to raiding railways in Southern France, went, one hundred and thirty-two in strength, to Turin railway centre, two hundred and seventeen to Genoa West railway centre, as well as to other important rail targets in large numbers. Ninety-eight Mitchells and one hundred and twenty-six Marauders attacked rail, bridges and roads in the rear areas; aircraft of every category, including French Spitfires, were out against the mobile enemy. The ground advance, proceeding at accelerated pace, will now be considered up to the point when Rome was captured. (1)

Final Plan for the Ground Advance to Rome

Final Allied Army orders were issued on 31 May. VI Corps was to attack on 1 June, to secure the Alban Hills in its sector and advance to cut the enemy's withdrawal routes through Rome; (this latter task was largely accomplished by air action). The 5th British Division was to advance on the left of VI Corps, to drive against the Tiber and destroy any forces which were turned southward by this thrust. II Corps was to secure the high ground north of Valmontone, seize the northern part of the Alban Hills and pursue any enemy attempting to withdraw northwards. The Germans were still resisting desperately, endeavouring to keep the Allies out of Rome, with its prestige value, at all costs. With their centre disintegrating and the Allies on the Alban Hills, on 2 June Von Mackensen was still ordering resistance to the last and making plans for the redistribution of his forces, with confidence, as captured documents show, in the possibility of a German success. This time, the reluctance to yield ground had been carried to the point of folly; disaster was now inevitable.

Germans considering abandoning Defences south of Rome

The Anglo
American Offensive
up to the
Capture of
Rome - German
Document
See Appx. 24.

At the end of the third week in May the High Command had considered it possible to halt the Allies in the Q position. By the end of the month it was open to question whether the area south of the Tiber could be held much longer. This included the city of Rome, the greater part of which lies south of the river. Support measures, including the despatch of

/two

(1) The history of the final phases of Operation Diadem, with assessments of the results of the Air Forces' contribution, and the record of their occupation of new airfields, will be found in Volume II of the R.A.F. Narrative of the Italian Campaign.

two battalions of Tiger and Panther tanks had been ordered by Hitler on 2 June, but these could not take effect before the lapse of at least a week. The position was aggravated by gaps in the command. The Chief of Staff of the Army Group and the Commander of Tenth Army both fell sick and the Commander of Fourteenth Army was replaced.

Allied successes in breaking into the German front on 2 June caused O.B.S.W. to request permission to evacuate Rome should this step become necessary, as the reforming of a solid front south of the Tiber appeared no longer possible. The German Tenth Army War Diary states that the German Command had never contemplated the defence of Rome itself. On 3 June, therefore, O.B.S.W. was directed by the High Command (who had taken an increasing hand in control of the fighting) to continue fighting south and southeast of the city as long as possible, in order to create suitable conditions for the evacuation of Rome and the withdrawal of Fourteenth Army across the Tiber. If it were no longer possible to make a stand south and southeast of Rome, the west wing was to be withdrawn to the next suitable sector of terrain, in order to avoid drawing the city of Rome into the main battlefield, which would be the case if the Tiber were used as a supporting line. That night an order was issued to reconstruct the front north of Rome and as far south as possible. The right wing of Fourteenth Army was withdrawn to a line behind the Tiber, following the course of the old Tiber eastwards past Tivoli - Subiaco to the C position and kept in touch with Tenth Army in the area northeast of Valmontone.

The Advance into Rome

The Conquest of
Southern Italy
Br. Hist. Sect.
Central Med.

The greatest advance was made on 1 June by II Corps, who crossed Highway 6, capturing Valmontone and almost reaching Palestrina by the end of the next day. Hotly resisted, VI Corps captured, at last, Velletri. At the end of the day there was still no sign of weakening, but that night the enemy's will snapped. The Hermann Goering Division had come to the end of its tether and although recently reinforced, could no longer hold on. It turned in full retreat, and made for the Aniene river, east of Rome. The Germans fighting south of the Alban Hills were obliged to follow, to avoid being crushed against Tiber's banks. By the afternoon of 3 June, both II and VI Corps were pressing forward on Rome by all roads. The German 4th Parachute Division stayed on to screen the rest of the local armies hurrying over the Tiber. They fought a delaying action at Centocelle, preventing the fusion of II and VI Corps. Eighth Army, well up the Liri Valley, had taken Agnani by the night of 2/3 June and by the evening of 3 June were near Acuto and Paliano. Trivigliano was entered in the early morning of 4 June and Vico and Guarcino fell to them at this time.

At 0800 hours on the fourth of June, the first Allied elements - 88th U.S. Reconnaissance Group - entered the outskirts of Rome, followed by 1st Special Service Force (U.S.) in force, who lined up on the Piazza Venezia. No one who was present is likely to forget the warmth of the reception. Rome had changed hands many times in the course of history, but this was the first time since the Roman general Belisarius captured it in 536 A.D. - liberating most of Italy from the East Goths - that Rome had been taken by an invading army from the south.

/Summary

Summary of Chapter Nine

The opening phase of Operation Diadem, culminating in the fall of Rome, proved conclusively that the full fruits of scientifically exploited air superiority could only be gathered as a result of a combined operation. Air power, as has been seen, could go a long way towards isolating a battle area, although on this occasion it did not fully achieve this. When the Army advanced in full strength and continuously, the Air Force turned to the disorganisation of the distribution of what supplies had survived the rigorous deterrent of Operation Strangle and its successor under Diadem. The German document at Appendix 24 reveals how successful they were.

From a military point of view, the capture of Rome was only a tactical success in the course of an operation whose life extended long beyond the event. Lacking any substantial value to the Armed Forces, small holding and administrative forces could be left there and the Control Commission set up, while the Armies passed on, the Air Forces constructed and manned new forward bases and the pursuit continued to the gates of Florence. The moral and political significance of the capture of Rome was far greater.

End of Volume I

APPENDICES

AIR ORGANISATION AND CHAIN OF COMMAND OF FORCES ENGAGED IN INVASION OF ITALY AS AT 3RD SEPT. 1943.

OPERATIONAL.

MEDITERRANEAN AIR COMMAND

Commander and Air C-in-C. Air. Chf. Mshl. SIR ARTHUR W. TEDDER (R.A.F).
Dep Command and C.G.N.A.A.F. Maj. Gen. CARL SPAATZ (U.S.A.A.F)
Dep Air C-in-C. A.V.M. H.E.P. WIGGLESWORTH (R.A.F)

NORTH-WEST AFRICAN AIR FORCE

C.G. Maj. Gen. Carl Spaatz. (U.S.A.A.F)
Dep. A.V.M. J.M. Robb (R.A.F).

MALTA AIR COMMAND

A.Q.C-in-C. ^{AVP} Sir K. Park (R.A.F)

MIDDLE EAST AIR COMMAND

A.O.C-in-C. ^{AVP} Sir Sholto Douglas (R.A.F)

AIR DEFENCE EASTERN MEDITERRANEAN

NINTH U.S. AIR FORCE

C.G. Maj. Gen. L.H. Brereton (U.S.A.A.F).

NORTH-WEST AFRICAN STRATEGIC AIR FORCE

C.G. Maj. Gen. J.H. Doolittle (U.S.A.A.F)

NORTH-WEST AFRICAN TACTICAL AIR FORCE

A.O.C. ^{AVP} Sir A. Coningham (R.A.F).
Dep. Maj. Gen. J.K. Canon (U.S.A.A.F)

NORTH-WEST AFRICAN COASTAL AIR FORCE

A.O.C. ^{AVP} Sir H.P. Lloyd. (R.A.F).
Dep. Brig. Gen. E. Quesada. (U.S.A.A.F)

NORTH-WEST AFRICAN PHOTOGRAPHIC RECONNAISSANCE WING

C.O. Col. E. Roosevelt (U.S.A.A.F)
Dep. Wg. Cdr. E. Fuller (R.A.F)

NORTH-WEST AFRICAN TRAINING COMMAND

C.O. Col. J.W. Monahan. (U.S.A.A.F)

NORTH-WEST AFRICAN TROOP CARRIER COMMAND

C.G. (temp) Brig. Gen. R. Dunn (U.S.A.A.F)

DESERT AIR FORCE

A.Q.C. A.V.M. H. Broadhurst (R.A.F)

TWELFTH AIR SUPPORT COMMAND

C.G. Maj. Gen. E.J. House (U.S.A.A.F).

TACTICAL BOMBER FORCE

A.O.C. Air. Cdre. L.P. Sinclair (R.A.F).
Dep. Col. Lowe (U.S.A.A.F)

ORDER OF BATTLEORGANISATION AND LOCATION1 SEPTEMBER 1943NORTH WEST AFRICAN AIR FORCE, R.A.F. MIDDLE EAST AND MALTA

NOTE: INITIAL ESTABLISHMENT was usually calculated on the following basis:-

Fighters	S.S.	per Squadron	British and Empire	16
"	"	"	U.S.	25
"	M.S.	"	British and Empire	16
"	"	"	U.S.	12
Medium and Dive Bombers	"	"	U.S.	13
Medium Bombers	"	"	British	20
Light Bombers	"	"	U.S.	24
Heavy Bombers	"	"	U.S.	12
Torpedo Bombers	"	"	French	12
Reconnaissance	"	"	British and Empire	6, 8, 12
"	"	"	U.S.	13
Troop Carriers	"	"	U.S.	13
Airborne Forces	"	"	British	26

S E C R E T

R.A.F. Narrative
of the
Italian Campaign

1 SEPT. 43

NORTH WEST AFRICAN AIR FORCE

(Rear - Maison Carree
(Adv. - La Marsa

OA 1712 Aug. 23

ORDER
OF
BATTLE

SECRET

APPENDIX 2

Subordinate Command Force		Formation		Squadron	Role	Type	I.E.	Location	Remarks
		RAF Group or US Wing	RAF Wing or US Group						
TACTICAL AIR FORCE (Rear: Nabeul, Adv.: Syracuse)	Desert Air Force (Lentini) (Sicily) O.49 Aug. 12			5 SAAF	S.S. Fighter	Kittyhawk	16	Ben Gardane	
				60 "	Photo Survey	Baltimore/Mosquito	8	Sorman (Det. La Marsa)	
				225 RAF	Tac. Recce.	Spitfire/Mustang	16	Bou Ficha	
				241 "	S.S. Fighter/Bomber	Hurricane IIE	16	" "	Bomber
				6 "	Fighter Recce.	Hurricane IV	16	Ben Gardane	
			324 US (Haouaria)	314 US	S.S. Fighter	Warhawk (P.40F)	25	Haouaria)On loan)from 9th)Air Force
				315 "	" "	" "	25	"	
				316 "	" "	" "	25	"	
		211 RAF (Lentini)	7 SAAF (Pachino)	2 SAAF	" "	Spitfire V	16	Pachino	
				4 "	" "	" "	16	"	
			57 US (Scordia) (Sicily)	64 US	" "	Warhawk (P.40F, K or L)	25	Scordia	
				65 "	" "	" "	25	"	
				66 "	" "	" "	25	"	
			79 US (Palagonia) (Sicily)	85 "	" "	" "	25	Palagonia	
				86 "	" "	" "	25	"	
				87 "	" "	" "	25	"	
			285 RAF (Sorman) (Det. Francesco Sicily)	40 SAAF	Tac. Recce.	Spitfire V	18	Francesco	
				1437 Flt RAF	Strat. Recce.	Mustang (A.36)	6	Sicily	
			322 RAF (Lentini)	81 RAF	S.S. Fighter	Spitfire IX	16	Lentini	
				152 "	" "	" V	16	"	
				154 "	" "	" "	16	"	
				232 "	" "	" "	16	"	
				242 "	" "	" "	16	"	

D.O.Ops.
1st Sept. 1943

NORTH WEST AFRICAN AIR FORCE

SECRET

Subordinate Command Force		Formation		Squadron	Role	Type	I.E.	Location	Remarks
		RAF Group or US Wing	RAF Wing or US Group						
TACTICAL AIR FORCE (Cont'd)	Desert Air Force (Cont'd)	211 RAF (Cont'd)	324 RAF (Pachino)	43 RAF	S.S. Fighter	Spitfire V	16	Pachino	
				72 "	" "	" IX	16	"	
				93 "	" "	" V	16	"	
				111 "	" "	" "	16	"	
				243 "	" "	" "	16	"	
				600 "	M.S. Fighter	Beaufighter (NF)	16	Cassibile	
				1 SAAF	S.S. Fighter	Spitfire V	16	Lentini	
				92 RAF	" "	" " & IX	16	"	
				145 "	" "	" " "	16	"	
				417 RCAF	" "	" V	16	"	
				601 RAF	" "	" "	16	"	
	12th Air Support Command (Palermo)	-	239 RAF (Pachino) (Sicily)	3 RAAF	S.S. Fighter	Kittyhawk II & III	16	Lentini	
				112 RAF	" "	" III	16	"	
				250 "	" "	" "	16	"	
				260 "	" "	" II & III	16	"	
				450 RAAF	" "	" III	16	"	
				307 US	" "	Spitfire V & IX	25	Termini	
				308 "	" "	" " "	25	"	
				309 "	" "	" " "	25	"	
				58 US	" "	" "	25	Licata	
				59 "	" "	" "	25	"	
				60 "	" "	" "	25	"	
				99 "	" "	" "	25	"	Coloured Unit

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NORTH WEST AFRICAN AIR FORCE

SECRET

Subordinate Command Force		Formation		Squadron	Role	Type	I.E.	Location	Remarks				
		RAF Group or US Wing	RAF Wing or US Group										
TACTICAL AIR FORCE (Cont'd)	12th Air Support Command (Cont'd)	-	33 US (Cont'd)	111 US	Obs./S.S.Fighter	Mustang (P.51)	18	Gela W. (Sicily)					
			27 US (Gela E.) (Sicily)	15 US	Dive Bomber	Mustang (A.36)	13	Gela					
				16 "	" "	" "	13	"					
				17 "	" "	" "	13	"					
				91 "	" "	" "	13	"					
			86 US (Gela W.)	309 US	" "	" "	13	Gela W.					
				310 "	" "	" "	13	" "					
				311 "	" "	" "	13	" "					
				312 "	" "	" "	13	" "					
			Tactical Bomber Force (Cefelu)			12 US (Ponte Olivo) (Sicily)	83 US	Medium Bomber		Mitchell (B.25)	13	Ponte Olivo)On loan from 9th Air Force)
						434 "	" "	" "		13	" "		
						81 "	" "	" "		13	" "		
						82 "	" "	" "		13	" "		
						3 SAAF (Cutticho) (W.N.W. Gerbini)	12 SAAF	Light Bomber		Boston III	24	Cutticho	From G.R.
							21 "	" "		Baltimore IIIA	24	"	
24 "	" "	Boston III					24	"					
232 RAF (Sigonella) (Gerbini)	55 RAF	" "				Baltimore IIIA	24	Sigonella					
	223 "	" "				" "	24	"					
340 US (Ponte Olivo)	486 US	Medium Bomber				Mitchell (B.25)	13	Ponte Olivo)on loan from 9th Air Force)				
	487 "	" "				" "	13	" "					
	488 "	" "				" "	13	" "					
	489 "	" "	" "	13	" "								

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D.O.Ops.
1st Sept. 1943

NORTH WEST AFRICAN AIR FORCE

SECRET

Subordinate Command Force		Formation		Squadron	Role	Type	I.E.	Location	Remarks	
		RAF Group or US Wing	RAF Wing or US Group							
TACTICAL AIR FORCE (Cont'd)	Tactical Bomber Force (Cont'd)		326 RAF (Gerbini)	18 RAF 114 "	Light Bomber " "	Boston III " "	16 16	Comiso "		
			47 US (Torrente Comuneli)	84 US 85 " 86 " 97 "	" " " " " "	Boston (A.20) " " " "	13 13 13 13	Torrente Comuneli " "		
		8th French Groupment (Thelepte)	-	1/25 Fr. 2/23 " 1/11 "	Medium Bomber (N) " " " "	Leo 45 " " " "	16? 16? 16?	Thelepte " "		
			330 RAF (Kairouan)	142 RAF 150 "	Medium Bomber " "	Wellington III " "	20 20	Kairouan "		
			331 RCAF (Kairouan)	420 RCAF 424 " 425 "	" " " "	" X " "	20 20 20	Kairouan " Pavillier)?? To be re-)turned U.K.)Sept.15.)AX.775 Aug.2)DCAS Aug.27)Conference	
		205 RAF (Kairouan)	231 RAF (Kairouan)	37 RAF 70 "	" " " "	" IC III " "	20 20	Kairouan "		On loan from M.E.
		"	236 RAF (Hani West)	40 RAF 104 "	" " " "	" II & X II " "	20 20	Hani West " "		To re-arm with III & X On loan from M.E.

O.Ops.
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NORTH WEST AFRICAN AIR FORCE

SECRET

Subordinate Command Force	Formation		Squadron	Role	Type	I.E.	Location	Remarks
	RAF Group or US Wing	RAF Wing or US Group						
STRATE- GIC AIR FORCE (Cont'd)	5 US (Chateaudun)	97 US (Chateaudun)	340 US	Heavy Bomber	Fortress II (B.17F)	12	Chateaudun	
			341 "	" "	" "	12	"	
			342 "	" "	" "	12	"	
			414 "	" "	" "	12	"	
	"	301 US (St. Donat)	332 US	" "	" "	12	St. Donat	
			352 "	" "	" "	12	" "	
			353 "	" "	" "	12	" "	
			419 "	" "	" "	12	" "	
	"	99 US (Oudna)	346 US	" "	" "	12	Oudna	
			347 "	" "	" "	12	"	
			348 "	" "	" "	12	"	
			416 "	" "	" "	12	"	
	"	2 US (Massicault)	20 US	" "	" "	12	Massicault	
			49 "	" "	" "	12	"	
			96 "	" "	" "	12	"	
			429 "	" "	" "	12	"	
	47 US (Souk el Arba)	310 US (Souk el Arba)	379 US	Medium Bomber	Mitchell (B.25)	13	Souk el	
			380 "	" "	" "	13	Khemis	
			381 "	" "	" "	13	" "	
			428 "	" "	" "	13	" "	
	"	82 US (Souk el Khemis)	95 US	S.S. Fighter	Lightning (P.38)	25	" "	
			96 "	" "	" "	25	" "	
			97 "	" "	" "	25	" "	

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NORTH WEST AFRICAN AIR FORCE

SECRET

Subordinate Command Force		Formation		Squadron	Role	Type	I.E.	Location	Remarks
		RAF Group or US Wing	RAF Wing or US Group						
STRATE- GIC AIR FORCE (Cont'd)		47 US (Cont'd)	321 US (Souk el Arba)	445 US	Medium Bomber	Mitchell (B.25)	13	Souk el Arba	
				446 "	" "	" "	13	" " "	
				447 "	" "	" "	13	" " "	
				448 "	" "	" "	13	" " "	
		2686 US (Ariana)	17 US (Djedeida)	34 US	" "	Marauder (B.26)	13	Djedeida	
				37 "	" "	" "	13	"	
				95 "	" "	" "	13	"	
				432 "	" "	" "	13	"	
		"	319 US (Djedeida)	437 US	" "	" "	13	"	
				438 "	" "	" "	13	"	
				439 "	" "	" "	13	"	
				440 "	" "	" "	13	"	
		"	320 US (Massi- cault)	441 US	" "	" "	13	Massicault	
				442 "	" "	" "	13	"	
				443 "	" "	" "	13	"	
				444 "	" "	" "	13	"	
		"	14 US (El Bathan)	37 US	S.S. Fighter	Lightning (P.38)	25	El Bathan	
				48 "	" "	" "	25	" "	
				49 "	" "	" "	25	" "	
		"	1 US (Mateur)	27 US	" "	" "	25	Mateur	
				71 "	" "	" "	25	"	
				94 "	" "	" "	25	"	
		"	325 US (Mateur)	317 US	" "	Warhawk (P.40)	25	"	
				318 "	" "	" "	25	"	
				319 "	" "	" "	25	"	
D.O.Ops. 1st Sept. 1943									

NORTH WEST AFRICAN AIR FORCE

SECRET

Subordinate Command Force	Formation		Squadron	Role	Type	I.E.	Location	Remarks
	RAF Group or US Wing	RAF Wing or US Group						
COASTAL AIR FORCE (Algiers)			Det. 230	Flying Boat	Sunderland	?	Agouti (Tunisia)	
			32 RAF	S.S. Fighter	Spitfire	16	La Sebala	22 Spits/ 9 Hurri's
			87 "	" "	Hurricane IIC	16	" "	
			253 "	" "	" "	16	" "	
			219 "	M.S. "	Beaufighter (NF)	16	" "	Dets. Malta & Bone
			36 "	GR/TB/ASV	Wellington VIII/XI	20	Blida	From India
			?	GR/ASV	" XII	2	-	(4 from Malta (2 " M.E. (To be cen- tralised (NACAF
			500 RAF	GR	Hudson	16	Tafaraoui	
			608 "	"	"	16	Protville	Det. Bone
			1575 Flt. RAF	S.O.E.	Halifax/Ventura	5	Blida	To become No. 624 Sqn. 3 IE of 142
	242 RAF (Bizerta)	323 RAF (Sebala)	73 RAF	S.S. Fighter	Spitfire V	16	La Sebala	On loan from M.E.

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NORTH WEST AFRICAN AIR FORCE

SECRET

Subordinate Command Force	Formation		Squadron	Role	Type	I.E.	Location	Remarks
	RAF Group or US Wing	RAF Wing or US Group						
COASTAL AIR FORCE (Cont'd)	242 RAF (Cont'd)	323 RAF (Cont'd)	283 RAF	A.S.R.	Walrus	6	La Sebala Cassibile (Sicily)	(To re-arm with War- wick Mk. I (Sept. 9) (8 I.E. + (3 Walrus
			284 "	"	"	6		
			255 RAF	M.S. Fighter	Beaufighter (NF)	16	Borizzo (Sicily)	
			No. 4 French " 143 "	G.R. "	Latecore "	? ?	Tafaraoui "	
		328 RAF (Prot- ville).	458 RAAF	Torpedo Bomber	Wellington IC	20	Protville	(From Malta (To re-arm (XIV
			14 RAF	" "	Marauder	16	"	
			39 "	Torpedo Fighter	Beaufighter X	16	"	From Malta
			47 "	" "	" "	16	"	" M.E.
			52 "	G.R.	Baltimore III	16	"	From LB M.E.
		F.A.A.	821 FAA	TSR Torpedo Bomber	Albacore	12	El Haouaria	From Malta
			813 "	" " "	Swordfish	12	Tafaraoui	
			828 "	" " "	Albacore	12	Monastir	
			VP. 73 USN	G.R.	Catalina (PBY 5A)	12	Port Lyautey	
			VP. 92 "	"	" " "	12	Casablanca	

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NORTH WEST AFRICAN AIR FORCE

SECRET

Subordinate Command Force	Formation		Squadron	Role	Type	I.E.	Location	Remarks
	RAF Group or US Wing	RAF Wing or US Group						
COASTAL AIR FORCE (Cont'd)		350 US (Reghia)	345 US	S.S. Fighter	Airacobra (P.39)	25	Tingley(Bone)	Det.Reghia
			346 "	" "	" "	25	Reghia(Algiers)	
			347 "	" "	" "	25	Taher(W.Bone)	
			414 "	M.S. Fighter	Beaufighter (NF)	12	Reghia	
			153 RAF	" "	" "	16	"	
			415 US	" "	" "	12	La Sebala (Tunis)	
		81 US (Monas- tir)	91 US	S.S. Fighter	Airacobra (P.39)	25	Sfax	
			93 "	" "	" "	25	Monastir	
		52 US (Palermo)	2 US	" "	Spitfire V & IX	25	Castel Vetrano	
			4 "	" "	" " "	25	Bocce di Falco	} Sicily
			5 "	" "	" " "	25	Palermo	
	2688 US (Casa- blanca)	480 US (Port Lyautey)	1 US	Anti Submarine	Liberator (B.24)	12	Port Lyautey	
			2 "	" "	" "	12	" "	
	2689 US (Oran)	-	92 US	S.S. Fighter	Airacobra (P.39)	25	Tafaraoui	
			13 RAF	G.R.	Blenheim	16	Blida	
			614 "	"	"	16	Tafaraoui	
		-	2/7 Fr.	S.S. Fighter	Spitfire	16	Bone	(Lafayette)
			2/5 "	" "	Kittyhawk (P.40)	25	La Sebala	
			45 "	G.R.	Walrus	?	Tafaraoui	3 a/c ?

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NORTH WEST AFRICAN AIR FORCE

SECRET

Subordinate Command Force		Formation		Squadron	Role	Type	I.E.	Location	Remarks
		RAF Group or US Wing	RAF Wing or US Group						
COASTAL AIR FORCE (Cont'd)			275 RAF (Bizerta)	982 RAF	Balloon	Mark VI	45	Sousse	Det. Pantalleria
				981 "	"	" "	45	Tindja	
				985 "	"	" "	45	Bone	
				977 "	"	" "	45	Palermo	
				972 "	"	" "	45	Sicily)Trans. from M.E.
				975 "	"	" "	45	Sicily	
PHOTO RECCE. WING (Rear: Algiers, Adv.: La Marsa)		-	3 US (La Marsa)	682 RAF	P.R.	Spitfire	12	La Marsa (Tunis)	
				5 US	"	Lightning (F.5A)	13	La Marsa	
				12 "	"	"	13	Ariana	
				23 "	"	"	?	La Marsa	
				15 "	"	Fortress (B.17E) (Photo)	4	" "	(Re-arm Oct Mosquitoes)
				2/33 Fr.	"	Lightning (F.5A)	?	" "	
TROOP CARRIER COMMAND (Sousse)		51 US (Goubrine)	60 US (El Djem)	10 US	Troop Carrier	Dakota (C.47)	13	El Djem	
				11 "	" "	" "	13	" "	
				12 "	" "	" "	13	" "	
				28 "	" "	" "	13	" "	
		"	62 US (Goubrine)	4 US	" "	" (C.47/53)	13	Goubrine	
				7 "	" "	" "	13	El Djem	
				8 "	" "	" "	13	" "	
				51 "	" "	" "	13	Goubrine	

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NORTH WEST AFRICAN AIR FORCE

SECRET

Subordinate Command Force		Formation		Squadron	Role	Type	I.E.	Location	Remarks
		RAF Group or US Wing	RAF Wing or US Group						
TROOP CARRIER COMMAND (Cont'd)		51 US (Goubrine) (Cont'd)	64 US (Zina)	16 US	Troop Carrier	Dakota (C.47/53)	13	Zina	
				17 "	" "	" "	13	"	
				18 "	" "	" "	13	"	
				35 "	" "	" "	13	"	
		52 US (Kairouan)	61 US (Farik)	14 US	" "	" "	13	Alem	
				15 "	" "	" "	13	Farik	
				53 "	" "	" "	13	"	
				59 "	" "	" "	13	"	
		"	313 US (Farik)	29 US	" "	" (C.47)	13	Farik	
				47 "	" "	" "	13	"	
				48 "	" "	" "	13	"	
				49 "	" "	" "	13	"	
		"	314 US (Alem)	32 US	" "	" "	13	Alem	
				50 "	" "	" "	13	"	
				61 "	" "	" "	13	"	
				62 "	" "	" "	13	"	
		"	316 US (Enfidaville)	36 US	" "	" "	13	Enfidaville	
				44 "	" "	" "	13	Benina	
				45 "	" "	" "	13	Enfidaville	
		-	315 US (Blida)	34 US	" "	" (C.47/53)	13	Blida	On loan from 8th A.F.
				43 "	" "	" "	13	"	

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NORTH WEST AFRICAN AIR FORCE

SECRET

Subordinate Command Force		Formation		Squadron	Role	Type	I.E.	Location	Remarks
		RAF Group or US Wing	RAF Wing or US Group						
TROOP CARRIER COMMAND (Cont'd)		Adv.HQ 216 RAF (La Marsa) (Rear: Egypt.)	Det. 38 RAF (Goubrine)	296 RAF Sqn.	Airborne Fros.	Albemarle	26	Goubrine	
	A.O.P.			651 RAF 654 "	A.O.P. "	Auster "	12 12	Comiso ? " ?	
TRAINING COMMAND NON-OPERATIONAL (Casa-blanca)				416 US 417 "	M.S. Fighter " "	Beaufighter (NF) "	12 12		
			284 RAF	-	Transport	-	-	Algiers	To admin. 216 Grp. units
			325 RAF	-	G.R.	-	-	?	-
				293 294	A.S.R. "	Warwick/Walrus " "	8+3 8+3	- -	- -
			332 RAF	-					Trans. to NAAF wef May 1 from M.E.
				986 RAF	Balloon	Mark VI	45	In U.K.	7 days notice from Jul. 31

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NORTH WEST AFRICAN AIR FORCE

SECRET

Subordinate Command Force		Formation		Squadron	Role	Type	I.E	Location	Remarks
		RAF Group or US Wing	RAF Wing or US Group						
TRAINING COMMAND NON-OPERATIONAL (Cont'd)	Fighter T.C.		68 US (Berri-chid)	16 US 122 "	Mixed Fighter " "	Boston (A.20) " "	18 18	Berrichid "	} Aircraft en route
	-			655 RAF 657 "	A.O.P. "	Auster Mk.III " " "	16 16	M.A.C. "	
	-		334 RAF		S.O.E.				
	Fighter T.C.			154 US	Recce.	P.38, P.39 & F.4A	?	Nouvion	To operate SOE in N.W.A. and det. in E.E.
	-			1/3 Fr. 1/4 " 1/5 "	S.S. Fighter " " " "	Spitfire Airacobra (P.39) Warhawk (P.40)		Mediouna " "	
	Bombardment T.C.			15 US 311 "	Mixed Bomber " "	Boston/Mitchell/ Marauder Fortress	? ?	Berrichid	
				Det. 206 RAF Det. 220 RAF	G.R. G.R.	Fortress "	? ?	U.K. U.K.	

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MIDDLE EAST COMMAND

SECRET

Subordinate Command Force	Formation		Squadron	Role	Type	I.E.	Location	Remarks
	RAF Group or US Wing	RAF Wing or US Group						
D.O.Ops. 1st Sept. 1943	201 RAF (Alexan- dria)	238 RAF	603 RAF	M.S. Fighter	Beaufighter (C)	16	Misurata	To re-arm X
		"	16 SAAF	Torpedo Bomber	Beaufort I & II	24	Misurata	From L.B. Temp. 20 I.E. To re-arm Baltimores?
		235 (N.C.) RAF (Gambut 3)	13 RHAF	G.R.	Blenheim V	16	Gambut	To re-arm Balts. From L.B.
			459 RAAF	"	Hudson VI	16	"	
			454 "	"	Baltimore III	16	L.G. 91 (S.Alex)	
		245 (N.C.) RAF (L.G. 91)	?	A.S.V. G.R.	Wellington XII ASV	2	-	To be cen- tralised N.C.A.F. From L.B.
		"	15 SAAF	G.R.	Baltimore	24	L.G. 91 (S.Alex)	
		"	$\frac{1}{2}$ GRU	Mine Sweeper	Wellington	3	Ismailia	
		247 (N.C.) RAF (Berka)	Flt. 38 RAF	A.S.R. T/B ASV	Various Wellington VIII	?	Berka	Det. Gambut
						20	Berka	Det. L.G. 91 (S.Alex)
			252 "	M.S. Fighter	Beaufighter (C)	16	Berka	To re-arm X
			203 "	G.R.	Baltimore III	16	Berka	
		216 RAF (Heliopolis) (Adv.H.Q: La Marsa Tunisia)	267 RAF	Transport	Hudson VI	16	Cairo	(To re-equip Dakotas 25 I.E. Det. El Quina (Tunis)

MIDDLE EAST COMMAND

SECRET

Subordinate Command Force		Formation		Squadron	Role	Type	I.E.	Location	Remarks
		RAF Group or US Wing	RAF Wing or US Group						
		216 RAF (Cont'd)		173 RAF	Transport	Lodestar/Fairchild	33	Heliopolis	4 specific Flts. see X.8854 Jul. 20.
				216 "	"	Bombay/Hudson/Dakota	16	Cairo West	Re-equipping Dakotas 25 I.E.?
				28 SAAF	"	Ansons	16	Castel Benito	Det.Ras el Mar
				-	"	-	-	-	Transport
		214 RAF (Tripoli)	249 RAF (Castel Benito)	117 RAF	Transport	Hudson	16	Castel Benito	Det.Bilbeis
				162 "	Signals	Blenheim/Wellington	15	L.G. 91(S.Alex)	1 Flt.R.C.M. 1 Flt.R.D.F.
D.O.Ops. 1st Sept. 1943	AIR DEFENCES EASTERN MEDITERRANEAN (Cairo)	210 RAF (Tripoli)	-	89 RAF	M.S. Fighter	Beaufighter (NF)	16	Bu Amud	Operating at 12 I.E. Dets. Bersis & Haifa
				213 "	S.S. Fighter	Hurricane IIC	16	Edeu	
				274 "	" "	" "	16	Derna	
				3 SAAF	" "	" IIB	16	Mellaha	
		212 RAF (Benina)	-	33 RAF	" "	" IIC	16	Misurata	
				123 RAF	" "	" "	16	Bu Amud	
				134 "	" "	" IIB	16	Bersis	
				Det.108 RAF	M.S. Fighter	Beaufighter IC & VI (NF)	?	Castel Benito	

M I D D L E E A S T C O M M A N D

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SECRET

Subordinate Command Force	Formation		Squadron	Role	Type	I.E.	Location	Remarks
	RAF Group or US Wing	RAF Wing or US Group						
AIR DEFENCES EASTERN MEDITER- RANEAN (Cont'd)	219 RAF (Alexan- dria)	-	94 RAF	S.S. Fighter	Hurricane IIC	16	Cyrene (Sa Savoia)	Temp. employed Fighter/Def. Duties
			41 SAAF	" "	Hurricane IIB	16	Bu Amud	
			237 RHOD.	Fighter Recce.	Hurricane IIC	18	Magrun	
			46 RAF	M.S. Fighter	Beaufighter (NF) IC & VI	16	Edcu	Operating at 21 I.E. Det. Nicosia
			238 RAF	S.S. Fighter	Hurricane IIC	16	Port Said	L.G.8(Matruh) L.G.121 Edcu
			335 RHAF	" "	" IIB	16		
			336 "	" "	" IIC	16		
			451 RAAF	" "	" "	16		
			260 RAF (Delta)	971 RAF 974 "	Balloon "	60 75	Alexandria ? Geneifa ?	Tripoli ? El Firdan ?
			275 RAF (Bizerta) temp. loan N.A.A.F.	976 " 980 "	" " "	60 90		
			98 US (Benina)	343 US 344 " 345 " 415 "	Heavy Bomber " " " " " "	8 8 8 8	Berca " Benina Main " "	
	9th USAF (Tripoli)	-						

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MIDDLE EAST COMMAND

SECRET

Subordinate Command Force		Formation		Squadron	Role	Type	I.E.	Location	Remarks
		RAF Group or US Wing	RAF Wing or US Group						
AIR DEFENCES EASTERN MEDITER- RANEAN (Cont'd) 9th USAAF (Tripoli)	-		376 US (Berca)	512 US	Heavy Bomber	Liberator II (B.24D)	8	Berca 2	
				513 "	" "	" "	8	" "	
				514 "	" "	" "	8	" "	
				515 "	" "	" "	8	" "	
			240 RAF (Hosc Ruai)	178 RAF	" "	" "	16	Hosc Ruai	(No.178 Re-equip (ping Liberators (during Sept./ (Oct. (462 when a/c (available
				462 RAAF	" "	Halifax	16	" "	
				148 RAF	" " SOE	Halifax/Liberator	14	Tocra (Bersis)	
				680 "	P.R.U.	Spitfire VI	12	Matariva	(Det.Derna (To re-arm XI
				37 US	Troop Carrier	Dakota (C.47/53)	13	Kabrit	

MALTA AIR COMMAND
(Valetta) MS.57987/Org./Aug.2

SECRET

Subordinate Command Force		Formation		Squadron	Role	Type	I.E	Location	Remarks
		RAF Group or US Wing	RAF Wing or US Group						
		-	248 RAF (Valetta) "	221 RAF	T/B. A.S.V.	Wellingtons VIII T/B. A.S.V.	20	Luqa	Det. L.G. 91
				?	G.R.	Wellington XII A.S.V.	4	?	To be centralised N.A.C.A.F.
				69 RAF 683 "	G.R. P.R.	Baltimore IIIA Spitfire XI	16 12	Luqa "	Daily state July 31
		-		826 FAA	T/B	Albacore	12	Takali	
		-	-	23 RAF	M.S. Fighter Int.	Mosquito	16	Luqa	
		-	-	126 "	S.S. Fighter	Spitfire V & IX	16	Safi	
				1435 "	" "	Spitfire V	16	"	
				185 "	" "	" "	16	Krendi	
				229 "	" "	" "	16	"	
				249 "	" "	" "	16	"	
				272 RAF	M.S. Fighter	Beaufighter C IC & VI	16	Luqa	To re-equip Mark X
				108 "	" " NF	Beaufighter NF	16	"	Det. Castel Benito
				Det. 219 "	" " "	" "	?	"	From N.A.C.A.F.
				983 RAF	Balloons	Mark VI	21	Marsa	
				Det. 256 RAF	M.S. Fighter N.F.	Mosquito XII Mark VIII A.I	6		Remainder of Sqn. coming from U.K. (Sept.) at I.E. 16 XII/XIII. Controlled by HQ. D.A.F.

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PROVISIONAL ORDER OF BATTLE D DAY - AVALANCHE

A.O.C. T.A.F.	C.G. XII ASC	31 Gp. - 3 Sqns. Spits.	Milazzo Area.
		111 Sqn. - 1 Sqn. P-51s Tac/R	" "
		33 Gp. - 3 Sqns. P-40s	Catania Plain) if required
		99 Sqn. - 1 Sqn. P-40s	" " forward
		27 Gp. - 3 Sqns. A-36s	" "
		86 Gp. - 3 Sqns. A-36s	" "
		322 Wing - 4/5 Sqns. Spits.	Milazzo Area
		324 Wing - 4/5 Sqns. Spits.	" "
		600 Sqn. - Beaufighters (N)	Cassibili
		3 Grps. - 9 Sqns. P-38s	Catania Plain or Comiso
A.O.C. T.A.F.	A.O.C. D.A.F.	225 Sqn. 1 Sqn. Spits Tac/R	Catania Plain
		244 Wing 5 Sqns. Spits	" "
		7 S.A.A.F. Wing { 2 Sqns. Spits	" "
		{ 1 Sqn. P-40s	" "
		57 Gp. 3 Sqns. P-40s	" "
		79 Gp. 3 Sqns. P-40s	" "
		239 Wing 5 Sqns. P-40s	" "
		415 & 272 Sqn. 2 Sqns Beaufighters	" "
		23 Sqn. 1 Sqn. Mosquitoes } Intruder	" "
A.O.C. T.B.F.	A.O.C. T.B.F.	TO OPERATE WITH XII AIR SUPPORT COMMAND	
		326 Wing 2 Sqns. Bostons	Catania Plain
		3 S.A.A.F. Wing { 2 Sqns. Bostons	" "
		{ 1 Sqn. Baltimores	" "
		12 (B) Gp. 4 Sqns. B-25s	" "
A.O.C. T.B.F.	A.O.C. T.B.F.	TO OPERATE WITH DESERT AIR FORCE	
		232 Wing 2 Sqns. Baltimores	Catania Plain
		47 (B) Gp. 4 Sqns. A-20s	" "

NORTH AFRICA

Reserve Units 241 Sqn. - Hurribombers
 40 Sqn. - Spits Tac/R
 324 Gp. - P-40s

MIDDLE EAST

6 Sqn. - Hurricanes IID

Source

Appendix B to N.A.T.A.F. Operational Directive for
 Operation Avalanche No.1 dated 17 August 1943.

S E C R E T

APPENDIX 4

G E R M A N A I R F O R C E

ESTIMATED MAXIMUM STRENGTH AND SERVICEABILITY AS AT 1 SEPTEMBER, 1943
IN ITALY, CORSICA, SARDINIA, S. FRANCE, GREECE, CRETE,
RHODES, AEGEAN, ALBANIA & JUGOSLAVIA

CATEGORY	STRENGTH		SERVICEABILITY (1)	
	Luftflotte 2	S.E. Command	Luftflotte 2	S.E. Command
L.R. & Torpedo Bombers	320	80	128	32
Bomber Recce.	70	50	28	20
Dive Bombers & Ground Attack	-	60	-	30
S.E. Fighters	210	60	126	36
Fighter Bombers	80	-	48	-
T.E. Fighters	10	10	6	6
Tac/R & Army Co-op	20	15	10	8
Coastal	10	50	5	25
Ref. Appendix A to N.A.C.A.F. Operation <u>Totals</u> Order No.3 -- 3 Sept. 1943	720(2)	325	351	157

ACTUAL STRENGTH AND SERVICEABILITY AS AT 31 AUGUST 1943
ACCORDING TO GERMAN DOCUMENTS

CATEGORY	STRENGTH		SERVICEABILITY	
	Luftflotte 2	S.E. Command	Luftflotte 2	S.E. Command
L.R. & Torpedo Bombers	276	15	110	5
Bomber Recce.	20	23	13	14
Dive Bomber	-	197	-	147
Ground Attack	28	-	10	-
S.E. Fighters	181	80	91	60
Fighter Bombers	27	-	16	-
T.E. Fighters	-	13	-	9
Night Fighters	-	20	-	15
Tac/R	20	47	10	27
Coastal	6	46	6	35
Source: Abteilung 6 German Air Ministry <u>Totals</u> Returns as at 31 Aug. 1943	558	441	256	312

(1) Bombers 40%: Fighters 60%: other categories 50%

(2) But cf. N.A.A.F. A.2 figures for 3 Sept. in text showing lower figures representing approx. 100 less.

T H E I T A L I A N A I R F O R C E

PARTITION AFTER THE ARMISTICE OF 3 SEPTEMBER 1943

(a) Aircraft secured by Allies

Category	Service-ability	Strength (1)	Secured by Allies (2)
<u>First Line Aircraft</u>			
Bombers	40%	188	30
Torpedo Bombers	23%	57	35
Dive Bombers	?	100	8
Ground Attack	70%	36	21
Fighters	50%	535	105
Army Co-op	?	228	16
Coastal	?	242	47
Transport	?	250	51
Totals		1636	313
<u>Second Line Aircraft</u>			
Stored Reserves		350	
Gruppi Complementari (Adv.O.T.U.)		250	
Old & Obsolescent Type		850	16
Totals all Categories		3086	329

(b) Aircraft secured by Germans

Insufficient evidence is available to date to enable any detailed totals to be given. Only in the case of Transport aircraft is anything approaching the truth available. The Air Ministry Intelligence estimate of the total secured by the Germans is 186,⁽³⁾ a figure which tallies closely with the number quoted by the C.G. Luftwaffe Italy, Ritter von Pohl, who at his interrogation⁽⁴⁾ stated that about 200 S.M. 82's were taken over to form a Transport Geschwader. Other figures given by him which cannot yet be verified were that about 100 Macchi Fighters (some still in the factories) and about 60 S.M. 79's were considered useable, that some 200 training aircraft of various types were flown to Germany and that the balance were broken up for salvage.

(1) Authority: Superacreo (Italian Air Ministry) Stats.

(2) Authority: A.I. 3(b) Air Ministry.

(3) Authority: 3268/C.S.B. 12 March 1947

(4) Authority: C.S.D.I.C.

S E C R E T

APPENDIX 6

ITALIAN ARMISTICE

TEXT OF SHORT INSTRUMENT OF SURRENDER

Ref. CZ. 2653 3rd Sept. 1943

The following conditions of an Armistice are presented to the Italian Commander-in-Chief by General Dwight D. Eisenhower, Commander-in-Chief of the Allied Forces, acting by authority of the Governments of the United States and Great Britain and in the interest of all of the United Nations.

1. Immediate cessation of all hostile activity by the Italian armed forces.
2. Italy will use its best endeavours to deny, to the Germans, facilities that might be used against the United Nations.
3. All prisoners or internees of the United Nations to be immediately turned over to the Allied Commander-in-Chief, and none of these may now or at any time be evacuated to Germany.
4. Immediate transfer of the Italian Fleet and Italian aircraft to such points as may be designated by the Allied Commander-in-Chief, with details of disarmament to be prescribed by him.
5. Italian merchant shipping may be requisitioned by the Allied Commander-in-Chief to meet the needs of his military-naval program.
6. Immediate surrender of Corsica and of all Italian territory, both islands and mainlands, to the Allies, for such use as operational bases and other purposes as the Allies may see fit.
7. Immediate guarantee of the free use by the Allies of all airfields and naval ports in Italian territory, regardless of the rate of evacuation of the Italian territory by the German forces. These ports and fields to be protected by Italian armed forces until this function is taken over by the Allies.
8. Immediate withdrawal to Italy of Italian armed forces from all participation in the current war from whatever areas in which they may be now engaged.
9. Guarantee by the Italian Government that if necessary it will employ all its available armed forces to ensure prompt and exact compliance with all the provisions of this armistice.
10. The Commander-in-Chief of the Allied Forces reserves to himself the right to take any measure which in his opinion may be necessary for the protection of the interest of the Allied forces for the prosecution of the war, and the Italian Government binds itself to take such administrative or other action as the Commander-in-Chief may require, and in particular the Commander-in-Chief will establish Allied Military Government over such parts of Italian territory as he may deem necessary in the military interests of the Allied Nations.
11. The Commander-in-Chief of the Allied Forces will have a full right to impose measures of disarmament, demobilisation, and demilitarization.
12. Other conditions of a political, economic and financial nature with which Italy will be bound to comply will be transmitted at a later date.

The conditions of the present Armistice will not be made public without prior approval of the Allied Commander-in-Chief.

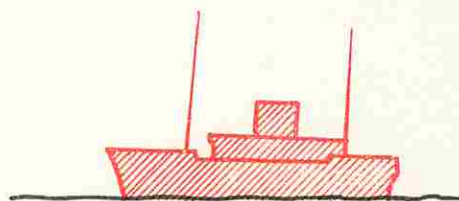
OPERATION AVALANCHE

9 SEPTEMBER 1943.

DIAGRAM SHOWING HEADQUARTERS AND CONTROL SHIPS AND
THEIR FUNCTIONS.

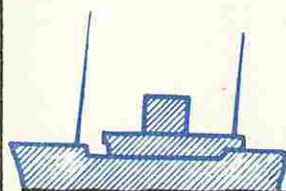
U.S.S. ANCON.

Main H.Q. Ship; will have Army and Naval Commanders and Air Force Commander or his representative Fighter direction for land based aircraft, and is standby for H.M.S. ULSTER QUEEN.



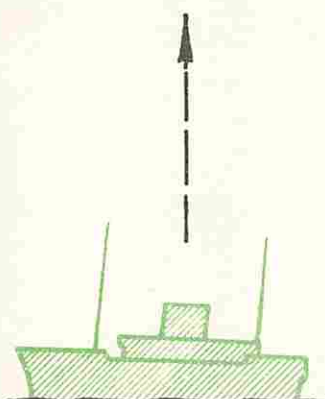
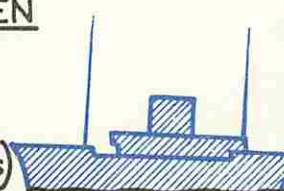
H.M.S. ULSTER QUEEN

Fighter direction carrier-based aircraft (Naval fighter directors)

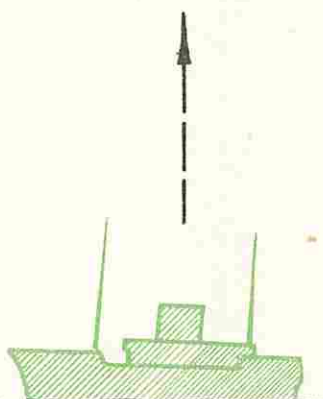


H.M.S. HILARY.

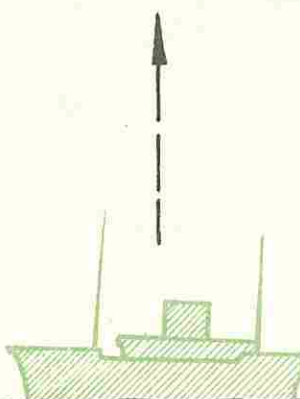
Standby for U.S.S. ANCON for land based fighters. IO Corps H.Q. Ship



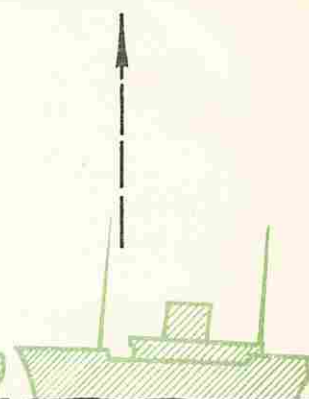
H. M. S. ROYAL
ULSTERMAN.



U.S.S.
BISLAYNE



U.S.S.
CHASE.



U.S.S.
CARROL.

Secondary Standby ships. equipped for fighter control on a reduced scale.

NOTE: ———— Indicates Standby Ship.

ANNEXURE to:

Outline Plan of Air Operations, Operation AVALANCHE.

S A L E R N O L A N D I N G S

EXCERPTS FROM GERMAN NAVAL WAR DIARIES

Excerpts from the War Diary of the German Naval Staff - Operations (See Kriegsleitung) and from the War Diary of the German Naval Command, Italy (Marinenkommando Italien), 1st to 19th September, 1943.

Note. - The greater part of this paper refers to the operation of taking over Northern and Central Italy from the Italians and to events in Corsica and Sardinia. This appendix contains only extracts dealing with the Salerno landing. It is significant perhaps that the German Naval Command was much more interested in the taking over of the Italian ports than in the Allied landings at Salerno, with which only about one-tenth of the document is concerned. It is also striking that there is practically no mention of the port of Naples. Especially noteworthy are the inaccuracy of the German air reconnaissance and the exaggeration of the Luftwaffe's claims of casualties inflicted on Allied shipping; these were :-

<u>Sunk</u>	<u>Probably Sunk</u>	<u>Damaged</u>	<u>Hit</u>
3 Cruisers	1 Cruiser	1 Battleship	1 Cruiser
7 Destroyers	2 Destroyers	4 Cruisers	38 Transports
6 Transports	1 Escort Vessel	2 Destroyers	2 Merchant Vessels
2 Large Steamers	3 Unspecified Warships	24 Transports	31 Unspecified Craft
2 Freighters	6 Transports	1 Merchant Vessel	
14 Landing Craft	3 Landing Craft	7 Freighters	
2 Unspecified Units			

The actual losses by aircraft were :-

<u>Sunk</u>	<u>Damaged</u> (1)
1 Hospital Ship	1 Battleship
1 Tug	2 Cruisers
1 Merchant Vessel	1 Destroyer
2 L.C.T.(2)	1 Gunboat
	3 Merchant Vessels
	1 L.C.T.(2)

Of interest also is the failure of the German S-boats and submarines to interfere with the convoys, and with shipping, in Salerno Bay. The diaries show that U-boats were on patrol in the area yet during the course of operations they only hit one minesweeper and one merchant vessel. The S-boat made repeated night sorties against shipping in the bay, but only on one occasion was their presence observed by the Allied forces; as the mass of shipping in the bay offered a splendid target it can only be assumed that the S-boat commanders lacked daring. There are several references to allied landings on the Sorrento Peninsula. No such landings took place, though it is possible that allied light craft may have sent foraging parties ashore which the Germans mistook for troops.

All footnotes are by Admiralty Historical Section. The following abbreviations are used - N.S. = Naval Staff Operations; N.C. = Naval Command, Italy; S-boat = German M.T.B.; R-boat = German Minesweeper; U-boat = German submarine.

/3 September

- (1) Slight damage which did not affect the fighting capacity of a ship is not included.
- (2) The L.C.T. losses from air attack may have been somewhat heavier. Some landing craft were listed as sunk or damaged without cause of sinking, or date, being given.

3 September. N.S., p.5.(1)

The expected landing on the coast of Calabria began at 0600 near Reggio. The German Naval Staff calculates that this operation is only to secure a bridgehead for complete protection of Messina Strait....A campaign in the Italian Peninsula towards Northern Italy appears as a slight possibility; though it is not in accordance with the English mentality.

P.6.

Following information from intelligence reports: Within the next few weeks a landing attempt will be made on the Southern tip of Italy and at Taranto; the aim is to close Otranto Straits. After occupying Brindisi there are plans for a landing in Albania this autumn. The often planned landings at Genoa, and Naples have been delayed because of distance and lack of transports. Attack on Taranto and Otranto will be by British Eighth Army. U.S. Seventh Army under Patton will land on Southern tip of Italy and on Sardinia.

6 September. N.S., p.10.

Our planes were sent out against shipping targets at Bizerta on the night of 6th/7th. (2)

N.S., p.11.

From photographic reconnaissance of 5 September the freighters (about 30 of 220,000 tons) observed on 4 September in Oran and Mers-el-Kebir have for the most part left port. It is probable that the shipping which has left the areas Mers-el-Kebir - Oran - Arzue is now under way to new landing areas in the Western Mediterranean.(3)

However, the formations sighted in the late afternoon of 5 September N.E. of Bone, (large convoy of 60 ships and a carrier formation on an easterly course) had not been picked up again by the evening of the 6th.

N.C., p.12.

Location of the target for new allied landing attempts is dependent on the goal of the eastbound convoys in the Western Mediterranean. The bringing up of aircraft carriers points to the conclusion that the next landing operation of the enemy will be carried out over a long sea distance. Sardinia or a strike in the direction of the Gulf of Salerno are possible. Commander South ordered the setting up of the remainder of the 21 cm. guns (8.4 inch) on the Gulf of Salerno and the bringing up of two additional guns of the same size has been requested.

7 September. N.S., p.13.

1655 hours, 6 September, N.W. of Bizerta a carrier formation of 18 units of which one carrier, two escort carriers, two light cruisers and seven escorting craft (4) were photographed.

/At

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- (1) Pages refer to pages in N.I.D. translations.
 - (2) Convoy F.S.S.2.
 - (3) Probably refers to Convoy N.S.F.1. (but this contained 16 combat loaders and L.S.I. and the three "Killer" L.S.T.) and Convoy N.S.S.1. containing 16 freighters.
 - (4) Unicorn and two escort carriers on way to Malta.

At 1745 hours, 6 September, 52 miles N.E. of Bizerta, 40 merchant ships and additional escorting craft on an easterly course. (1) The convoy was 20 miles north of Palermo at 0740, 7 September, and was made up of 60-80 units course still east. (2) At 1615 hours the formation was reported 8 miles to the North of Ustica course N.E. and included one cruiser, five escorts and 60 invasion craft. (3) At 2330 three aircraft carriers were 35 miles W.N.W. from Trapani, obviously the carrier formation reported at 1655, 6 September. (4) Reported movements lead one to expect an invasion of the Italian west coast apparently in Salerno Bay.

N.C., p.14.

A large convoy of 60-80 ships at 0740 north of Palermo (see report from German Naval Staff War Diary supra). The convoy has transport capacity about one half of an American Task Force. The intention to land behind the front is clear. The convoy continued on during the entire day and in the early hours of the next few days will apparently land the troops either in the Gulf of Eufemia (Vibo Valentia) or on the coastal area south of Capri. Off the harbour of Bizerta there was a large concentration of ships noted, which put to sea on an easterly course. The large convoy reported out of Bizerta shows that the enemy has his striking forces for the expected invasion under way. It is not clear whether this movement is connected with the formation north of Palermo. A strike in the direction of Salerno is not out of the question. The air force attacked Bizerta (last night) and hit six craft of 28,000 tons. Heavy damage leads one to expect some sinkings. (5)

8 September. N.S., p.18.

Since the withdrawal of Italy from the war was foreseen by the Fuehrer, all possible measures to protect German interests have been set up and put into action. It is planned to keep Northern Italy and Corsica under Rommel, while the troops in Southern Italy retreat fighting to Northern Italy.

N.C., p.19.

During the morning, German air reconnaissance shows that several large invasion formations protected by numerous heavy and light warships, including aircraft carriers and probably battleships, are moving in the sea area north of Palermo in the direction of the Gulf of Salerno and Cape Pallinuro. The northern group includes five cruisers and ten destroyers and was 40 miles south of Naples at 1030. (6) The approach of this large landing fleet indicates that landings will occur north as well as south of Rome. According to an observation report of the German Air Force received at 1530 the invasion fleet at 1300 hours was 24 to 40 miles south of Capri on a course of 20°. The fleet was made up of four formations. First formation 30-40 ships, second formation 20 medium sized warships, third formation 40 transports in four columns protected by 20 warships in two columns, five heavy and 10 medium sized warships, presumably including battleships. (7) According to radio listening post reports, all battleships and aircraft carriers are at sea, individual positions undetermined. Over the ship formations strong fighter protection was flying.

/P.20

- (1) Either or both of T.S.M.1 and F.S.M.1.
- (2) Either or both of T.S.M.1 and F.S.M.1.
- (3) Not identified.
- (4) Certainly not the same formation, but possibly Force H though position would be a long way out.
- (5) In fact no damage was done.
- (6) No formation of cruisers and destroyers was anywhere near that position at that time.
- (7) If this position is correct only the slow convoys could have been sighted. No major unit was anywhere near this position.

P.20

The invasion units being transported are estimated at five task forces. The landings are expected in the early morning hours of to-morrow or late this evening. The points principally threatened appear to be the Gulf of Gaeta and Salerno. All M.T.Bs ready for sea received orders to attack the invasion force. Two boats were sent out from Salerno and three from Maddalena. (1) R.7 (motor minesweeper) reports being at anchor south of Cape Licosa with damage to rudder and screw. Also R.1 is aground and is being towed by a M.F.P. (Naval Ferry Barge) to Salerno. R.13 sent to two R.7.

9 September. N.S., p.23.

In the early morning hours 54 of our bombers were sent out against the enemy invasion force in the Gulf of Salerno. A cruiser blew up after being hit. Hits were observed on another cruiser and 17 other craft. (2) Strafing plane attacks were carried out continuously during the day. Strong fighter protection was reported over the enemy landing fleet.

N.O., p.25.

Enemy invasion began at 0345 hours with 400 tanks (3) between Salerno and Castellabate; the attack was in part successfully repulsed. The enemy landed several tanks near Vietri and Paestum. The enemy is slowly moving forward there. Further landings at Marcatello. Forces which landed are moving on Ponte Aquano. During the day there was further landings with tanks (4) 80 kilometres S.E. of Battipaglia.

P.29

S-boats which are in any way operational will be sent out against the enemy in Salerno Bay. The submarines must shift their main efforts to the sea lanes leading to the new enemy invasion point in the Salerno area. S.57 and S.154 put into Nettunia at 1630. They were sent out against the enemy landing fleet during the preceding night, 8/9 September, after the Commander of the 1st S-boat division had started all craft northwards and abandoned the base. The attack was unsuccessful. A new sortie is planned for the next night, 9-10 September.

10 September. N.S., p.32.

Supplementary report of our attacks in the Gulf of Salerno on 9 September shows that with 158 missions flown, hits were made on 38 transports and 14 warships and landing craft. Of these one heavy cruiser, one transport of 9,000 tons and six L.C.T. of 250 tons were sunk. (5)

/P.34.

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- (1) No M.T.B. attacks on convoys were reported by allied vessels.
 - (2) The tug Nauset was sunk and one L.C.T. and the Cadmus slightly damaged. It is strange that there is no mention of air attacks on the 8th when L.C.T. 624 was sunk and the Mendip and U.S.L.C.I. 87 damaged.
 - (3) This number is enormously exaggerated even if armoured cars and self-propelled guns are included.
 - (4) i.e., in Gulf of Policastro. No troops were landed here, but this spot is about halfway between Salerno and Vibo Valentia where there was a landing by a Brigade of the Eighth Army on 8 September. This shows the inaccuracy of the German reconnaissance.
 - (5) No warships or transports were sunk or damaged, and there is no record of any L.C.T. being damaged.

P.34

The S-boat sent out during the night of 8-9 had no success. A new attack was planned for the night of 9-10th. Six M.F.P. (naval barges) with two S-boats made contact with the enemy above Gaeta. One M.F.P. was sunk. (1) Our own mines destroyed two large steamers and other smaller craft. (2)

N.C., p.35.

According to reports received up till now, the enemy landed in the Gulf of Salerno between Amalfi and Agropoli in a strength of about four divisions, other landings near P. Campanella. (3) During the day further reinforcements. Salerno in hands of enemy since evening of 9th.

Against this reinforced enemy our own counter-attack is under way. In the afternoon the bridge near Cava was retaken. (4) General Field Marshal Kesselring issued the following orders :-

"The invading enemy in the area Naples-Salerno and southwards must be completely annihilated and in addition thrown into the sea. Only by so doing can we obtain a decisive change of the situation in the Italian area. I require ruthless employment of all the might of the three army units. Every commanding officer must be aware of his historical responsibility! British and Americans must realise that they are hopelessly lost against the concentrated German might."

This morning in the southern part of the Gulf of Salerno there was a large convoy concentration and in the afternoon 18 large transports, 50 large landing craft, 150-300 small landing craft and seven or eight cruisers, 45 miles south of Naples. Behind them as a protecting force (5) three battleships and three aircraft carriers. (6) Ten large and about fifty medium sized and small ships in the late afternoon on the beach by Cape Licosa, and standing off to the west. (7) Ten miles west of Licosa two large and six small warships headed west.

P.37

Lt.-Cdr. Bottke reports from the Naples area, where he pushed southwards as far as Salerno Bay, that the situation there has relaxed (8) and the rumours that the enemy was pushing on Naples have not been substantiated. The naval units there have for the most part been assigned to coastal defence under the Naples Chief-of-Staff.

S.57, 151, 152, 154, 1600 hours operation Salerno Bay, according to personal decision of the Chief of the 1st S-boat division, since no reconnaissance reports reached him. S.57 returned because of motor trouble. By moonlight the boats attacked a strongly

/P.38

- (1) See Section 66.
- (2) Not understood, but can hardly refer to the Salerno area.
- (3) There was no landing here.
- (4) It is strange that there is no mention of the German recapture of Battipaglia.
- (5) als Sicherung.
- (6) One battleship was evidently mistaken for a carrier.
- (7) No allied source makes any mention of craft beaching so far south, and it is most improbable that this is true.
- (8) Entspannt.

escorted convoy and sank a 10,000 ton steamer. No further attack made because immediately afterwards they were pursued by a destroyer, (1) The boats put into Civitavecchia in the morning.

10 September. N.C., p.38

The R-boats from the Salerno-Naples area are included operating in the general northbound movement. R.13 which towed R.7 from the Cape Licosa area had a fouled radio. There is a report from this ship as of late yesterday evening that they put into Salerno but found that there was no longer a German station there. Since then there has been no further report. (2) Likewise the positions of R.187 and R.188 which were under way to Civitavecchia with some craft from Salerno, is unknown. Later they reached Leghorn; their previous reports were blocked by enemy radio interference.

11 September. N.S., p.39.

In resisting the enemy invasion in the Gulf of Salerno there was sunk during the night of 9 September by direct fire from the batteries of the General of A/A., South district, one cruiser, two destroyers, two transports, five large and three small landing craft. In addition hits were made on many other boats and heavy losses caused by A/A. projectiles with time fuses. (3) One enemy aeroplane was also shot down. During the night of 10-11 September, 92 of our planes in two waves, attacked the shipping in Gulf of Salerno. Hits were observed on 19 craft. From these, one cruiser and two transports probably sunk. (4)

P.40.

Situation south of Eboli was very critical during the noon-day hours. The enemy has reached the line Eboli-Serre-Albanella (5) with his forward units, which include tanks. Up to now four divisions have landed in the Gulf of Salerno between Amalfi and Agropoli. Salerno is in enemy hands since 9 September. Landings have likewise been carried out on the west end of the Sorrentine peninsula. (6) Our troops have started a counter attack which by evening had made progress in the direction of Vietri. It is planned to drive to the coast east of Salerno and through concentrated attacks destroy the enemy.

There are no reliable reports available yet on the operation of four of our S-boats in Salerno Bay during the night of 10-11 September.

/N.C., p.42.

- (1) This probably refers to the attack on Convoy S.N.F.1 during the night of 10th-11th (see Section 68). No transport was hit but the American destroyer Rowan was torpedoed and sunk.
- (2) There is nothing about these craft in Allied reports.
- (3) There is no report of ships being hit by gunfire during the night of 9th-10th.
- (4) The only ship known to have been damaged during these raids was the Dutch gunboat Flores.
- (5) The Americans had reached Albanella but no Allied forces were anywhere near Eboli or Serre; in fact Eboli was the H.Q. of a German division.
- (6) This was not correct.

N.C., p.42.

Hard fight near Salerno. Counter-attack against tenaciously fighting enemy. At noon the situation south of Eboli very critical. Enemy reached with his forward units the line Eboli-Serre. By evening the enemy intercepted. Enemy supported by ships' batteries. In the evening our units began the fight to recapture Salerno. On the Sorrentine Peninsula new landings have taken place.⁽¹⁾ Further strong concentrations of enemy transports and landing craft with warship cover reported in the Salerno area.

P.43.

At 1800 our air force observed in Salerno Bay several enemy ship formations including five cruisers and five or six destroyers heading west. Three convoys each 8 to 14 ships, presumably transports, ⁽²⁾ surrounded by escort were observed leaving the bay, and two smaller convoys each with 6 to 8 units were observed entering.⁽³⁾ In front of the bay there were individual war and merchant ships not under way. Our S-boats reported, around midnight, a convoy of eleven ships and four destroyers 28 miles S.S.W. of Salerno, course not stated. On the coast of Cape Palermo-Cape Licosa widely separated landing craft were seen on the beach ⁽⁴⁾ and on the coast from Cape Licosa to Salerno several more landing craft were on the beach. In the morning a departing convoy of two large transports and 14 freighters of which six were L.S.I. was sighted north of Ustica. From air photo evaluation the enemy has about 35-40 per cent. of the total Mediterranean landing equipment committed in the Salerno undertaking, in addition at least four battleships (Nelson, Rodney, two Warspite class), three aircraft carriers of the Illustrious class and five escort carriers. The attack by the German air force on the invasion flotilla, during the night of 10th-11th obtained hits on 23 craft. ⁽⁵⁾ One L.C.T. of 250 tons was sunk, three transports and one cruiser were so heavily damaged that sinking can be assumed; 17 transports and one cruiser damaged. Further reports of the success of this attack are not on hand.

P.44.

Naples-Gaeta - situation quiet. Lt.-Odr. Bottke was put out of action. I assigned Capt. Kamptze to determine the Italian shipping in Naples, its readiness, and the complements on hand, and directed him to send all ships ready for sea northwards.

P.45.

Commander (South) had plans to release the two submarines assigned to the Salerno area for the support of the east entrance of the Bonifacio Strait. This proposal was not accepted by me. The two submarines have the best attack possibilities at the invasion centre of Salerno. Two submarines would not be nearly enough to secure the east entrance of the Bonifacio Strait.

/During

- (1) This is not correct unless the Germans considered Maiori to be on the Sorrento Peninsula.
- (2) Certainly not transports, possibly L.S.T.
- (3) Presumably Convoy N.S.S.7 split into two.
- (4) Presumably Cape Palinuro is meant, but nothing is known of any landings on this coast.
- (5) This is an increase of four over the figure given above in the Naval Staff Diary.

During the night of 11th-12th, 28 of our planes were employed in the Gulf of Salerno. One enemy small destroyer was sunk, two large steamers destroyed, two transports and two cruisers damaged. (1) By day strafing planes in the same area hit the build-up craft.

12 September. N.S., p.47.

At Naples two large transports were seen burning in the morning.

P.48.

Four of our S-boats were out during the night of 11th-12th. Results not yet reported. R.187 and R.188 have reached Leghorn. R.7 and R.13 have apparently been lost; complements have been assigned to the ground fighting. Commander of Submarines, Italy, reports that two submarines are stationed off Salerno Bay. Another submarine from Toulon is headed for the Salerno-Gaeta area.

German Naval Command, Italy, reports the developments in the ground force situation as being not unfavourable. The enemy appears to be pulling out invasion equipment in the direction of Bizerta. (2) The attack to retake Salerno has started.

N.C., p.49.

Near Salerno our counter-attack is slowly winning ground against tough enemy resistance. The heights, four kms. N.E. of Salerno have been reached. From radio listening post reports, withdrawal from Salerno by the enemy is out of the question. Reinforcements for our units are being brought up. The enemy suffered heavy losses in this fight. Up to now, 1,400 prisoners have been brought in and 2,500 dead counted. The number of dead and wounded are estimated at between 8,000 and 10,000. (3) The night, morning, noon and evening reconnaissance shows active traffic in Salerno Bay. In addition to several cruisers and many destroyers, two battleships (4) were located. The main mass of invasion equipment was located in the S.E. section of Salerno Bay. At 0218 hours, 85 miles north of Ustica, one battleship, one aircraft carrier and one escort vessel heading south. (5) There have been no reports of a major invasion in the Naples area. However, small flanking operations are to be expected at any time. The concentration of landing equipment in the Salerno Bay has decreased. It appears as though the enemy was withdrawing landing equipment southwards. (6)

/The German

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- (1) Casualties were Biscayne slightly damaged and freighter Lyminge badly damaged. The Savannah was hit and badly damaged in a day attack on 11th and it is strange that the enemy made no claim on this account.
 - (2) It is difficult to find any grounds for this belief.
 - (3) The correct figure was rather less than 4,000.
 - (4) No battleship was anywhere near Salerno on 12th. Force H withdrew on 11th at 1900 and was in Malta by 1700 on the 12th.
 - (5) Quite incorrect.
 - (6) Assuming that by "equipment" the Germans meant craft, this is hard to understand. Naturally all craft larger than L.C.T. withdrew as soon as possible after unloading, but the L.C.T. remained and the L.C.M. were reinforced.

The German Air Force attacked the invasion fleet near Salerno with waves of medium bombers. During the night of 11th-12th, 19 ships were hit, including one transport of 6,000 tons and one L.C.T. sunk, and two transports of 13,000 tons, one light cruiser and one destroyer damaged.(1)

P.51.

Concerning the whereabouts of R.7 and R.13, it is now known that the two boats were blown up by their crews on 9 September in Salerno because of the approach of the enemy.

13 September, N.S., p.52.

Signs of great success appear to be coming from Salerno invasion area. Our air reconnaissance reported 12 miles S.E. Salerno, no time given, 50 to 60 transports and merchant ships, two battleships, numerous cruisers and destroyers, (2) as well as landing craft, and north of Licosa five large units and 30-40 large landing craft. From a report from Air Group 2 which has not been substantiated, Salerno has been retaken this morning and the enemy was observed re-embarking. According to the air listening post the radio activity in the Gulf of Salerno was noticeably weak before noon, from which the deciphering post concluded, apparently too soon, that a partial withdrawal of warships and evacuation of the Salerno area had taken place.

P.53.

In regard to the land situation in Italy, Commander (South) reports that after four days of strong resistance the Tenth Army has gone over to the attack against the enemy which landed in the neighbourhood and south of Salerno. In the area of the 70th Armoured Corps enemy resistance is near the breaking point. The enemy has already lost grievously in men and material and had over 1,400 prisoners taken. Total losses are estimated at 8 to 10,000 men.

N.C., p.54.

Our counter-attack in the Salerno area is rapidly recovering ground lost. In the morning Salerno and in the evening Persano were taken by storm.(3) Prisoners and a large number of weapons have been brought in. The enemy resistance is at the point of breaking in many places. Our attack continues. An enemy unit of company strength landed during the night of 12-13 near Castellamare and was destroyed, likewise parachute troops who jumped in the evening hours in the Pompeii area.(4)

In the Gulf of Salerno there is again active landing traffic. According to radio intercept report re-embarkation is in progress. Strong security for the landing traffic by means of heavy ships. In the Gulf of Salerno there was sighted in all three battleships, one carrier and six destroyers, cruising just off the Gulf an additional two battleships.(5)

N.C., p.56.

The sortie of S-boats during the night of 12-13 September in Salerno Bay had no success. Although I regret that the S-boats did not get into action during this night I still see in the appearance of our boats all

/night

- (1) This claim is quite different from that made on the same day by Naval Staff, see above.
- (2) All battleships were in Malta. It must be presumed that the Germans consistently mistook cruisers for battleships and destroyers for cruisers.
- (3) The Germans never recaptured Salerno.
- (4) Nothing is known of any landing near Castellamare di Stabia. No paratroops were dropped in the area on night of 12th-13th, though they were dropped inside the American lines during the two following nights.
- (5) There were no battleships or carriers in the area.

night long in and before the Salerno Bay a disturbing factor for the enemy, which in my opinion cannot be valued high enough. (1) In view of the favourable course of the battle on the Salerno front and the possibility of a retreat of the enemy by water, the S-boats received orders for a new mission in the Salerno Bay during the ensuing night. The S-boats found out during the last sorties that in addition to establishments on Ventotene there is also an enemy base on Ischia. Air Flotilla 2 has been requested to determine the extent of the enemy installations on this island by air reconnaissance, also to make a reconnaissance survey prior to the next S-boat operation.

P.57.

The traffic on the Italian west coast in view of the favourable situation on the front has been extended to Gaeta and in addition to M.F.P. (Naval ferry barges), K.T. ships (war transports) have been assigned. In addition to the transport of fuel and ammunition, the withdrawal of important goods from the Naples area has begun.

14 September. N.S., p.57.

The action in the Salerno area favourably reported. However confirmation for the recapture of the city has not yet come to hand.

P.58.

Second Air Corps reports an attack of 21 fighter bombers on ships in Salerno Bay on 13 September. Three merchant ships were hit. One of these was reported as heavily damaged. As a result of further attacks by eight planes on ships in Salerno Bay one cruiser was hit. On 14 September the attacks were continued. Three transports were damaged. Of 35 planes committed four were lost. Twenty-five fighter bombers destroyed a freighter of 4,000 tons and damaged another by a near miss. (2) Our air reconnaissance observed further strong ship concentrations in Salerno Bay and new landings at Castellamare. (3) According to air observation embarkation is also in progress. East of Ustica there was observed at 0210 hours, 15 merchant ships each of 10,000 tons, 15 L.C.T. and several escorts. W.S.W. of Naples at 0814 hours one cruiser observed.

P.59.

In the night of 11th-12th, during the attack of our S-boats in Salerno Bay, two detonations against a cruiser were observed. (4) On the second attack during the night of the 12th-13th, a torpedo fired at a steamer missed. A new attack is planned for the night of 14th-15th. Concerning the ground situation Commander (South) reports for the evening of 13 September hard fighting near Salerno, an enemy airborne attack (5) on the highway Torre Annunziata-Pompeii-Vietri.

Summary of success by the Air Corps in Salerno Bay from the invasion's beginning until 1800 hours, 13 September, according to a report from Commander (South). Reported as sunk, five transports, one heavy cruiser, seven landing craft, seven small destroyers; as probably sunk, six transports one /cruiser,

-
- (1) Unfortunately for the Germans our Command had no knowledge of this German S-boat activity and so was not in the least disturbed.
 - (2) The only damage reported during 13th and 14th was Uganda badly damaged, hospital ship Newfoundland and cargo ship Bushrod Washington sunk.
 - (3) There is no allied report of any such landing.
 - (4) Nothing is known of this attack. Certainly no ship was damaged.
 - (5) Presumably air attack is meant.

cruiser, three unidentified warships, two destroyers, one escort, three landing craft.(1)

N.C., p.59.

Our attack continues slowly forward against increased resistance. In summary it can be said that the enemy is retreating on the Salerno front.

P.61.

According to reports now available, the S-boat mission during the night of 11th-12th made an attack on a light cruiser. After firing their torpedoes two detonations were heard, but the sinking of the cruiser was not observed. In the preceding night, three S-boats sent out towards Salerno Bay were pursued by five enemy destroyers S.W. of Capri and forced into Nettunia.(2) No results.

15 September. N.S., p.61.

On 14 September, 25 planes were sent out against ship targets in Salerno Bay, and sank a landing craft. In addition explosions and fire were caused in fuel dumps and parked motorised equipment on land. Thirty-seven fighter bombers attacked ship targets. They sank a freighter and damaged six others. On 15 September an additional fighter bomber attack damaged additional ships in the Salerno area. Otherwise our air force carried on reconnaissance.(3) Reconnaissance still shows a heavy shipping concentration in Salerno Bay. On the afternoon of 14 September south of Vietri there were three battleships or heavy cruisers (4) with a formation of 15 transports and 35 landing craft. Another group of 35 medium sized transports were located about ten miles south of Montecorvino and carried on active landing craft traffic with the coast. Five miles south of here a cruiser was bombarding the coast. South of Praiano a ship was observed on an east course and was thought to be an aircraft carrier.(5) From a report of the German Naval Command, Italy, there lay in Salerno Bay at noon on 14th, six cruisers, five destroyers, three escort vessels, 15 small warcraft, 212 landing craft, two special ships, 27 merchantships of 156,000 tons, as well as landing craft under way between ships and beach. On the morning of 15 September two ships, presumably battleships, one ship, presumably an aircraft carrier, 86 large and medium sized transports and about 95 landing craft were seen.(6) The heavy increase in merchant tonnage leads one to assume a further increase in troops and equipment. Apparently replaced troop units are also being withdrawn.

P.62.

In the late evening there were 15 war and merchant ships 15 miles north of Licosa, course not given, while in the same area a landing craft, a transport and three guard boats were on a S.S.W. course. /N.C., p.63.

- (1) Actual losses were one tug, one L.C.T. and one hospital ship sunk.
- (2) There is no report of any such incident for the night of 10th-11th but on night of 14th-15th the 24th Destroyer Flotilla made contact with E-boats off Capri and chased them without success. See Section 69.
- (3) The claims for the 14th appear to be additional to those set out above under that date. On 15th the cargo ship James Marshall was badly damaged and L.C.T.19 sunk; two L.C.T. were damaged as also was the L.S.G. Derwentdale. It is strange that this is the first reference to strafing of the beaches. American reports say that raids on the beaches were frequent and severe. It also seems strange that no reference is made to the directed missiles which caused most of the damage to Allied vessels.
- (4) There were no battleships present on 14th and no heavy (eight-inch) cruisers in the area at any time during the operation.
- (5) There were no carriers in the area.
- (6) This time the Germans were right about the battleships for the Valiant and Warspite arrived during the morning of 15th, but there was no carrier present. The number of merchant vessels seems to be greatly exaggerated and there were few if any transports there.

N.C., p.63.

Our attack had to stop and re-form because of the great effect of the enemy sea bombardment and continuous air attacks. Three battalions of a parachute troop division are to be brought up. They are not expected to arrive until the evening of the 16th. No complete air reconnaissance in Salerno Bay because of fog and haze. The troops previously withdrawn from the northern part of the Bay appear to have relanded in the Sapri-Benevento area.(1) The sortie during the previous night of three S-boats into Salerno Bay was unsuccessful because of poor visibility. For this evening there is no S-boat sortie planned.

16 September. N.S., p.65.

During the night of 15-16, during the day and during the night of 16-17 September, our bombing and fighter bomber formations carried out attacks on ship targets in Salerno Bay. In all one heavy ship, battleship or heavy cruiser, and one destroyer were badly damaged, two units were sunk and other hits secured. Results of night 16th-17th have not yet come in.(2) During the night of 15th-16th and on 16th an especially strong concentration of shipping was observed in Salerno Bay, principally in the southern sector. One battleship and 19 cruisers and destroyers took part in the ground battle for the possession of Salerno with continuous gunfire to relieve the pressure on the Fifth U.S. Army, who were pushed to the coastal strip, and thereby brought our own attacking divisions to a halt shortly before the goal could be reached of driving the enemy into the sea. In addition to these two ships, 47 transports, 50 to 80 landing craft and 20 other ships were counted.

P.66.

In regard to the ground situation, Commander (South) reports that the effect of the heavy ships' bombardment and the almost complete command of the fighting area by the far superior enemy air force has cost us grievous losses in the fighting around Salerno and this will lead to a gradual reduction of our strength. Therefore the present operation will be broken off unless the entry into battle on 17 September of units of the 1st Parachute Troop Division, now being brought up from Apulia, leads to a break through.

17 September. N.S., p.66.

In Salerno our own attack operations are being given up if the attack starting to-day does not break through.

/P.67

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- (1) This is a good illustration of the deficiencies of the German intelligence. No troops were withdrawn from the northern sector, but on several occasions troops withdrawn from the southern sector landed at Maiori and the Germans must have thought they were leaving from there instead of arriving. There were landings at Scalea (about 15 miles from Sapri) on the 14th and 15th, but these were carried out by Eighth Army troops who embarked at Vibo Valentia, and had nothing to do with the Salerno operations. The reference to Benevento is not understood. This town is 35 miles N.E. of Naples and over 100 miles from Scalea.
 - (2) The Warspite was badly damaged on 16th but there is no record of other casualties.

P.67.

The German Naval Staff is convinced that the enemy landings in Southern Italy serve only as a preliminary for the main strike at the Balkans. The Naval Staff maintains that it is not likely that the enemy will turn towards Northern Italy. In case the situation at Salerno does not permit of the expectation of a successful break through, the Fuehrer has agreed to the projected "holding campaign" plans. Long resistance is to be made at Line B. Extensive withdrawal and thorough destructive measures are to be initiated. Further orders in this regard will follow. Eighteen of our planes attacked ship targets in the Salerno area. Ten ships were observed to be burning.(1)

P.68.

In Salerno Bay there was only a small amount of traffic observed entering or leaving in the morning. Before the harbour lay a few transports under cruiser protection. In the south part of the bay there were two battleships, 19 cruisers or destroyers, over 100 transports as well as 50-60 landing craft and patrol craft.(2) S-boat sortie on night of 16th-17th was unsuccessful. Repetition of the attack is planned for to-night.

18 September. N.S., p.69.

In Salerno Bay the enemy picture shows no obvious change. In the morning as a part of the previously reported strong concentration of shipping, there were observed six to eight large warships. More exact reports are lacking. According to air listening posts, U.S.A. units bombarded the coastal section in the Salerno area during the morning. Concerning the ground situation, Commander (South) reports by despatch at 0230 and 0800: "while our own attack operations at Salerno did not bring about the desired tactical results, still they are rated as a considerable success. The enemy lost over 3,000 prisoners, his dead and wounded must be estimated to be at least 10,000 men. In addition, large amounts of material were used up. Five infantry and two tank divisions are for a long time incapable of attacking.(3) The delaying effect on further enemy plans and their disappointment in the result has already been shown in the reports from London. Above all the value to us lies in the time won, which will assist us in the building up of strength and the deploying of troops to other sections of Southern Europe.

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- (1) There is no mention of casualties in reports for this day.
 - (2) The battleships had left the area the previous day, and it is unlikely that any transports were present.
 - (3) The only armoured division engaged was the 7th (British). Of the five infantry divisions the 3rd (U.S.) so far from having received heavy losses had hardly been in action by the 17th. The figures of Allied casualties are greatly exaggerated.

OPERATION AXIS (Achse)Captured German High Command Instructions

Top Secret
By Hand of Officers Only

30 Aug. 1943

In adaptation to the developments of the situation in the Mediterranean and in Italy, the following general instructions are now given.

A. In General

Most important task is the disarmament of the Italian Armed Forces as fast as possible. Exceptions will only be made in the case of those units which offer reliable guarantees of their will to continue fighting on the side and under the command of German troops.

The dissolution will be facilitated by the use of the watchword that the war is ended for the Italians and that every man, after handing over his arms, may either return to his civilian occupation or join the German Armed Forces as a helper.

The disarmament will be carried out first and as fast as possible in the case of the Italian formations that can be reached quickly, thereafter it will be gradually extended to all formations.

It must be made certain that all arms, vehicles, horses, mules, fuel and other materials will be seized.

It is especially important that the valuable material of the division 'Centauro' be seized or, at least, be rendered useless. German troops from formations in training may be used for this purpose.

In the prosecution of these measures, formations of Militia or of workmen will be formed, and our own troops will be made fully mobile and all other supplies will be replenished.

B. Tasks of the Individual Headquarters1. C.-in-C. South

- (a) Transfer of all German troops in Sardinia to Corsica. To this end all fortified islands around Maddalena will first be occupied and all the Fascists that have arrived there already will be freed.

Corsica will be defended by, and the island of Elba placed under the Command of G.O.C. 90 Panzer Grenadier Div.

- (b) Return of 10 Army into the Rome Sector

Defence of that sector with all German troops now there, at least until arrival of all parts of 10 Army in the area.

- (c) During the course of these two operations, demolitions as in enemy country.

- (d) Further conduct of operations as ordered by Army Group 'B'.

/2. Army

2. Army Group 'B'

- (a) Strengthening of the protection of all mountain passes. Use of the local rifle clubs in the Tyrol and in Carinthia, as well as of the male German population of the Southern Tyrol; (to be armed with weapons from Italian booty).
- (b) Occupation of the ports of Genoa, La Spezia and Livorno, as well as of Trieste, Fiume and Pola.
- (c) Safeguarding of the most important mountain passes of the Apennine Mountains between Genoa and Florence, and subsequent advance of the guarding elements to the line Elba - Perugia - Porto - Civitanova, for ultimate fusion with the forces of O.B.S. (C.-in-C. South).
- (d) Pacification of Northern Italy with the help of the Fascist organisations.
- (e) Army Group 'B' receives the right of issuing directives to O.B.S.; it is intended to place 10 Army later under the command of Army Group 'B'.

3. C.-in-C. West.

Occupation of the part of the Italian coast situated west of the Franco-Italian border.

4. C.-in-C. Southeast

Assumption of command over the whole southeastern theatre, including the Aegean Sea, towards this end occupation of the most important bases, including the coastal areas, islands and parts of islands (Crete, Rhodes) hitherto occupied by Italian troops.

C. Tasks of the Navy

Taking possession of the Italian naval and commercial ships within reach. In any event prevention of their going over to the enemy.

The carrying through of the transports required for the evacuation of Sardinia.

Maintenance of vital traffic on the sea.

Taking over the naval tasks in the coastal sectors hitherto occupied by the Italians.

Assisting the Army in the occupation of the Islands around Maddalena, the island of Elba and possibly of further islands in the area of C.-in-C. Southeast.

D. Tasks of the Air Force

They are enlarged by the taking over of the tasks of the Italian Air Force. Towards this end taking over of the Italian ground organisation, the additional installations required and the equipment of the Air Defences, especially the anti-aircraft equipment provided by Germany.

Prevention of the going over to the enemy of Italian naval forces and of the misuse of Italian air and anti-aircraft equipment.

E. Transport

Army Group 'B', in conjunction with the General for Transportation in Italy, will take all measures necessary to prevent any interruption of the rail service.

In Northern Italy the commander of the Army Transportation Service will make arrangements for German personnel to take over and operate the rail service; further south and as far as Rome he will endeavour to improvise a service with Italian railway personnel.

In the areas to be evacuated, Army Group 'B' and O.B.S. will thoroughly demolish all railway installations. Italian freight and supply trains will be confiscated if within easy reach of German troops.

C.-in-C. Southeast will take over the guarding of the railway lines through Albania from Kraljewe to Skoplje.

F. Commander Signal Communications takes the measures necessary to take over Italian signal installations in the area of German troops.

G. Chief of Counter-Intelligence in Foreign Countries assists the Higher Commanders and the units of the Armed Forces in the execution of their tasks, especially with regard to border controls and the security of vulnerable points, (power stations, railway installations etc.), the prevention of the going over to the enemy of the Italian Navy and the liaison with Fascist organisations.

H. A special proclamation will be directed to the Italian people and the Italian Army.

I. German Commanders, down to divisional commanders or officers if equivalent authority, will again be informed orally as far as necessary.

The order for the execution of these tasks will be given by the High Command of the Armed Forces (by dispatch of) code word 'Achse.'

Local developments may make it necessary for officers of the rank of divisional commander, and upwards, to take these measures on their own initiative.

K. Orders previously issued by the High Command of the Armed Forces are herewith cancelled and are to be destroyed.

The orders for 'Special Undertakings' (limited distribution) remains unchanged.

The authorities named in the distribution list are responsible for it that no written order concerning 'Achse' will be issued at lower levels than Army and that copies of this document in the Italian area can under no circumstances fall into the hand of Italians.

Signed: Keitel

OKW/WFST/662108/43 Top Secret Command matter

OPERATION AVALANCHEStatistics of Tactical Air Force Effort in Assault Phase
Last Light 8 September to Last Light 17 September 1943Sorties

Tactical Bomber Force	Day 528	Night 806
Desert Air Force	Fighter Fighter-bomber Tac/R	546 993 107
XII Air Support Command	Fighter Fighter-bomber Night fighters Tac/R	3680 3252 208 134

Allied Operational Losses in Aircraft

A-36	6	Seriously damaged	12
P-38	10		
P-40	5		
Mosquitoes	2		
Spitfires	11		
	<u>34</u>		

Allied Claims

Destroyed	Probably destroyed	Seriously damaged
Do.217	Total 20	Total 27
Ju.88		
F.W.109		
Me.109		

Note These totals cannot be confirmed in detail, but are reasonably accurate. The Germans admitted the loss of 18 bombers on the night 8/9 September alone.

Source: Operation Avalanche - H.Q. M.A.T.A.F. 21 April 1945

N.A. Coastal Air Force Effort

Total sorties flown	1596
Convoy fighter protection	948
Aircraft losses	8
Air Sea Rescue: lives saved	39

Operations included two anti-shipping strikes (neither of which resulted in sinkings) and several attacks on submarines, one of which was claimed as successful.

MEDITERRANEAN AIR COMMAND

ANALYSIS OF BOMBING OPERATIONS BY COUNTRIES AND OBJECTIVES

SEPTEMBER 1943

LOCATION		No. of A/C Despatched		No. of A/C Effective		TONS			CASUALTIES Destroyed or missing by by enemy action		
		Bomber	Ftr. Bomber	Bomber	Ftr. Bomber	Bomber	Ftr. Bomber	Total	Bomber	Ftr. Bomber	Total
ITALY	Harbours	140	-	146	-	267	-	267	1	-	1
	Airfields	2,616	33	2,168	23	3,232	5	3,237	16	-	16
	Communications	6,984	580	6,573	566	10,087	215	10,302	44	2	46
	Army Support	1,609	3,288	1,443	3,188	1,696	974	2,670	5	16	21
	Miscellaneous	48	-	49	-	29	-	29	-	-	-
	Leaflets	53	-	52	-	-	-	(b)	-	-	-
	TOTALS	11,450	3,901	10,431	3,777	15,311	1,194	16,505	66	18	84
SARDINIA	Airfields	-	128	-	112	-	5.9	5.9	-	-	-
	Industries	-	8	-	8	-	1.8	1.8	-	-	-
	Miscellaneous	4	49	4	45	-	7.2	7.2	-	-	-
	Leaflets	4	-	4	-	-	-	(b)	-	-	-
	TOTALS	8	185	8	165	-	14.9	14.9	-	-	-
CORSICA	Harbours	95	-	95	-	180	-	180	2	-	2
	Airfields	36	-	36	-	54	-	54	-	-	-
	Communications	-	-	1	-	1.3	-	1.3	-	-	-
	Leaflets	5	-	5	-	-	-	(b)	-	-	-
	TOTALS	136	-	137	-	235.3	-	235.3	2	-	2

(b) ITALY: 16,330,000 SARDINIA: 1,150,000 CORSICA: 1,643,000

Source: War Room Monthly Summary of M.A.C. Operations. Air Ministry War Room (Stats. Section)

S E C R E T

APPENDIX 11

MEDITERRANEAN AIR COMMAND

FIGHTER OPERATIONS

SEPTEMBER 1943

COMMAND	OFFENSIVE PATROLS & SWEEPS	ATTACKS ON LAND FORCES/MT/A.D.'s		SEARCHES & ATTACKS ON SHIPPING	SHIPPING PROTECTION & ESCORT	ESCORT TO AIRCRAFT	LOCAL DEFENCE	TOTAL DAY SORTIES	N I G H T				TOTAL NIGHT SORTIES	TOTAL SORTIES
		BOMBING	MG/CAN.						OFFEN.	INTR.	SHIP- PING	LOCAL DEF.		
NORTH WEST MIDDLE EAST AFRICA AIR FORCE														
R.A.F.	3	-	-	79	2,106	37	528	2,753	18	21	-	-	39	2,792
U.S.A.A.F.	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MALTA AIR FORCE														
R.A.F.	-	-	-	-	313	-	83	396	-	13	-	20	33	429
U.S.A.A.F.	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NORTH WEST AFRICA AIR FORCE														
R.A.F.	85	485	499	21	905	1,469	3,136	6,600	94	-	135	505	734	7,334
U.S.A.A.F.	306	3,630	985	24	1,785	1,061	3,702	11,493	2	-	62	168	232	11,797
FRENCH	141	-	-	-	1,108	43	245	1,537	-	-	-	-	-	1,465
TOTALS	535	4,115	1,484	124	6,217	2,610	7,694	22,779	114	34	197	693	1,038	23,817

ALLIED FIGHTER CASUALTIES (By Enemy Action)

	Dest. or Missing	Damaged
N.A.A.F.	91	28
M.E.A.F.	16	2
MALTA A.F.	-	-
	<u>107</u>	<u>30</u>
R.A.F.	63	10
U.S.A.A.F.	42	17
FRENCH A.F.	2	3

Source: War Room Monthly Summary
of M.A.C. Operations.
Sept. 43. Air Ministry War
Room (Stats. Section)

SALERNO OPERATIONSALLIED NAVAL SHIP CASUALTIES

Up to, and including, 20 September 43., the date accepted by H.M. Admiralty as the close of Salerno Operations, Allied naval casualties to ships caused by German air attacks were as follows:-

<u>BRITISH</u>	<u>SUNK</u>	<u>DAMAGED</u>
Landing craft/ships	3	6
Hospital ships	1	
Destroyers		3
Monitors		1
Merchant Vessels		1
Cruisers		1
Battleships		1

<u>AMERICAN</u>	<u>SUNK</u>	<u>DAMAGED</u>
Landing craft/ships	2	4
Destroyers	1	
Merchant vessels	1	1
Tugs	1	
Cruisers		1

Note. All the above were either sunk, or damaged sufficiently badly to leave the assault area.

Source: Admiralty Battle Summary on Salerno Operations
(A.H.B. Ref. II.K/18/30)

S E C R E T

APPENDIX 14

PROVISIONAL ORDER OF BATTLE -
'SHINGLE'

TACTICAL AIR FORCE

C.G. N.A.T.A.F.	C.G. XII A.S.C.	31 Gp.	3 Sqdns. Spits.	Naples
		324 Wing	4 " "	"
		33 Gp.	3 " P-40	"
		324 Gp.	3 " P-40	"
		27 Gp.	3 " A-36	"
		86 Gp.	3 " A-36	"
		111 Sqdn.	1 Sqdn. P-51 Tac/R	"
		600 Sqdn.	1 Beau. N.F.	"
		415 Sqdn.	1 " " "	"
		225 Sqdn.	1/2 Sqdn. Spit Tac/R	"
	A.O.C. T.B.F.	79 Gp. or)	3 Sqdns. P-40	Corsica) Det-
		239 Wing)		ached
				from
) D.A.F.
	A.O.C. D.A.F.	244 Wing	4 " Spits.	Naples
		47 Gp.	4 " A-20	Naples
		64 Fighter Wing		
		12 Gp.	4 Sqdn. B-25	Naples
		340 Gp.	4 " "	"
		321 Gp.	4 " "	Foggia
		17 Gp.	4 " B-26	Sardinia
		320 Gp.	4 " "	"
		319 Gp.	4 " "	"
		267 Sqdn. Air Transport		Bari
		57 Gp.	3 Sqdns. P-40	Foggia area
		79 Gp.	4 Sqdns " } Less	Termoli "
		239 Wing	6 " " } 4 Sqdns.	" "
		7 (S.A.) Wing	3 " Spits.	" "
		285 Wing	(1/2 225 Sqdn. Spit.	" "
			(Tac/R.	" "
			(Det. 4)	" "
			(S.A.) Sqdn. Spit. Tac/R.	" "
			(Det. 682	" "
			((P.R.) Sqdn. " "	" "
		232 & 3		
		S.A.A.F. Wing 2 Sqdns. Balts.		Foggia area.

Source. TAF/60/AIR) 30 Dec. 43.
Appendix B)

S E C R E T

"SHINGLE" OPERATION PHASE 3

Strength and Effort by Type aircraft
Period 22 Jan. to 15 Feb. 44 (inclusive)

Type	Average Aircraft		Total Sorties Aircraft Airborne	Total Effective Sorties
	On Hand	Operational		
B-17	232	169	2052	1577
B-24	393	250	1665	966
B-25	284	217	1595	1303
B-26	201	148	1321	735
A-20	75	50	837	731
A-36	106	81	1626	1385
P-38	114	92	886	697
P-39	118	96	2173	2115
P-40	245	188	4875	4555
P-47	172	133	1129	1028
P-51	11	8	266	256
Spit. (U.S.)	138	104	2358	2312
Beau. (U.S.)	47	34	350	304
P.R. (U.S.)	37	27	171	154
Wellington	86	69	504	431
Kittyhawk	117	95	1061	1034
Baltimore	51	45	486	476
Boston	32	26	199	186
Hudson	22	14	128	125
Mosquito	18	17	86	86
Beau.	57	37	199	192
Airocobra	56	41	88	88
Hurricane	14	9	28	28
Spitfire	277	237	5240	5125
Total All Types	2903	2187	29323	25889

Source: Operations in Support of Shingle (M.A.A.F./Tab.O.) II.J.11/49
A.H.B.

SHINGLE

Letter from Gen. Baker to Gen. Arnold
6 Mar. 1944

Shortly after I came here 'Shingle' was launched. The landing was successful and I was personally critical of the slow progress made in extending the bridgehead, the failure to move rapidly to the high ground from the North and to take the then lightly-held village of Cisterna, thus to insure a sufficiently deep penetration to guarantee that no artillery fire would fall on the harbour of Anzio or on our landing strip. After walking and driving over the terrain I now feel that Alexander and Clark have a good case. If they had pushed the two divisions in the first landing on to these points, there is little doubt in my mind that the Germans would have gotten between them and Anzio and that, with their supplies cut off, they would have eventually have been overcome..... When Gen. Spaatz came down here two weeks ago he felt exactly as I had. He spent a week or two with us and talked to Clark and his staff and to Alexander and the Army Group Staff. I made no effort to influence him. In fact I pointed out to him the failure of the Ground Forces to use airborne troops to set a brigade down on the high ground, and the slow build-up and expansion in the bridgehead. When he left here he expressed, as his private opinion, the view that Clark was right, that we would have lost the bridgehead if the Ground Forces had pushed any further.

I think you know what ardent airmen Tooey and I are and that we both have the aggressive spirit. When you find the two of us in agreement on this point you should be less critical of the Ground Forces. There may have been an intermediate plan which would have worked coincidentally with the landing in Anzio, put down a brigade on the high ground from troop carriers.⁽¹⁾ Immediately after the landing, rushed small mechanised units out to join with the paratroops; rushed small mechanised forces out towards Rome and cut all highways leading from the German main position to Rome and to the North - something in the order of the way General Stewart used his cavalry in the Civil War..... I feel that this aggressive spirit might have induced the enemy to begin a hurried withdrawal from the 5th Army front. A follow-up then might have brought on a full-scale enemy retreat as happened at El Alamein. Here again, however, we must remember that the terrain and the weather conspired to bring about an entirely different situation than that which pertained in the desert. In the desert campaign flanking movements were always possible. The weather and the terrain made that possible. Here, both the weather and the terrain have forced any advances to be made through mined defiles with heavy artillery concentrations on the high ground on either side. That makes a very different picture out of it entirely.

There seems to have been a feeling on the part of some distant strategists and critics that, in some way, the Air let the Ground and Sea forces down in this 'Shingle' operation. Actually there have been continual messages coming back from Alexander and from Clark lauding and complimenting the air effort. Here, I feel, is really the basis for the criticism against the Air operations in the 'Shingle' campaign. - The military critics have not appreciated what Air Forces can and cannot do and the true influence of the weather in placing a ceiling on their capabilities. When the Navy announces that it cannot inload supplies with a wind of more than force four or with a high tide and rough seas, nobody criticises the Navy! That is an accepted limitation in naval operations. The same is true of the Ground Forces. When they come to a swollen stream flowing at such a strength that it prevents their

/laying

(1) An airborne operation for the purpose of landing troops on D Day was drawn up but abandoned when more landing craft became available.

laying their pontoon bridges, or when they come to a mined defile, it is well understood that they are halted for the moment. You have not, I am sure, appreciated completely the limitations which the weather has imposed on the air effort here during the last six weeks. We have had almost daily heavy rains. On many days it has rained steadily for 12 to 24 hours. There have been, generally, low icing levels. the clouds have rested on mountain tops and generally the visibility has been greatly reduced. Despite this weather condition, we have averaged six hundred to a thousand sorties a day; we have maintained constant patrols, day and night, over the bridgehead; our medium bombers have worked on enemy flying fields to the point where the enemy's air effort has averaged less than one hundred sorties a day. We have also made two of our most successful long-range attacks into Germany with the Strategic Air Force and they have been used most successfully in cutting communications, in attacks on airfields in Southern France and, on two critical occasions, on the battlefield.

The big lesson I have gained from participating in the 'Shingle' operation is this: amphibious operations are the most difficult form of military movement. They should never be undertaken except as a last resort for the very good reason that you deliberately hand every advantage to the enemy. When undertaken, amphibious operations will be a failure if opposed by an enemy of the character of the Germans in strength unless they are within the reach of an overwhelming friendly air force. For example, some of the critics have wondered why the landing point for 'Shingle' was not North of Rome. Had it been, the Navy could not have supplied it for the very good reason that we could not have furnished them adequate air cover. Troops in a bridgehead there would have been continually pounded by German aircraft and would have been beyond the support of our own fighter aviation in sufficient strength to save them. I hope the C.C.S. will bear these things in mind in 'Anvil'. In that connection, I am quite certain that our best plan, the one which will insure the greatest support for 'Overlord' and pin down the greatest forces will be a movement in strength right on up the Italian Mainland. By that time we shall be in late Spring weather which, if it is normal, will permit us to slow down to a walk any pull-out of German divisions.

The picture with respect to the future I think is this and you can rely on it. - The German will not break up our bridgehead and do at Anzio as he almost did at Salerno. The Air can and will prevent that, ably aided and abetted by the hard-fighting ground forces. We shall go forward and capture Rome when the weather permits our forces to reach their maximum capabilities and not before: we shall be able, with Spring and Summer weather, to contain the German divisions now in Italy. If they attempt to pull out we can effect tremendous delay and can so cut them up that they will be of little use elsewhere.

S E C R E T

APPENDIX 17

H. Q., N. A. T. A. F.
Ref:- P. TAF/69/AIR

13 March, 1944.

CASSINO OPERATION

The plan of air operations for the reduction of CASSINO TOWN on March 14th, or the first day thereafter that weather permits is as follows:-

PART I ATTACK ON CASSINO TOWN AND SUPPORTING ACTIONS ON MORNING
OF D DAY

1. The attack of Cassino proper will be carried out by 11 Heavy Groups of the M. A. S. A. F. and 5 Medium Groups of the M. A. T. A. F. in accordance with following schedule: (Note that two time schedules are specified. We will indicate in our order of execution which time schedule is to be effected.)

Schedule "A"

Schedule "B"

0730 hours	1 Group	57 Wing	0830 hours
0740 "	1 "	57 "	0840 "
0750 "	1 "	15th Air Force	0850 "
0800 "	1 "	" " "	0900 "
0815 "	1 "	" " "	0915 "
0830 "	1 "	" " "	0930 "
0845 "	1 "	" " "	0945 "
0900 "	1 "	" " "	1000 "
0915 "	1 "	" " "	1015 "
0930 "	1 "	" " "	1030 "
0945 "	1 "	" " "	1045 "
1000 "	1 "	" " "	1100 "
1015 "	1 "	" " "	1115 "
1030 "	1 "	42 Wing	1130 "
1045 "	1 "	42 Wing	1145 "
1100 "	1 "	42 Wing	1200 "

Time schedule is to be maintained as rigidly as possible. In no case will any bombing of the town take place after 1105 hours (Schedule "A") or 1205 hours (Schedule "B").

The object of the attack is to accomplish complete reduction of Cassino Town. Particular attention will be directed to the destruction of all buildings within the town proper.

(a) Alternative targets in case any particular group is unable to bomb because of cloud coverings are as follows:-

(i) Heavy Groups - Targets as specified in Part II for afternoon.

(ii) B-25 Groups - Gun area at G-817103 - 820103 - 820098 - 817098

(iii) B-26 Groups - Ceprano bridges at G-525274

(b) No bombs of less than 1,000 lbs weight to be employed. No long-delay fuses will be used. The 57 Wing will attach whistling devices to as many bombs as practicable.

(c) Refer to A. 240 of the Headquarters for 7th March, 1944 for special communication procedure between bombers and XII Air Support Command ground station.

(d) Upon landing all heavy groups and B-26 Groups will reload with 1,000 lb bombs. B-25 Group will reload with fragmentation bombs.

2. (a) New B-24 Groups will attack the factory and dump at Fontana Liri (G.623340) and town of Roccasecca.
- (b) Light bombers and fighter bombers of the XII A.S.C. will operate in the Anzio Beachhead area and attack gun areas during the morning of D Day.
- (c) Desert Air Force Baltimores will attack gun areas during the morning.

PART II

SUPPORTING ATTACK ON D DAY (AFTERNOON)

1. (a) Heavy Groups of M.A.S.A.F. will attack the following targets:-
 - (1) Piedimonte Town including gun area G-791223 - 794225 - 796221 - 792219
 - (2) Pignataro Town at G-821150
 - (3) Castraciello Town at G-750256
 - (4) San Giorgio Town at G-804118
 - (5) Pontecorvo Town at G-722169
 - (6) Aquino Town at G-748211
 - (7) Gen. area at G-817102 - 820103 - 820098 - 817098.
 - (8) Ceprano bridges at G-595274.
 - (b) B-25 groups will attack gun and assembly area G-800228 - 802233 - 805232 - 803237 - and gun areas G-782225 - 789225 - 789222 - 782222.
 - (c) Freshman heavy groups will attack Frosinone Town at G-460372.
 - (d) Light bombers and fighter bombers of the XII A.S.C. will act in direct support of the Cassino assault during the afternoon.
 - (e) Desert Air Force Baltimores will attack gun areas during the afternoon.
2. (a) Fighter cover for both beachhead and Cassino area will be provided throughout the day by the XII A.S.C.
 - (b) Desert Air Force fighter-bombers will attack road movements on Highway 6 throughout the day creating road block in Valmontone and Ferrentino Town if no movement is observed.
 - (c) During the night of D/D + 1 Wellingtons will attack Velletri, Genzano, Arricia, Albano and Frascati.

NOTIFICATION REGARDING THE DECISION FOR EXECUTION OR POSTPONEMENT WILL BE GIVEN NOT LATER THAN 1800 MARCH 12. IN THE EVENT THE OPERATION IS POSTPONED, THE SAME RULE WILL APPLY TO EACH SUCCESSIVE DAY UNTIL THE OPERATION IS COMPLETED OR CANCELLED.

Major General
 Commanding General
 Mediterranean Allied
Tactical Air Force.

BOMBING OF CASSINO 15 MARCH 1944
TIMING AND RESULTS OF ATTACKS

Force	Group	No. of a/c bombing	Scheduled T. O. T.	Actual T. O. T.	Interval between waves	No. of 1000 lb. bombs dropped on target	Results reported by Air Crews
57 Wing	340	36 B-25	0830	0832	12	140	Photos show numerous hits E. side of town. Good concentration in E. part of town.
	321	36 B-26	0840	0844	21	132	
15 Air Force	301	23 B-17	0850	0905	30	134	Alt. 22,000 ft. bombing short and left of assigned target
	2	23 B-17	0900	0935	8	132	Bd. from 17,000 ft. bombing in target area. Some in direction of Abbey and Abbey Hill. Smoke covered centre area.
	99	34 B-17	0915	0943	9	199	Bombed from 21,000 ft. Good concentration on S.E. edge of town. Some hits in vicinity of Monastery
	454	24 B-24	0930	0952	9	144	Bombed from 15,000 ft. S.W. portion town well covered
	97	35 B-17	0945	1001	1	207	Bombed from 18,000 ft. Bombs started on edge and extended into town. Hits near Highway 6 roads to R.R. station
	459	28 B-24	1000	1002	18	168	Bombed from 14,500 ft. Hit target as briefed. Results good.
	456	18 B-24	1015	1020	14	106	Alt. 14,000 ft. Concentration in Cassino
	455	35 B-24	1030	1034	41	210	N.R.O.
	376	19 B-24	1045	1115	5	139	Alt. 19,000 ft. Bombs in target area. Good results
	98	23 B-24	1100	1120	12	135	Alt. 20,500 ft. Target well covered. Concen- tration in east and centre part of town. 13 B-24's dropped bombs in friendly territory.
42 Wing	17	35 B-26	1130	1132	13	136	Concentration of bombs in N.W. section of target. Many strings to S.W. and 1 string $\frac{1}{2}$ mile N. of town.
	319	36 B-26	1145	1145	15	112	Excellent concentration of bombs in target area with fair concentration on N. & W. sections of town.
	320	30 B-26	1200	1200		120	Bombs fell in good concentration through centre and N. sections of town. Observation of results difficult due previous bombing.
		435				2214	

AIR ATTACKS ON RAIL AND ROAD COMMUNICATIONS

by Prof. S. Zuckerman

An analysis of operations carried out in Sicily and S. ItalyGENERAL CONCLUSIONS

1. If the measure of success of air attacks on enemy rail and road communications is taken as the destruction of the means of communication, then the offensive carried out against rail targets in Sicily and Southern Italy must be regarded as an outstanding success. If, however, the measure of success were taken as the complete cutting and blocking of railway-lines and roads, then the offensive could be regarded as having partly failed in its purpose. There is little indication that the attacks prevented the enemy from moving from place to place within the limits imposed by the capacity of the transport at his disposal.

2. The two factors which contributed most to the strategical and tactical success of the offensive were the destruction and damaging of rolling-stock and repair facilities. Largely because of such damage, the Sicilian and Southern Italian rail systems had become practically paralysed by the end of July, 1943 - as a result of attacks on only six railway centres, Naples, Foggia, San Giovanni, Reggio, Messina, Palermo.

3. The attacks on these six centres appear to have added at least as much to the enemy's supply difficulties in Tunisia as did the losses he incurred at sea.

4. Major damage to the railway system in Sicily and Italy forced the enemy to other means of transport, especially to the use of motor-transport, and helped to consume his petrol supplies.

Local, and possibly a general, shortage of coal may have contributed to the decline in railway traffic. It seems fair, however, to assume that damage to the railway distribution system was a major factor in producing this shortage, since it is improbable that motor-transport would have been used for long hauls that might have been effected by rail - had it been possible to work the railway system.

The dislocation of the electric railway system in Southern Italy was another factor which would have forced the enemy to a greater use of steam trains - given that the railway system had not suffered other critical damage.

5. The enemy managed to maintain a ferry service across the Messina Straits until the end of the Sicilian hostilities. A fairly successful attempt was also made to compensate for the losses in traffic resulting from direct damage to the ferries, by substituting coastal vessels.

6. The damage inflicted on the railway system represented more than a potential loss in traffic flow; it also represented an actual loss in goods.

7. In general, the normal peace-time capacity of a railway system is far in excess of war-time military requirements. After the railways of Sicily and Southern Italy had been severely hit, they were inadequate to deal with the enemy's military needs.

8. Damaging a railway system in the manner that has been described hits the civilian population at least as hard as it does the military, and has serious effects on morale.

9. It is worth noting that the damage suffered by the Southern Italian and Sicilian railway system will have very lasting effects, and will probably be felt by the civil population long after hostilities have ceased.

10. The strategical effect of destroying the enemy's means of rail communication is best achieved by attacks on large railway centres which contain important repair facilities and large concentrations of locomotives and rolling-stock. The sub-targets (e.g. tracks, rolling-stock, warehouses, repair sheds, etc.) in a large railway area are very concentrated. As a result, the general risk of damage from bombing, if the attacks are carried out in adequate strength, is very high.

The efficiency of a railway system appears to fall very rapidly when bombing simultaneously leads to an increase in the calls upon, and a decrease in the capacity of the repair facilities,

11. In the Italian railway system, repair facilities, and especially major repair facilities, are concentrated in a few large centres such as Naples, Palermo and Turin. At any given moment, about half of the available locomotives in each compartment of the Italian railway system were also concentrated in a few large centres,

12. The high vulnerability of rolling-stock to concentrated bombing is partly explained by the fact that the direct effects of the bombs are greatly increased by indirect causes, such as spreading fires, etc. etc. The relation between damage to rolling-stock and scale of attack has been determined, and is shown in Fig.17 of the main report.

13. The only major counter-measure which the enemy used to decrease the risk of damage to the railways was the dispersal of locomotives. The extent to which the dispersal of rolling stock is possible is, however, small, and is determined by the more or less fixed capacity of different railway areas.

14. A far more costly air effort would be needed to achieve a tactical success, in the sense of a sudden blocking of communications at any given series of points, than has proved necessary to produce the strategical effect of reducing traffic potential by the destruction of rolling-stock and repair facilities.

15. In spite of the heavy cost, it may be a vital necessity in certain situations to attempt to disrupt enemy movement suddenly by means of air-attacks. The heavy bombing of Eboli and Battipaglia during the period of the Salerno battle represents a case in point,

16. Since the strategical results that have been discussed above in general outweigh immediate tactical effects, and since they can be achieved by a less costly air effort, it is necessary to consider how soon their effects are felt in the sphere of tactics. Unfortunately no definite answer can yet be given to this question. In the case of the Messina ferry service, the fall in the first three months of 1943 was no more than about 20% of the average level of flow for the last six months of 1942. In April, however, the flow fell 17% in relation to the March figures; in May it fell 42% in relation to the April figures, and in June 50% in relation to the May figures. In the case of southbound traffic from Naples, the fall, after the severe damage inflicted in July, amounted to at least 50% during the following month.

These figures in no sense indicate absolute limits in speed of effect. The latter is largely bound up with the scale of effort that can be applied in any given period of time. Major falls in traffic could have been achieved more rapidly had it been possible to expend a larger effort on large railway centres.

SPECIAL CONCLUSIONS

17. Attempts to achieve an immediate dislocation of enemy movement are unlikely to prove worth while except in a battle area.
18. Railway and road bridges are uneconomical and difficult targets, and in general do not appear to be worth attacking except where special considerations demand it in the tactical area.
19. The heavy bombing of tunnels or isolated stretches of line is in general also uneconomical.
20. Attempts to create road blocks do not appear to be worth while, except in those cases where main roads pass through small congested towns in the tactical area. The indications are that the heavy bombing of such towns would result in an effective slowing down of enemy movement. The use of long delay action bombs, in addition to ordinary bombs, seems to be indicated in such operations.
21. The bombing of cross roads in the open, if carried out only or mainly for the purpose of cratering the roads, is not worth while, except in those cases in the tactical area where Intelligence makes it certain that the enemy would be unable to by-pass the roads easily.
22. In estimating for the weight of attack necessary to cause critical damage in large railway centres, it is advisable to attempt to cause the maximum of damage and dislocation as rapidly as possible, so as to embarrass the repair facilities. Present standards of bombing-accuracy are sufficiently good to yield a high expectation that a large proportion of bombs aimed at a large railway area will fall within the area. If heavy attacks are not made, attacks by single intruders may prove as valuable as light attacks by medium or heavy bombers.
23. For a variety of reasons a few large railway centres represent a far better bombing target, so far as strategical effects are concerned, than do a large number of smaller railway centres.
24. Experience in Sicily and Southern Italy shows that the turnover of goods handled by the railways is not materially affected by diffuse attacks on, and diffuse effects in, the towns in which the railway centres are situated. It seems probably that before the turnover falls significantly, material damage must be done to railway installations.
25. At the present stage of the war, it could be regarded as unwise to experiment in attacks on railway centres with bomb-loads very different from those that have been used so successfully in attacks on the Sicilian and Italian railway yards. Most of the bombs used in these attacks have been of 500 lb calibre and 50% charge-weight ratio. For attacks on railway targets the 0.025 sec. delay fuse appears to be the best of those that are at present available.

Bombing Survey Unit - Palermo
Mediterranean Air Command.
28 December, 1943.

SECRET

OPERATIONS STRANGLE AND DIADEN

STATUS OF ITALIAN RAILWAYS, 16 MARCH - 3 JUNE 1944

Source:- Chief Engineer, State Railways, Italian Ministry of Communications.

SECRET

APPENDIX 20

[illegible]

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---- - blocked
o     - open
x     - no data

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SECRET

G. 260700/020/9/50.

SECRET

MEDITERRANEAN ALLIED TACTICAL AIR FORCE

ORDER OF BATTLE AT 27 APRIL, 1944

G. 260700/UPW/8/50

SECRET

C.G. M.A.T.A.F.

			Location	Notes
	324 WING	43 Sqn) 72 ") 93 ") 111 ")	Lago	Admin control DAF
	244 WING	92 Sqn) 145 ") 601 ") 417 (RCAF))	Venafro	
64(F) WING	79 GROUP	85 Sqn) 86 ") 87 ") 99 ")	Marcianise	
	324 GROUP	314 Sqn) 315 ") 316 ")	Cercola - moving to new site not yet completed	
C.G. XII TAC	415 Sqn NF	Beaufighter VI Mk. IV A.I.)	Marcianise	Admin control DAF
	600 Sqn NF	Beaufighter VI Mk. IV A.I.)		
	111 Sqn Tac/R	P-51	Santa Maria	
	225 Sqn Tac/R	Spitfire)	Lago	Admin control DAF
	40(SA) Sqn Tac/R	Spitfire)	- " -	Admin control DAF
	208 Sqn Tac/R	Spitfire	San Angelo	Admin control DAF
	2/33(French) Sqn Tac/R	Spitfire	In process of moving to Italy	
				/84 Sqn

SECRET

C.G. M.A.T.A.F.		Location	Notes
C.G. XII T.A.C.	84 Sqdn)		
	47 GROUP 85 ")	Cercola	
	A-20 86 ")		
	87 ")		
	522 Sqdn)	Castel Volturno	
	27 GROUP 523 ")		
	P-47 524 ")		
	525 Sqdn)	Pomigliano	
	86 GROUP 526 ")		
	A-36 527 ")		
87(F) WING	237 Sqdn)	Poretta	
	238 ")		
	251 WING Spit IX 451 (RAAF))		
			Admin control DAF
	154 Sqdn)	Poretta	
	322 WING 232 ")		
	Spit IX 243 ")		
	64 Sqdn)		
	57 GROUP 65 ")	Alto	Admin control XII TAC
	P-47 66 ")		
A.O.C. D.A.F.	2/5 (French) Sqdn P-47	Alto. In process of moving to Corsica	
	3(RAAF) Sqdn)		
	112 Sqdn)		
	239 WING 5 (SAAF) Sqdn)		Under operational control XII T.A.C.
	Kittyhawk IV 450(RAAF) Sqdn)	Inello. Possibly moving to Santa Maria later	
	250 Sqdn)		
	260 Sqdn Mustang III)		
	1(SAAF) Sqdn Spitfire VIII)		
	2(" " " IX)	Trigno	
	4(" " " IX Bomber)		
	7(" " " IX)		
	7(SA) WING		

G. 260700/UNW/8/50

SECRET

C.G. M.A.T.A.F.				Location	Notes
A.O.C. D.A.F.	285 WING	241 Sqdn Strat/R Spitfire VIII & IX		Trigno	
		Det 683 Sqdn PR Spitfire XI		"	Admin control MAPRW
		318 Polish Sqdn Tac/R Spitfire		Madna. In process of moving to Italy	
	232 WING	18 Sqdn Boston III and IIIA)	Marcianise	Under op.control XII T.A.C.
		114 " " " " ")		
	232 WING	13 " Baltimore IV and V)	Biferno	
		55 " " " " ")		
	3(SA)WING	12 (SA) Sqdn Marauder			
		21 (SA) " Baltimore IV and V)	Biferno	
		223 Sqdn " " " ")		
57(B) WING		4th STORMO (I.A.F.) Mc205		Nuova	
	321 GROUP	445 Sqdn)		
		446 ")	Alesani	
	B-25	447 ")		
		448 ")		
	340 GROUP	486 Sqdn)		
		487 ")	Solenzara	
	B-25	488 ")		
		489 ")		
	310 GROUP	379 Sqdn)		
42(B) WING		380 ")	Ghisonaccia	
	B-25	381 ")		
		428 ")		
	319 GROUP	437 Sqdn)		
		438 ")	Decimomannu	
	B-26	439 ")		
		440 ")		

SECRET
- 3 -

APPENDIX 21

	<u>C.G. M.A.T.A.F.</u>		<u>Location</u>	<u>Notes</u>
42(b) WING		441 Sqdn.	Decimomanmu	
	<u>320 GROUP</u>	442 "		
	B-26	443 "		
		444 "		
		34 Sqdn.	Villacidro	
	<u>17 GROUP</u>	37 "		
	B-26	95 "		
		432 "		
		1/22(French) Sqdn	Villacidro. In process of moving to Sardinia	
	<u>31 ESCADRE</u>	2/20(") "		
51(TC) WING		10 Sqdn	Capodichino & Sardinia	
	<u>60 GROUP</u>	11 "	Gerbini	
	C-47 & 53	12 "		
		28	Ponte Olive	
	<u>62 GROUP</u>	7 Sqdn		
	C-47 & 53	8 "		
		51 "		
			Brindisi	

	<u>C. in C. A.A.I.</u>	<u>Aircraft</u>	
	V. CORPS	651 AOP Sqdn	Auster III
8th ARMY	XIII CORPS	(655 (1 Flight) AOP Sqdn	" "
		(657 AOP Sqdn	" "
5th ARMY	(XI CORPS	654 AOP Sqdn	" "
	(VI CORPS(1 Div)	655 (2 Flights) AOP Sqdn	" "
5th ARMY			

Admin
control
DAF

/April

MEDITERRANEAN ALLIED COASTAL AIR FORCEORDER OF BATTLE FORUNITS IN ITALY, SARDINIA AND CORSICA
AT 28 APRIL, 1944

				<u>Location</u>
	<u>337 WING</u>	417 USA Sqdn	Beau VI	Moving to Borgo
	<u>332 WING</u>	328 FAF Sqdn	Spit V & IX	Moving to Calvi
	<u>248 WING</u>	283 Sqdn	Warwick (ASR)	Detachments) Taranto) Grottaglie)
242 GROUP	<u>286 WING</u>	1435 Sqdn	Spit IX	Brindisi
		249 "	Spit VC	Grottaglie
		6 "	Hurricane (RP)	Grottaglie) Borgo)
	<u>323 WING</u>	221 Sqdn	Well. XIII	Grottaglie
		253 "	Spit V & IX	Foggia
		32 Sqdn	Spit VIII & IX	Foggia
		73 "	Spit V & IX	"
		255 "	Beau VI	Foggia detachment Grottaglie
		608 Sqdn	Hudson	Detachment) Monte Corvino)
		416 USA Sqdn	Beau VI	Pomigliano
	<u>62 WING</u> U.S.A.	293 Sqdn	Warwick) Walrus)	Foggia) Capodichino) Cutella)
			A. S. R.	

/328 WING

63 WING U. S. A.	<u>328 WING</u>	23 Sqdn	Mosquito VI	Alghero
		39 "	Beau X (RP)	"
		272 "	Beau X (RP)	"
		414 US Sqdn	Beau VI	Elmas
		346 US "	P-39	(Ghisonaccia)
				(Elmas)
				(detachment)
		345 US Sqdn	P-39	Alghero
		284 Sqdn	Warwick) A. S. R.	Alghero
			Walrus)	Borgo
		14 Sqdn	Marauder I & II	Alghero
		326 FAF Sqdn	Spit V & IX	Ghisonaccia
		327 FAF "	" " " "	Ajaccio
		4 S. F. A. F. Sqdn	Walrus A. S. R.	Ajaccio
		1 U. S. Sqdn	PBY	Alghero
				Ajaccio
	<u>350 GROUP</u>	347 US Sqdn	P-39	Ghisonaccia

O. G. M. A. S. A. F.

15th Air Force - Order of Battle
28th April 1944

5th Bombardment Wing	2nd Bomber Group	20 Sqdn	Amendola
	B-17	49 "	
		96 "	
		429 "	
	97th Bomber Group	340 Sqdn	Amendola
	B-17	341 "	
		342 "	
		412 "	

/99th Bomber

G. 260700/UFM/8/50

S E C R E T

			Location
5th Bombardment Wing	99th Bomber Group B-17	346 Sgdn	Tortorella
		347 "	
		348 "	
		416 "	
	301st Bomber Group B-17	32 Sgdn	Lucera
		352 "	
		353 "	
		419 "	
	463rd Bomber Group B-17	772 Sgdn	Celone
		773 "	
		774 "	
		775 "	
	483rd Bomber Group B-17	815 Sgdn	Sterparone
		816 "	
		817 "	
		840 "	
47th Bombardment Wing	98th Bomber Group B-24	343 Sgdn	Lecce
		344 "	
		345 "	
		415 "	
	376th Bomber Group B-24	512 Sgdn	San Pancrazio
		513 "	
		514 "	
		515 "	
	449th Bomber Group B-24	716 Sgdn	Grottaglie
		717 "	
		718 "	
		719 "	
	450th Bomber Group B-24	720 Sgdn	Manduria
		721 "	
		722 "	
		723 "	

/451st

S E C R E T

- 7 -

			Location
47th Bombardment Wing	451st Bomber Group B-24	724 Sqdn	Manduria
		725 "	San Pancrazio
		726 "	
		727 "	
55th Bombardment Wing	460th Bomber Group B-24	760 Sqdn	Spinazzola
		761 "	
		762 "	
		763 "	
	464th Bomber Group B-24	776 Sqdn	Pantanelli
		777 "	
		778 "	
		779 "	
	465th Bomber Group B-24	780 Sqdn	Pantanelli
		781 "	
		782 "	
		783 "	
	485th Bomber Group B-24	828 Sqdn	Venosa
		829 "	
		830 "	
		831 "	
49th Bombardment Wing	461st Bomber Group B-24	764 Sqdn	Torretto
		765 "	
		766 "	
		767 "	
304th Bombardment Wing	484th Bomber Group B-24	824 Sqdn	Torretto
		825 "	
		826 "	
		827 "	
	454th Bomber Group B-24	736 Sqdn	San Giovanni
		737 "	
		738 "	
		739 "	

/455th Bomber

G. 260700/UEW/8/50

SECRET

				<u>Location</u>	<u>Notes</u>
304th Bombardment Wing	455th Bomber Group B-24	740	Sqdn	San Giovanni	
		741	"		
		742	"		
		743	"		
	456th Bomber Group B-24	744	Sqdn	Stornara	
		745	"		
		746	"		
		747	"		
	459th Bomber Group B-24	756	Sqdn	Guilia	
		757	"		
		758	"		
		759	"		
305th Bombardment Wing	1st Ftr Group P-38	27	Sqdn	Salsola	
		71	"		
		94	"		
	14th Ftr Group P-38	37	Sqdn	Triolo	
		48	"		
		49	"		
306th Fighter Wing					

Forming

/306th Fighter

SECRET

306th
Fighter
Wing

82nd Ftr Group
P-38

95 Sqdn
96 "
97 "

Vincenzo

325th Ftr Group
P-47

317 Sqdn
318 "
319 "

La Senia

31st Ftr Group
P-51

307 Sqdn
308 "
309 "

San Savero

307th
Bombardment
Wing

Forming

Location

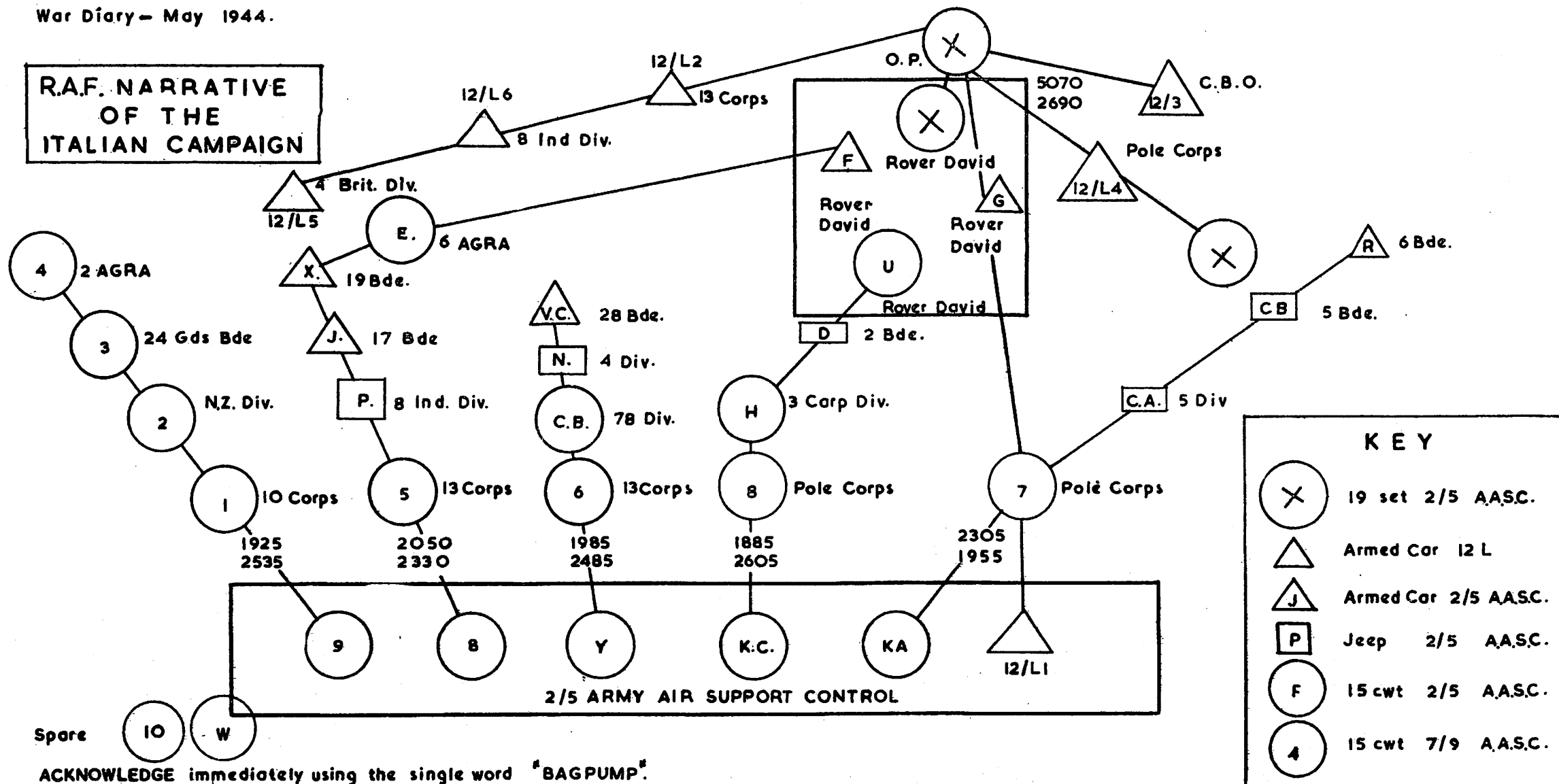
Notes

2/5 ARMY AIR SUPPORT CONTROL.
War Diary - May 1944.

SIGNAL INSTRUCTION NO. 65.

SECRET.

R.A.F. NARRATIVE
OF THE
ITALIAN CAMPAIGN



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5 May 44.

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APPENDIX 22

A.H.B.I. DIAG. NO. 114.

S E C R E T

APPENDIX 23

THE ANGLO AMERICAN OFFENSIVE IN ITALY
UP TO THE CAPTURE OF ROME

German Document
(Translation)

981A10 (D 11)

Ref: H.S.Report No. 20, para 4 - Army H.Q., Ottawa.

Source: G.M.D.S. - Narrative based on the War Diary of
Armed Forces Operations Staff

S E C R E T

2. THE ANGLO-AMERICAN OFFENSIVE IN ITALY UP TO THE CAPTURE OF ROME.(a) The Fighting up to the Breakthrough in the Senger Position

On 12 May, local enemy attacks directed against the Fourteenth Panzer Corps front on the previous day developed into a large-scale attack with strong air support, the point of main effort being at Minturno, Monte Faido and south of Cassino. General Alexander issued an order of the day, in which he called on his troops to destroy the German forces in Italy. The enemy press spoke of the beginning of a new offensive by Fifth and Eighth Armies under General Alexander. This offensive was said to be part of the combined operations plan, and to have been calculated to last for some time. It was said to have a more distant objective than that of the Cassino battles.

On 13 May the enemy made four penetrations. O.B.SW left it to the discretion of the higher commanders to carry out local withdrawals to previously prepared shorter lines of defence. On this day the enemy airforce made 1,300 operational flights over the forward area, as well as strong attacks on the central Italian railway system, where the sections Brenner - Verona and Milan - Rimini were cut. At first it appeared as though the primary objective of the enemy attack were the opening of the Liri valley. By the third day of the offensive, fighting was already going on around the Dora position, which had only been prepared for temporary occupation, and which, even at this time, was not completely in our possession. While 1 Para Div was successful in holding its position at Cassino, on 15 May, 94 and 74 Inf Divs had to be withdrawn to the Dora position. On 17 May Esperia and Pignataro were lost, as a result of which O.B.SW approved the withdrawal of Fourteenth Panzer Corps to a line running from Gaeta - west of Formia - Monte Lepezze - Senger position as far as Olivia - Pontecorvo - Piedimonte - the old line. This meant that the positions at Cassino were being given up. On 18 May town and monastery were evacuated according to plan. On 19 May the recently arrived 26 Pz Div (see below) was involved in heavy fighting on the fringes of the town of Pico, while at Pontecorvo and Aquino all attacks were repelled. Gaeta was given up on May 20. On the same day the enemy made a penetration at Fondi, and another on the following day west of this locality in the Senger position, piercing the position between Pico and Pontecorvo, which was still held by 1 Para Div for several days. The Senger position was broken, and the threat of a junction of the attacking enemy spearheads, which were rapidly forging ahead in a north and north-westerly direction, with the forces of the Nettuno beachhead could be plainly recognized. After surrendering our containing-positions around the beachhead, only the 'C' position remained as the last obstacle before Rome. O.B.SW and Armed Forces Operations Staff considered the 22nd of May as decisive (sitrep 23 May). If the enemy attack were not halted on this day, an effective break-through could no longer be avoided.

The enemy's success was to be accounted for mainly by his superiority in guns, tanks and aircraft. As opposed to this, the steadfastness of our own troops, "which in some instances amounted to self-immolation" was exemplary (Major v. Brauchitsch, General Staff Corps. Report on tour of inspection, dated 27 May). The enemy's main infantry strength consisted of the French troops of First French Expeditionary Corps, which comprised four formations, three of them Moroccan. "These are the only troops that do not shrink from mass hand-to-hand fighting in the Russian style, when our own troops had not been completely dispersed by enemy artillery fire. Fired by every success, they carry their comrades along with them; exploit every local success by prompt pursuit, and frequently help their less successful neighbours by lateral thrusts. Quick recognition of a situation and its correct evaluation constitute a pronounced characteristic of French leadership."

/The

The superiority of the enemy artillery was especially noticeable in that he could direct his artillery fire systematically from the air, while our own artillery aircraft were wholly lacking. The enemy air supremacy was decisive; our own aircraft on the other hand, only made their appearance over the front in small numbers, and brought no sort of relief to the ground troops. On 20 May, at the conference of the Armed Forces Operations Staff, the Deputy Chief of Staff raised the point of whether the code word "Marder" (major enemy landing) could not be given out for the Luftwaffe, as the effects of continued successful enemy attacks would be equal to those of a major landing (sitrep 20 May). When it became known on the following day that the Luftwaffe had been given orders to undertake fighter protection and commitments over the front in the Rome area under special conditions only, General v. Buttlar pointed out that in that case A.O.K. 10's operations had no sense. The question was to go before the Chief of the Armed Forces Operations Staff at the midday session (sitrep 21 May).

Even in the initial stages, those of our formations (71, 94, 44 Reichsgren Divs, 15 Pz Gren Div) committed in the main attack sector suffered heavy losses. As early as 22 May, 71 Inf Div was not only in need of reinforcements but actually required complete reorganization. 94 Inf Div was in similar condition.

(b) Review of the Situation and our own Countermeasures.

It was immediately clear to the German Supreme Command that the attack under way against the right wing of 10 German Army by nine infantry and two armoured formations as well as other unattached armoured formations, was an operation with a far-reaching objective, and that it was the first phase of the planned general offensive of the Allies. From the start our own countermeasures were subject to a severe handicap. Although a number of the enemy formations up to now assumed to be in the rear areas of the southern front were identified at the front itself, the enemy appeared to be holding a further number of unattached formations (e.g. 36 Amer, 1 Cdn Inf, 6 S. African Armd Divs) in the Naples area ready for operational commitment (Communication from Gen. v.B. 15 May; report from O.B.SW 16 May). With these he could make an enveloping landing at any time. Furthermore, three French formations and one American were assumed to be now in Corsica. These were probably the advance troops of the North African reserve, earmarked for a landing in southern France. It was also conceivable that this Corsican group had been provided for a new landing on O.B.SW's Tyrrhenian flank; even that the enemy, by relinquishing his designs on the French Mediterranean coast, would commit all his free western Mediterranean forces against Italy. This might well mean that the entire western invasion would not take place, and that the Italian theatre of war would become the real "Second Front" (sitrep 19 May). Furthermore, on 15 May the port of Bari was crowded with an unusual number of vessels, which occasioned a passing concern for the Adriatic flank too (sitrep 16 May), and the expectation that the enemy would also advance from the Nettuno bridgehead. The natural consequence of these considerations was that those at high command levels could only resolve hesitatingly and step by step to release the major reserves, which were being held ready on the coasts and in northern Italy, for the threatened right wing of Tenth Army. The situation was similar to that which was to prevail in Normandy a month later. Here too the possibility of a second large-scale landing in the area of A.O.K. 15 curtailed the early and concentrated commitment of the available reserves on the Cotentin front.

Soon however, 1 Cdn Inf Div, 6 S. African Armd Div, etc., were identified at the front, and thus the concentration of forces in the Naples area was known to have been dispersed (sitrep 19 May). At about the end of May, another fact became apparent, which was decisive for an

/appreciation .

appreciation of the enemy's intentions. This was the gradual draining away of the N. African reserve (Communication Gen v.B. 2 Jun).

The events resulting from this situation belong to the next chapter of this narrative.

O.B.SW's first countermeasure was to bring up 90 Pz Gren Div from the mouth of the Tiber. The last elements of this division departed early on 14 Apr, and the first regiment to arrive was committed against an enemy thrust from Monte Maio in the direction of San Giorgio. On 16 May O.B.SW released 26 Pz Div from the zone of A.O.K. 14 as a further Army Group reserve for the southern front, and in addition, during the next few days the following formations and units were assigned for duty on this front:

1027 Gren Regt (mech)

8 Gren Regt and the
Panther Battalion of 3 Pz Gren Div

278 Inf Div (less one regiment) (This division
had been formed in Istria)

2 Bn 3 Regt. (Pz Gren Div) "Brandenburg"

Furthermore, 305 and 334 Inf Divs were transferred from the left wing of Tenth Army, though the operations of the enemy airforce delayed this movement considerably.

From the very beginning, the complementary measures taken by the Supreme Command affected the other theatres of war too. As replacement for 278 Inf Div, which had been formed in Istria, the Alarm Regiment (then in Hungary) of the Division "Brandenburg", as well as both the battalions of this division which were still committed with Army Group "Mitte" (Eastern Front), were to be moved up as approved by the Fuehrer on 16 May. (Entry in W.F.St Diary, 16 May). A communication to this effect was sent to the General Staff, Army, on 19 May. As replacements for these, it was assigned two of the four battalions originally intended for the Crimea, but which, in consequence of the evacuation of the peninsula, had not been transferred to that theatre of operations. On 18 May, the Chief of the Armed Forces Operations Staff reported to the Fuehrer on the changed enemy situation, which included the possibility of a new large-scale landing on the west coast north of Rome, possibly in the Ligurian area. The Fuehrer thereupon ordered the immediate transfer of 16 S.S. Pz Gren Div and S.S. Pz Gren Instr Regt to the northern Italian area. On 20 May, O.B.S. and S.S. Operational H.Q. were informed that both formations were O.K.W. reserves. Their commitment was only approved in the event of an enemy landing on the Ligurian coast.

From the opening of the offensive, the Supreme Command had devoted especial attention to the enemy's tactics in the Nettune bridgehead. At this stage, the Chief of Staff of the Armed Forces Operations Staff had seen the real danger for the Italian theatre of war, not in the continued attacks against the southern front, but in a major offensive from the Nettuno bridgehead (entry W.F.St W. Diary 15 May). The Fuehrer agreed entirely with this view of the situation. On the next day but one he commissioned the Chief of Staff of the Armed Forces Operations Staff to ascertain yet again whether all preparations had been made on

the Nettuno front for the concentration of the long-range artillery fire on the enemy batteries in the event of a major enemy attack. In the event of such a major attack, the only Army Group reserve would have been Pz Div "H.G.", which had been held in northern Italy as reserves of the Armed Forces High Command (O.K.W.). After 20 May therefore, the Chief of Staff of the Armed Forces Operations Staff advocated the timely transfer of this division to O.B.SW in the Rome area, and its replacement by 20 Lw Fd Div from Denmark (this formation to be replaced by the so-called Norwegian Panzer Formation (Panzer Verband Norwegen)). It should be moved into the Livorno area, "in order to lessen the immense risk of a drastic denudation of the Ligurian coast. I assess the likelihood of a landing in Denmark far lower than that of a landing on the Ligurian coast." Accordingly, after the Fuehrer had approved this redistribution of forces on the evening of 22 May (notebook 23 May), instructions to this effect were sent to O.B.SW at midday on 23 May.

During the first phase of the Italian offensive, the Supreme Command took no further hand in the direct conduct of operations. It was in agreement with the conduct of battle of O.B.SW, whose immediate concern it was to frustrate, by means of mobile tactics, the enemy's intentions to break through on the southern front, without having to withdraw all the main reserves needed to cope with a possible new major landing. Armed Forces Operations Staff dispatched Major v. Brauchitsch to Italy to obtain a firsthand impression of the situation. He was with Fourteenth Panzer Corps from 19 - 23 May, and submitted a report of his tour of inspection on 27 May.

The sudden breakthrough in the Senger position came as a surprise to the Fuehrer. In this connection he expressed anew his displeasure over the trifling achievements of the troops with regard to the construction work on the positions, and over the obscure reports on the construction situation (note-book 20 May). Thereupon Armed Forces Operations Staff worked out a new pattern for these reports, and required O.B.SW to immediately submit by telephone on the construction situation in 'C' position, which was already close to the front, and which would play a decisive role in the fighting south of Rome. Information was also demanded on the flooding situation.

Complaints were made that no forces from Organization Todt had been used in the position.

(c) The Subsequent Course of the Fighting up to the Capture of Rome

The enemy penetration west of the Liri which marked 22 May was extended on the following day. After the loss of Pico and Lenola (24 May), and the opening of the Senger position north of Pontecorvo, a withdrawal movement was approved, the scope of which was increased by O.B.SW after an enemy penetration at S. Giovanni on 25 May had already endangered the Sacco sector (sitrep 26 May). In the other sectors, the enemy at first followed the withdrawal movement only with hesitation.

The fighting entered a new phase on May 23, when the enemy attacked from the Nettuno beachhead as well. He was successful in breaking through on both sides of Cisterna; on May 24 in the early morning, he made a forward thrust north of the village (whose garrison received orders to break out on the following day) as far as the district south of Velletri; then northeast of this village in the direction of Valmontone. 362 Inf Div and 3 Pz Gren Div failed to close the gap during the night. The deciding factor in this sector was the planned counter-attack of Pz Div "H.G.", which was to be moved forward during the night of 25/26 May to the Nemi Lake district, so that it might be committed as soon as possible. An attack on May 26 was however no longer feasible. Simultaneous enemy attacks

/against

- 5 -

against the right wing of Fourteenth Army (1 Para Corps) were unsuccessful. At the same time a thrust northwest of Terracina in the sector of 29 Pz Gren Div through the Ausoni mountains brought him the long-strived-for junction with his forces in the Nettuno beachhead. On May 25, in a special broadcast, the enemy wireless announced this at the same time as the capture of Terracina.

Within a few days therefore, a completely new situation had developed on the southern front. As a result of the union of the enemy attacking force with that of the beachhead, and the folding back of the inner wings of 715 and 29 Pz Gren Divs, Fourteenth Army and the right wing of Tenth Army were deployed along a tortuous and undeveloped line, which was unsuited for a protracted defence. Furthermore, through the enemy assault on Valmontone, an acute crisis had arisen. It was apparent that the withdrawal of the entire front to the 'C' position would soon be necessary. For this reason it was important that, (as Armed Forces Operations Staff stressed on 24 May in notes prepared for a verbal report), the right wing positions of Fourteenth Army as far as the pivot point of Cisterna should be strongly held, while Tenth Army and the left wing of Fourteenth Army were withdrawn in a delaying action step by step, nursing and saving our own troops to the utmost, in such a way as to gain all possible time for the occupation and improvement of the 'C' position. Armed Forces Operations Staff proposed moving the remnants of 71 and 94 Divs into the 'C' position at once as a security garrison, and bringing them up to strength by immediately moving up replacements. Furthermore, O.B.SW would have to bring another formation from the southern front at once, and if possible yet another formation from northern Italy (in this connection 356 Inf Div in the Genoa area would be considered first of all), into the 'C' position. As replacements for 356 Inf Div the following formations could be moved up: 16 S.S. Pz Gren Div could be committed in the coastal sector; 42 Jaeger Div (in process of formation and reorganization) from the area of O.B.SE; and 363 Inf Div from Denmark. The further weakening of Denmark could be countenanced in view of the enemy picture in central England and northern Scotland; the prospective transfer of 6 Pz Div to Bergen, and the formation of a "Crimean division" near the Danish border. Finally it was also proposed that S.S. Pz Gren Instr Regt from the area north of Genoa should be transferred to the Livorno area as mobile reserve.

At the midday discussion of the situation on 25 May, the Fuehrer agreed with the proposal in essentials. The sector north of the Alban Mountains on both sides of the road to Frosinone was considered to be the most heavily threatened part of the 'C' position; this sector above all others should be provided with a strong defence formation. 356 Inf Div should be moved into the 'C' position as speedily as possible and replaced by 42 Jaeger Div (an order to this effect was issued to O.B.SE on the following day; after a preliminary telephonic warning order). Permanent commitment of 16 S.S. Pz Gren Div in the coastal zone was not however contemplated; (it was, according to the decision made next day after the return of the Reichsfuehrer S.S., to be quartered at the coast north and northwest of Pica until the arrival of 42 Jaeger Div). S.S. Pz Gren Instr Regt was to be committed in the Nori area (notebook 26 May). No decision had yet been reached on the question of 362 Inf Div. Furthermore, the Fuehrer issued orders that a close watch should be kept on all replacements in personnel and material reaching O.B.SW (of Armed Forces Operations Staff's notes of 25, 26 and 29 May, requiring that a report be sent to O.B.SW on the withdrawal of the artillery from the coastal zones which had been given up (Terracina, Gaeta, etc)). (The report stated that considerable Italian material had fallen into the hands of the enemy).

After an order had been issued during the night 24/25 May on the conduct of operations of the armies in central Italy (O.K.W./Armed Forces Ops St 771662/44 Top Secret, not in the war diaries), on the afternoon of

/26 May

26 May O.B.SW received further instructions in accordance with the Fuehrer's new decisions. These required that the 'C' position be held at all costs. The fighting in the forefield of this position must be so conducted that the enemy attack would be progressively weakened by constant losses, and would eventually collapse. In the subsequent withdrawal of Tenth Army, the northern wing should remain in the present main defence line. Communications between 'C' position and the static portion of the front must follow a line running from Tagliacozzo along the northern border of the former Fuciner Lake (flooding possibilities here were to be examined), to Sulmona. The key points of the 'C' position defence were to lie on the right wing and on the main lines of assault at Valmontone, Avezzano and the road from Sulmona to Aquila. Construction work on the 'C' position must be pushed forward by the commitment, not only of all the labour forces already on hand, but also of the security garrisons, the able-bodied natives living in the neighbourhood, and, if the opportunity arose, of Organization Todt forces withdrawn from other sectors with all available equipment. Directions followed for moving up the remnants of 71 and 94 Inf Divs, etc, in accordance with the decisions already recorded.

While in the Tenth Army zone the withdrawal movement of the new main defence line: (the Castro at Volsci - course of the Sacco as far as Isoletta - course of the Liri as far as 2 km southwest of Fontana Liri - then eastwards north of Santo Padre to the Mulfa sector - thence to Belmonte) went forward on the whole according to plan, though under increasing enemy pressure, on 26 May the situation in the Fourteenth Army zone became considerably more acute. The enemy continued his attacks towards the North from the Giulianello area; threw back the Recce Bn of Pz Div "H.G." committed in this region for sealing-off operations, and in the afternoon stood just south of Valmontone. Apart from the fact that this put him in a position to penetrate the 'C' position, there was the danger that not only the remaining cornerpost of Fourteenth Army, but also the whole right wing of Tenth Army, would be cut off from the road forming the line of retreat to the Rome area via Frosinone. This was the original operational objective, which was probably the reason for the Nettuno landing in January. O.B.SW resolved to commit all forces arriving at this time and in this locality, instead of using them to further strengthen Tenth Army. These forces comprised 334 Inf Div, 1 Projector Regt and 2 Flak Bn. of Tenth Army, 1060 Regt. etc. He also wished to commit Pz Div "H.G." here, giving up its previously planned offensive commitment. This met with opposition from Armed Forces Operations Staff. As it turned out after all, on the evening of 26 May the Division advanced to the assault as planned, but the attack did not reach its climax next day. On 27 May however, the sealing-off operation was successful, and on the next day, in co-operation with 29 Pz Gren Div, which attacked from the Southeast, the area of enemy penetration was considerably reduced. At the same time the enemy was exerting strong pressure on the district south of Velletri, and this our forces were able to resist. The condition of stabilization reached during the succeeding days in the Valmontone salient was of decisive significance for the progress of the fighting, most of all for the withdrawal movement of Tenth Army. An easing of the situation was brought about by the fact that the enemy, after his thrust over the Via Casilina had failed, shifted his point of main effort against A.O.K. 14 towards the West (sitrep 29, 30 May).

The withdrawal movement of the right wing of Tenth Army, whose main task was considered to be the prevention of an enemy break through up the Sacco valley in the direction of Rome, was accomplished over several lines of defence (I - III). These lines had been decided on in a conference of the commanders on 27 May, and on the following day O.B.SW communicated the decisions that had been reached to Armed Forces Operations Staff. The proposed new main defence line, in which a decisive and prolonged stand was to be made, ran east and west through Anagni.

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To support the right wing, 44 Inf Div was speedily relieved from its former assignment and committed west of the Liri. At the same time the gradual withdrawal of 51 Mtn Corps was approved; the intermediate lines however were only to be relinquished under enemy pressure. On 27 May the enemy began an energetic pursuit. On this day the operational centre of gravity lay in the Castro area at Volsci and at Caprano, where the enemy committed 400 tanks and penetrated the village. He was stopped in the Sacco sector, but this sector was given up on the following day. On 28 May the enemy shifted his point of main effort to the right wing of the Army. On the next day Ceccano was abandoned, and on 31 May Frosinone, the most important rail and road junction south of Rome. At the same time fighting developed in the sector of 1 Para Div, where the enemy broke into the withdrawal movement east of Sora. But, looked at as a whole, the gains of this withdrawal, which in consequence of the enemy air supremacy (see below) was most costly, were very considerable. The troops retreating through the Liri and Sacco valleys had been protected from being cut off or overtaken, and they had punctually reached the area southeast of Rome, where fighting was bound to develop during the next few days.

On 29 May, the development of strong enemy attacks against 65 Inf Div and 3 Pz Gren Div (here the two British beachhead divisions now made their appearance), and a successful penetration in the Hermann Goering Pz Div sector of the Fourteenth Army zone on 31 May, gave rise to a new crisis. If the area south of Rome and the city itself were to be held, new and vigorous measures must be taken to increase the fighting strength of the Army Group.

As a result of the battle of material on the southern front, which had already lasted for 17 days, the quite favourable situation which had existed in the Army Group zone on 1 May with regard to personnel and material had fundamentally changed, as O.B.SW stated in a comprehensive report issued during the night of 28/29 May. The losses in personnel, the exact figures of which were not yet available, could be estimated as at least 25,000 men; the heaviest sufferers being naturally the infantry and the engineers. As regards weapons, the losses might total 2,000 machine guns, 500 heavy machine guns, 420 heavy anti-tank guns, 148 tanks, 295 guns, etc. The motor vehicle situation was said to have been especially strained, as transport capacity was being continually reduced by air attack, and in addition many still undamaged motor vehicles could no longer be used, on account of a shortage of tyres and spare parts. Some of the divisions had apparently about reached the lowest point at which rejuvenation was still possible; this applied in particular to 94 and 715 Inf Divs. The enemy would keep to his operational objective - the capture of Rome - although he too had suffered severe losses. An early strengthening of the personnel and material of the Army Group therefore appeared to be essential. In view of this, O.B.SW requested the assignment for the time being of fifteen personnel replacement battalions, which would have to be transferred during the first week in June; the replacement of 94 and 715 Inf Divs by fully battleworthy and seasoned divisions, and the speedy bringing up of as large a number of tanks, anti-tank guns, etc. as possible. Over and above this, he suggested that the assignment of from two to three fresh divisions be considered, as the need for these would doubtless shortly become acute.

A large part of the losses suffered could be attributed to the mounting effect of the enemy air supremacy. Besides directly supporting the ground troops, the enemy airforce continued its raids on the Italian railway system and the Alpine passes without a break. Thus, not only was the arrival of the divisions on the southern front (such as 356 Inf Div) considerably delayed; but, of the formations coming from the other theatres of war, 42 Jaeger and 20 Lw Fd Divs were again held up. By the last day in May, three-quarters of 20 Lw Fd Div, and half the effective forces of 42 Jaeger Div had arrived in northern Italy. The lateral movements

/behind

behind the southern front too, such as those of 334 Inf Div, were greatly impeded. Night raids on the supply routes in the forward areas aggravated the situation still more. When O.B.SW appealed directly to the Fuehrer, the latter ordered that night fighter aircraft be used to protect road traffic at night (sitrep 29 May). Over and above this, as O.B.SW was informed on 1 Jun (see below), it was decided to transfer one night fighter group from the Reich, and one night bomber group from the eastern front to Italy. A decided weakening of our own airforce, which however did not directly affect the situation at the front, was occasioned by the transfer of the torpedo bombers from southern France to Norway, where the opportunities for commitment were judged to be more favourable (sitrep 31 May). In April these aircraft had again met with great success in their attacks on enemy convoys.

O.B.SW's other wishes with regard to personnel and material were examined by Armed Forces Operations Staff and Army Staff jointly. It appeared, as was made known to O.B.SW on 1 Jun, after a telephone conversation between the Chief of Staff of Armed Forces Ops Staff and Army Group Ops Offr, that the transfer of further divisions was not possible, as formations fit for commitment were not available at the time in the Reich. For the present, assistance from OKW would have to consist mainly of a copious supply of material and replacements. Besides this, the preparation of 16 S.S. Pz Gren Div and 42 Jaeger Div for commitment would be speeded up, so that they could later relieve the exhausted divisions. As regards the replacement situation; ten infantry battalions had been earmarked as June replacements, and this number might be increased. Because of special assignments, the arms allowance for May had reached an unusually high volume, and in June complete equipment for two divisions would be delivered - and so on in the same strain. When, on 1 Jun, the situation on the Italian front became still more acute, the Supreme Command realized that it was now necessary to take strong, comprehensive measures. At the midday discussion of the situation on 2 Jun, the Fuehrer ordered that, over and above the planned assignments, the largest possible number of Tigers and Panthers should be rushed to O.B.SW (notebook 2 Jun). In consequence, as a first consignment, 10 Tigers of Tiger Bn 102, 15 Tigers of Bn 510 and 20 Panthers were assigned to O.B.SW. During the afternoon the Fuehrer gave orders that Tiger Bn 504 originally intended for the East, should be sent to Italy. The battalion, which comprised 45 tanks, could arrive in the Florence area between 8 and 11 Jun. Furthermore, orders were given for the transfer of 19 Lw Fd Div from Bruges (arrival at Bologna between 7 and 9 Jun), and of the three high mountain battalions committed in the Apennines position (these being relieved by three high mountain schools). If possible these latter units would be replaced by one of the Italian divisions which were being formed in Germany (sitrep 3 Jun). Finally, the tanks of Pz Bn 508, which was already engaged on the southern front, were to be brought to full strength. The commitment of 162 (Turc) Div, which was assigned to O.B.SW on 3 Jun, would mean a further, though indirect, increase in strength for the southern front. First, reorganization within the Division was to be carried out, in order to bring the proportion of Germans to Turcomans in the infantry up to 50 per cent. This decision was based on the impressions of Major v. Brauchitsch, who had inspected the division in connection with his visit to 14 Pz Corps. In his report of 29 May, he had proposed that after reorganization the Division should be given an opportunity to prove itself on a quiet sector of the front. Only in the event of failure should it be disbanded, and the good German divisional cadre used as a nucleus for the formation of an infantry division on the 1944 pattern. (O.B.SW had been in favour of leaving the Division as it was, and dispensing with reorganization). Another support measure for O.B.SW, likewise ordered on 3 Jun, was the incorporation of the former S.S. Pz Gren Instr Regt (which meanwhile had been

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designated as a "Brigade") in 16 S.S. Police Gren Div, which would enable the Division to be ready for commitment sooner. The transfer of 20 Lw Fd Div to the Civitavecchia district (arrival 5 Jun), instead of into the Livorno area as planned, would mean a further, though indirect, strengthening of the southern front.

As once before the sudden breakthrough in the Senger position, so now the sudden victory in the "C" position brought forth new deliberations on the construction of the Apennine (Gothic) position, and especially its readiness for defence. On 27 May, at the suggestion of the Chief of Staff, Armed Forces Operations Staff, the Fuehrer gave orders for an all-out drive for the accelerated and fortress-like construction of the Apennine position (notebook 28 May). Accordingly, on 1 Jun, an order was issued to O.B.SW; to the General Commanding Engineers and Fortifications; to the Chief of Army Equipment and Commander of Replacement Army, etc. Construction of this position was envisaged as a long-term project. The Gothic position, which in the middle of the month had been renamed the Green line, existed at first, except for isolated sectors, only on the map (of 18 Jun). Orders were given in detail for security measures against armoured attacks in the sectors threatened by tanks; the speeding up of the fortress-like construction work on the main lines of attack (blasting of caves in rock, making of embrasures, etc); extensive mining in adequate depth; evacuation of the civilian population in the forward areas and on the main battle-ground; installation of a barrage zone about 10 km in depth in front of the main defence line; and within it, thorough destruction of preparations therefor of all traffic routes, installations, shelters, etc. The General of Engineers and Fortifications was instructed to strengthen the organization of the Fortress Engineers (for this a staff from the Southeast and a rock-drilling company from Norway were to be placed at his disposal); the Chief of Army Equipment and Commander of Replacement Army was as far as possible to form construction battalions as a cadre for the supervision of Italian civilian labour forces; O.B.SW was to withdraw the Italian construction forces that, in consequence of enemy action, could no longer be used for commitment in the "C" position, to the Apennine position; the German General Plenipotentiary in Italy was to form civilian labour battalions from the Italian male population which was to be evacuated, or which was settled in the district, and so forth. On 3 Jun, at the suggestion of the Chief of Staff of Armed Forces Operations Staff, the Fuehrer gave orders that the Fourth Italian Mountain Division and the three high mountain schools be transferred to this area. But as far as the Italian formation was concerned, General Ott had first to be heard from. This scheme was never put into effect. In this connection, the idea was formed of sending the Deputy Chief of Staff of Armed Forces Operations Staff to Italy, to gain a first hand impression of the defence potential of the Apennine position. The departure of Lt-Gen Warlimont took place on 7 Jun after a short delay caused by the invasion, which had meanwhile materialized.

The detailed carrying out of these orders for strengthening the southern front, has already been recorded in the description of the actual operational developments. Since 30 May, as already set forth, these had again taken on the aspect of a crisis in the area of A.O.K. 14. On 31 May, the heavy attacks against 65 and 3 Pz Gren Divs were for the most part repelled. An enemy regiment broke through on the right wing of Pz Div "Herman Goering", while further to the East in the Valmontone salient there was no serious fighting. Ground was lost in the sector of 29 Pz Gren Div. On the following day, the enemy succeeded in widening the penetration area in the sector of "Herman Goering" Div. The support measures taken by O.B.SW (the moving up of Airborne Asslt Regt 4 Para Div, and of alarm units, etc), who considered this locality the most severely threatened (sitrep 1 Jun), did not come to fruition. Velletri had to be

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evacuated, and the front in this sector had to be withdrawn to southeast of Nemi Lake. The sealing-off of the enemy penetration area at Valmontone had to be abandoned, and 29 Pz Gren Div withdrew to the north bank of the Sacco. From there, the front now followed a fairly straight line as far as Sora, which was lost on 2 Jun. On the same day, when the enemy attacked again from the Valmontone salient in the Fourteenth Army zone and made a deep penetration, the front in this sector had to be withdrawn once more - this time to a line following the salient from Rocca di Papa to Palestrina, formed with the last remaining reserves. 90 Pz Gren and 334 Inf Divs were to be moved up to support them, but it was uncertain whether they would arrive in time. On 3 Jun an enemy push in a northwesterly direction to Colonna could not be stopped, and during the afternoon enemy tanks pressed forward from this area to within a distance of from 6 to 8 km from the eastern and south-eastern fringes of Rome.

While scarcely a week before it had been considered possible that the enemy attack would be halted in the 'C' position, by the end of the month it was already open to question whether the area south of the Tiber could be held much longer. This included the city of Rome, the greater part of which lies south of the river (communication Gen v.B. 2 Jun). The support measures ordered on 2 Jun could take effect in a week at earliest. It was obvious that the fall of the city would have a significance reaching far beyond the Italian theatre of operations, and that the enemy would derive full propaganda value from it. He could not wish for a better prelude to the invasion summer which lay ahead.

The situation was rendered still more difficult by the fact that, precisely during these critical days, gaps appeared in the command. The Chief of Staff of the Army Group, Maj-Gen Westphal, who at the moment could not be adequately replaced, became ill as a result of overwork; and the Commander of Tenth Army, Col-Gen v.Vietinghoff, fell ill too, and became unable to carry on. Effective 2 Jun, Col-Gen v.Mackensen was replaced in command of Fourteenth Army by Gen of Pz Troops Lemelsen, the former Deputy Commander of First Army.

The events of 2 Jun had already caused O.B.SW to request permission to evacuate Rome, in the event of this step becoming necessary, as the reforming of a solid front south of the Tiber, more or less as a continuation of a "bridgehead Rome", appeared no longer possible. From the beginning, defence of the city itself had not been contemplated by the German Command. In an order issued on the afternoon of 3 Jun, O.B.SW was accordingly directed to continue fighting south and south-east of the city as long as possible, in order to create suitable conditions for the evacuation of the city of Rome and the withdrawal of Fourteenth Army across the Tiber. If it were no longer possible to make a stand south and south-east of Rome, the west wing of the Army Group was to be withdrawn to the next suitable sector of terrain, in order to avoid drawing the city of Rome into the main battle-field, which would be the case if the Tiber were used as a supporting line. In the future conduct of battle, on which O.B.SW was to submit his views as soon as possible, it would be important, while at first sparing and resting our own troops in a delaying action, to progressively undermine the enemy's fighting power, sacrificing as little ground as possible in the process; then, on a line to be decided on by O.B.SW, if possible a continuation of the centre and left wing of the 'C' position, to again take up a defensive position. During the night of 3/4 Jun a supplementary order was issued to the effect that reconstruction of the front must be attempted north of Rome and as far south as at all possible, and the centre of the Army Group speedily withdrawn to the 'C' position. In contradistinction to the course decided on for the surrender of Paris (which, if this became

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necessary, was to be defended to the last and left to the enemy as a field of ruins), from the outset the German Command made every effort to spare the city as far as possible. This aspect is being dealt with in a subsequent chapter of this narrative, entitled: "The Open City of Rome".

On the night of 3/4 Jun the surrender of Rome began. The right wing of Fourteenth Army was withdrawn to a line behind the Tiber, which followed the course of the old Tiber eastwards past Tivoli-Subiaco to the 'C' position. O.B.S.W. stated that the principal task of the Army was the rapid withdrawal of its formations across the Tiber on either side of Rome, while keeping in close touch with Tenth Army in the area northeast of Valmontone; and on 3 Jun the situation in this district became stabilized owing to the commitment of 334 Inf and 90 Pz Gren Divs (see below). On the morning of 4 Jun, enemy tanks with infantry on board penetrated into Rome, reaching the centre of the city at about 1415 hrs. At the same time the enemy pushed forward across the old Tiber east of Rome. An assault against his flank by 15 Pz Gren Div did not develop, owing to hostile air operations (sitrep 4, 5 Jun). The "battle for Rome", which had deemed to have already begun at the end of January with the landing at Nettuno, and which by the successful sealing-off of the beachhead and the resistance at Cassino had been drawn out to nearly six months, had ended.

In a broadcast on the evening of 5 Jun, Roosevelt celebrated the capture of the first of the "Axis capitals", which event had taken place at a time when the Allied troops stood prepared for a fresh blow in western Europe. The fact that the city had been spared was not credited to the German Command, but purely to the skill of the Allied generals, who, he said, did not leave the Germans, concerned with the withdrawal of their armies, time for demolitions similar to those carried out in Naples and other Italian cities. The President warned however against over-rating the military significance of Rome; victory was still a long way off. On 6 Jun, on the occasion of the announcement of the invasion, Churchill made a statement on the fall of Rome, which could now, so he said, be protected against enemy air attack and the threat of hunger. Before the extent and nature of the victory represented by the capture of the city could be estimated, subsequent developments in the Italian theatre of operations must be awaited. The British Prime Minister emphasized in particular the smooth cooperation of the many nations included in the Allied armies in Italy.

The conquest of Rome signified an important turning point in the development of occupied Italy. King Victor Emanuel abdicated, installing his son as Regent, and Badoglio resigned on 9 Jun. With the formation of the Bonomi cabinet the experiment of the Italian factions in self-government began. Permission for this had up to now been refused by the Anglo-Americans, having been delayed until the capture of Rome. Recently the enemy press had repeatedly stressed the achievements of the Badoglio troops fighting on the Allied side. In his speech, Roosevelt asked all other nations who were against "Fascism and Naziism" to give Italy a chance. Although no great military empire, Italy was entitled to claim the place of a "great mother-nation" on account of her over-population.

THE HEALTH OF THE ALLIED AIR FORCES
IN ITALY

LATE 1943 - EARLY 1944

The maintenance of that high level of good health without which the Air Forces could not hope to sustain a campaign in Italy could never be taken for granted. Anti-malarial and anti-jaundice measures constituted a minor campaign in themselves. Most of those who were present during these years will recall with a wry reflex grimace those repulsive yellow mepacrine tablets, which did nothing to season the often jaded appetite and left one with an unmerited hang-over. Examining the medical records of the Desert Air Force as a representative case, a rise of the malaria incidence from June to August 1943 is noticeable. In June it was .38 per 1000 per week; in August it had mounted to 2.32. Jaundice for the same period was, after an improvement in July, still more than double. Few jaundice patients, incidentally, returned to full duty inside a month. This situation was not only a reflection of the general increase of this infection - it was treble at home and seven times as high abroad in 1943 as in 1938 - but of the primitive conditions in Sicily.

The prospect of health in Italy was at first none too promising; the best possible organisation of the medical services was called for. The Fascist regime had gone far in the direction of limiting and suppressing malaria, but neglect due to years of war and the principle of scorched earth the Germans pursued, left neighbourhoods, previously healthy in terms of malaria, a danger to the Allies.

Aircrew rest camps were set up in North Africa and Italy and many squadrons ran similar camps of their own, with noticeable benefit to health and morale. After Tunisia the very tired aircrews were either sent on leave or taken off operations as tour-expired before Sicily. Morale during Sicily has been recorded as of a uniformly high level. Here attention must be called to the difference between the Empire and U.S. system of tour relief. The latter returned a man to the U.S. after an average tour of duty notably lower than the numerically weaker Empire aircrews. It was, in view of the continuous flow of operations after Sicily, impossible to allow such respite in Italy as after Tunisia. General Eisenhower reported the fatigue of the Lightning pilots after Operation Avalanche.

The possibility of malaria, jaundice and several other maladies, produced a long list of Don't's for the forces, such as avoidance of billeting near old ruins, of contact with certain women, and with children and dogs; no unboiled milk or water. Drainage, oiling, Paris Green ointment; anti-mosquito spraying, daily doses of suppressive drugs, control of movements after dark, careful supervision of maintenance of mosquito nets, screening of messes, huts and barracks, disinfection of gear and careful inspection of new arrivals from Africa and elsewhere were all in the repertoire of the fighting medical services and all went to ensure the essential basis of sound hygiene and health.

Sources

- (1) 1STD/O/213 Pt. II (Medical) 29 June 1943
- (2) Appreciation by M.A.8 on Health of Air Forces in Mediterranean based on M.A.A.F. and M.E. Annual Health Reports 26 March 1947.

TOPOGRAPHY AND CLIMATE OF SOUTHERN ITALYTopography

The lay of the land determined movement and supply operations and favoured or delimited the course of air warfare generally. Some idea of the country at the actual point of impact in the case of Salerno has been roughly sketched in Chapter 1. What is now presented, to be kept in mind as constant background as the narrative of the campaign proceeds, is the general structure of the country; a brief note is given of those weather conditions that contributed so largely at certain times to the succession of stalemates in the fighting and rendered continuity of air operations so often impossible. Consider on Map 12, the country below a line connecting Naples and Bari. The well-worn simile of the Italian Boot is still the best on which to build-up our picture and will facilitate description. First consider the area in terms of space.

The airline distance between Melito di Porto Salvo in the Toe and Cape Sta. Maria di Leuca, at the bottom of the Heel, is 190 miles. From the port of Reggio di Calabria on the point of the Toe to Bari is 136 miles. The arch of the Boot encloses the Gulf of Taranto - 63 miles wide. The shortest distance between the Italian mainland and Sicily is 2 miles across Messina Straits. South of the 41st parallel, the Leg of Italy projects 200 miles down to the Toe and 90 miles to the Heel.

The coastal strip round the Heel and Arch is low and regular, but the Toe has a rugged, mountainous coast, interrupted by low alluvial plains cut by watersheds. If a line is drawn along the axis of the Leg, two areas of widely differing character are thrown up; the western rugged mountain system and the eastern plains and hills. Within these two broad systems there are important variations, in terms of plateaux and complexes, breaking up the main features. Considering the terrain of operation from the landings in Calabria up to the fall of Naples, the minimum number of topographical divisions which can be considered is eight; their variety is an index to the material problems of movement and base consolidation which intimately affected the organisation of the Air Forces. There were the La Sila - Aspromonte Mountain Complex covering the Toe; the Southern Apennines, which were the extremity of the hard core of Italy, here occupying the western half of the Leg; and two plains - the Salerno and Naples Plains - all on the west. Moving the pointer upwards from the Heel, there were the Taranto Coastal Plain, the larger Penisola Salentina Plain covering the Heel, then the Eastern Coastal Plain extending from Brindisi to Lake Lesina; and lastly Le Murge Plateau, northeast of the Apennines behind the Bari-Otranto stretch of coastline.

Bearing of Topography on Climate

Meteorological units were talking more and more in terms of origins and movements; it had been realised by bitter experience during the Tunisian Campaign that the barrier of a mountainous ridge could completely nullify the beneficent effects of a friendly wind which had proceeded without change from as far as the Atlantic. The spiny outlines of the Apennines and subsidiary ranges were, therefore, bound to make a clear realisation of local fluctuations essential. It was necessary, but not sufficient, to have a general idea of the seasons, to know that from June to September the summers were on the whole warm, dry and sunny and the winters from December to March mild on the whole; that May might be as warm as Midsummer in England; that in summer the only break in a usually immaculate sky would be occasional heavy cumulus and showers; that even in the changeable winter weather, there were, normally, comparatively few days on which some sunshine was not likely to be registered. (In the event the winter of 1943/44 was one of the worst in living memory). It was also wise to bear in mind that disturbances were likely to arise in the Gulf of Lyons and

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Northern Italy, in a south-easterly direction over the Tyrrhenian Sea, or along the Adriatic Sea; and that others, travelling from the northern coast of Africa towards Crete, might affect the South; and that these might arise from October onward, bringing showers on the windward sides of the mountains, which were almost omnipresent; not ordinary showers, but falls from two to three times heavier than normally fell in London. Certainly the mountains were to affect the rainfalls, but even more so the cloud and winds. Generally speaking, it was true that cloudiness was greater and extended to greater altitudes on the windward than on the leeward sides of the mountains. A very close study had to be made of local variations, for opportunism played a large part in air operations.

Visibility

Although generally good, there were a few occasions during autumn and winter when this dropped to below 1000 yards, and even in calm summer, fog might drift in from seawards. Two or three times a month in autumn and winter, poor visibility from half a mile to 20 miles was normal, usually with southerly winds. In the Naples area some fog might be expected and in the early months of the landings a moist Scirocco wind, blowing from between south-west and southeast, might create thick weather. In summer, one of the complications likely to make life difficult was the poor visibility, resulting from shimmer along the ground during most of the day. For collectors of the exotic, fairly frequent mirages could be guaranteed to distort one's vision.

Cloud, Icing and Upper Winds

According to the general trend, the skies in the Naples area were normally clear for 11 days in September, 14 in October, but only 6 in November and December. Though the general cloud mass was small and the base of cloud high in comparison with conditions in England, the presence of high land in close proximity to the coast and to the scene of operations made cloud important. The average height of freezing level was 4,000 to 5,000 feet in winter and 11,000 to 12,000 feet in summer. At times in winter it dropped to 2,000 ft. Northwesterly or westerly winds blowing on to the western coast might form big cumulo-nimbus clouds, and were likely to give rise to rapid icing.

Importance of Weather in the Italian Campaign

The above sketch is enough to convey the variability in conditions likely to be met. It is true that by September 1943 certain improvements in instruments used in Western European operations had come to such a point that bombing could be carried out through cloud and that certain, but not all, aircrews had already had lengthy experience in bad weather flying, and the best devices were very slow in reaching Italy. The Desert Air Force found a vast difference between the sky in Africa and Italy; and all units, both ground and airborne, found the weather and its vagaries an opponent no less formidable at times than the Germans.

Sources

- (1) 1STD/C/213 29 June 1943
- (2) P/98 (Final) AFHQ - G3 Appendix A 24 July 1943
- (3) Southern Italy - Inter-Services Topographical Dept.

ITALY—ROAD AND RAIL COMMUNICATIONS

LEGEND

RAILWAYS
ROADS

SCALE
0 50 100
MILES



OPERATIONAL AIR MAP ITALY AND SURROUNDING AREAS 24 OCTOBER 1943

LEGEND

AIRFIELDS

SUNSHINY AND OR
FULL FACILITIES

- FIGHTERS
- MEDIUM BOMBERS
MINIMUM RUN OF 1450 YARDS
- HEAVY BOMBERS
RUN OF NEARLY 2000 YARDS OR MORE
- SEAPLANE STATION

LANDING GROUNDS

FEW OR NO FACILITIES

- FIGHTERS
- MEDIUM BOMBERS
MINIMUM RUN OF 1450 YARDS
- HEAVY BOMBERS
RUN OF NEARLY 2000 YARDS OR MORE
- SEAPLANE ALIGHTING AREA
- EMERGENCY ONLY

SCALE

