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R.A.F. NARRATIVE
(FIRST DRAFT)

THE CAMPAIGN IN SOUTHERN FRANCE

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PREFACE

In this narrative of the campaign in Southern France the air operations have been presented against a background of all arms. In the face of alternatives to assist the landings in N.W. Europe, Operation Anvil (later Dragoon) passed through a difficult period of gestation: the decision to launch it roused, and continues to rouse, ardent criticism and defence. For the student of air history the course and scope of the operation remain filled with interest, for they were marked by change and surprise from start to finish.

The study of the build-up in Corsica will convey some idea of the human and physical difficulties inseparable from modern war and show how the air forces converted a shattered and malaria-ridden terrain into an efficient air base for over two thousand aircraft. An endeavour has been made to show how the air forces, once they had compromised on the principle of concentration, were successful in confusing and weakening the enemy defences and how their weight, ingenuity and accuracy, coupled with the action of the ground and airborne forces, the naval support, and the successful break-through of the northern armies, led to a far more rapid advance than had been planned or hoped for. The operation, the last of its dimensions in the West, is interesting both as an example of staff planning and of how air, ground and naval forces met the challenge of a mobile battle unforeseen by the planners, the crises faced and the shifts and stratagems resorted to by the men on the spot. The German High Command was not surprised at the landings or the choice of time and terrain. It was the Allies who were surprised when they found themselves confronted by an unexpected change in Hitler's strategy and a disconcertingly successful outcome to their preparations, a rapidly retreating enemy in one sector and fanatical defenders in the two fortresses. With inadequate transport and little guidance except a plan becoming momentarily obsolescent, a high degree of improvisation was forced on them. The advance and its support from the air was patchy but somehow successful. The air forces were at times prevented by pressure from Italy, inadequate ancillary services and the absence of a properly integrated control, as well as gaps in the plan, from playing a more significant role after the actual pre-assault and assault operations, in the reduction of Toulon and Marseilles and the advance up the Rhone Valley.

The record of the contribution of carrier-borne aircraft to the land battle will provide useful material for discussion. The effective collaboration of the French Forces of the Interior will be recognized as the fruit of months of difficult air supply operations and the enthusiastic operations of the French air, ground and sea forces as the task most congenial to them. The achievement of the air forces in supplying all their units with all they needed, without army assistance, and in solving the general breakdown in the road transport system furnishes a striking example of flexibility and mobility.

With the improving position of enemy document holdings, a fairly clear picture can be presented of enemy estimates of Allied intentions and their reactions to Allied threats and assaults. Their comparison with Allied plans and operations will assist in defining the worth of our intelligence and strategy.

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CONTENTS

Page

Preface

CHAPTER 1 - THE STRATEGIC BACKGROUND.....1

Evolution of Allied Strategy in 1943

Early concepts - Early definition of the object of Anvil as a threat.

The Cairo and Teheran Conferences.....3

The need for Allied agreement on strategy - The Sextant and Eureka conferences - Overlord and Anvil now the supreme operations - Fluctuating conceptions of Anvil - Viewpoint of the Supreme Allied Commander Mediterranean - Deception plans.

The Final Decision.....5

The Stanwell meeting of the Combined Chiefs of Staff - Events after the Stanwell meeting - Visit of American Chiefs of Staff to Mediterranean - U.S. Chiefs of Staff call for Anvil - British Chiefs of Staff opposition to the Anvil plan - U.S. Chiefs of Staff's rejection of British proposals - British Chiefs of Staff's maintenance of their viewpoint - Decision referred to Prime Minister and President - Exchanges between Prime Minister and President - Order to launch Anvil - Directives to Mediterranean Commanders - Directive to Air Commander-in-Chief Mediterranean on Italian operations - Inevitable reduction of air participation in Italian campaign - British Chiefs of Staff's proposal to switch Anvil to Brittany coast - Consideration by Allied Force H.Q. of implications of suggested switch to Brittany - U.S. Chiefs of Staff's disagreement with proposed switch.

CHAPTER 2 - PLANS.....13

The General Outline Plans

Mission and command of the operation - Additions to the directive to task force commanders - Air, ground and naval outline plans.

Outline of Naval Plan

Task organisation - Area of operations and shore organisations - Mission and tasks - Areas assigned - Composition of the Carrier Force.

Outline of Army Assault Plan
Forces

Operational Air Plans.....15

General operational problems

Task - The three main air problems - Corsica and Sardinia bases - Air support of the operation.

Control of operations

Changes within Mediterranean air forces - Control and command, T.A.F. - XII T.A.C. control of operations in the assault area - Control of operations, M.A.C.A.F. - Control of Strategic bombers - Air Defence of Southern France - Air/sea rescue.

Outline plan for airborne operations
Build-up of airborne forces in Italy - Build-up of
troop carrier elements in Italy - Concentration of
units.

Detailed plans for airborne operation
Troops for, and mission of airborne operations -
Detailed planning for airborne operations - Route -
Difficulty in procurement of suitable maps and
models.

Plan for airborne diversion
Objects and diversions - Plan of operations -
Aircraft, crew and materials.

Bombing plan
General features - The four phases of offensive air
operations - Phase I - Phase II.

Operation Nutmeg
The four areas in the deception plan chosen for
pre-D Day bombing - The problem of the Dragoon
coastal defences - Decision on bombing prior to
D Day - Nutmeg operations planned against enemy
radar - Plan of attack - Alternatives to Nutmeg
plans.

Operation Yokum
Task - Targets - Rendezvous and approach - Beach
bombing.

Operation Ducrot
Objects - Objectives - Plan of attack.

The Air Build-up in Corsica 32

State of Corsica at the end of 1943 - The original air-
field position - Preparations for airfield construction -
Results.

Administrative Air Plans 35

Supplies for R.A.F. units in Corsica and Sardinia -
Repair, salvage and long range tanks - Other administrative
matters - Responsibilities and methods of malaria control in
Corsica.

Air Build-up in Southern France 37

Planned airfield build-up - Technical supply and mainten-
ance (R.A.F.) - Planned order of build-up of air forces into
Southern France.

The Plan for Aircraft Carrier Operations 39

Tasks and organisation - Carrier force operating area -
Aircraft control systems - The rise of No. 4 Naval Fighter
Wing - Training.

The Opposing Air Forces 42

Allied Air Forces
Allied air tactical order of battle for Operation
Dragoon - Coastal Air Force order of battle.

German Air Force

German Air Force appreciations of imminent Allied landings - Luftwaffe reactions to the threat - Fluctuating enemy estimates of Allied intentions.

CHAPTER 3 - PRE-ASSAULT AIR OPERATIONS 47

Phase 1

Counter-air force operations - Interdiction of communications - Results of air attacks on the river bridges and Riviera.

Phase 2 - Operation Nutmeg 48

General effect on bad weather on the operation - Attacks on radar installations - Satisfactory results of air attacks on enemy radar - Air attacks on coastal batteries and gun positions.

Phase 3 - Operation Yokum - Pre-H Hour D Day Bombing 50

Tactical air support for the landings - Rendezvous and areas of attack - Naval satisfaction with results of air attacks on guns - The bombing of the beaches, pre-H Hour.

Air Protection of the Assault Convoys 52

Mounting, staging and sailing of assault convoys - Approach corridors - Air convoy protection and the watch on enemy shipping - 10 August - 11 August - 12 August - 13 August - 14 August.

CHAPTER 4 - THE ASSAULTS 57

The Airborne Division, Airborne and Parachute Operations

The airborne diversion - operations - The six troop carrier missions - routes and formations - Drop zones - Pathfinder mission - Albatross mission - Bluebird mission - Canary and Dove missions - Fighter escort - Landings and action by airborne forces - Airborne forces operations after D Day.

Sitka and Kodak Force Landings 60

Sitka Force

Arrival of convoys - Execution.

Kodak Force 61

Alpha, Delta and Camel Force landings.

Air Operations on D Day 62

Operation Ducrot - XII T.A.C. operations D Day - Tactical air control - Strategic Air Force operations on D Day - General results of air operations up to the close of D Day.

Carrier Aircraft Operations 64

Area of operations - Variety and scope of operations - The two areas of operations - Carrier movements 15 to 29 August - Operations 15 to 19 August - Operations 20 to 29 August - Conclusions - Air Force Commander quoted by Admiral Commanding Carrier Task Force - Naval points in favour of aircraft carrier operations - Range.

	Page
<u>Fighter Cover and Airfields</u>	70
<p>Fluctuations in the pattern of fighter cover - Fighter cover on D Day - Air Control after D Day.</p> <p>Airfields in Southern France</p> <p>First airfields operational - Airfield construction after the assault phase.</p>	
<u>German Air Force Reactions to the Assault</u>	73
<p>Weak opposition - Enemy fighter and bomber operations on D Day - Enemy fighter and bomber operations D plus 1 to D plus 3 - The order to retreat - Luftwaffe role in the retreat.</p>	
<u>CHAPTER 5 - THE CAPTURE OF TOULON AND MARSEILLES</u>	77
<u>Air, Land and Sea Attack on Toulon</u>	
<p>Defence to the last cartridge - The three phases of the assault on Toulon - Air attacks on Toulon defences - Analysis of air attacks on guns at Toulon - The French battleship <u>Strasbourg</u> and the cruiser <u>La Galissoniere</u> - The air attacks on the ships - the French attack on Toulon.</p>	
<u>Reduction and Rehabilitation of Marseilles</u>	81
<p>The reduction of Marseilles - Medium bomber attacks on the island batteries of Pomègues and Ratonneau - Marseilles as an Allied port.</p>	
<u>CHAPTER 6 - POST-ASSAULT AIR AND GROUND OPERATIONS</u>	83
<u>Operations of the British Spitfire Wings in S. France</u>	
<p>Organisation - Pre-assault R.A.F. Spitfire operations from Corsica - Post-assault operations - Meeting of air group commanders.</p>	
<u>Allied Air Supply and the Breakdown of the Road Transport Plan</u>	85
<p>General road transport crisis origins - Opening of transport crisis on the beaches - Major responsibilities assumed by XII A.F. Service Command on the beaches - The opening of Port Bouc - The advance north creating acuter transport problems - Heavy and light bombers and transport aircraft diverted to ease road problems.</p>	
<u>Close Support Operations by XII T.A.C. and End of Campaign</u>	88
<p>Close support problems - Task Force Butler and <u>11th Panzer Division</u> - Air participation in the battle of Montelimar - Direct air support problems in a fluid battle - End of Dragoon operations and junction with Third Army.</p>	
<u>The Campaign from the View Point of the German Armed Forces Operations Staff</u>	91
<p>Evidence from German sources.</p>	

SECRET

APPENDICES

<u>No.</u>	<u>Title</u>
1.	Sextant and Eureka Conferences November - December 1943. Summary of Conclusions reached on Basic Strategy and Policies.
2.	Outline of Army Assault Plan.
3.	Order of Battle - M.A.T.A.F. Tactical Units.
4.	Location of Tactical Air Units.
5.	Enemy Ground Forces in Southern France and Liguria.
6.	The French Resistance Movement.
7.	Aircraft Carrier Task Force 88 - Flying Programmes.

SECRET

MAPS

<u>No.</u>	<u>Title</u>	<u>Facing Page</u>
1	Assault Convoy Routes	16
2	Airborne Diversion - Radio Counter Measures	26
3	Aircraft Lanes, Airborne Routes and Fighter Patrols	60
4	Plan of Assault	62
5	Army Progress 28 August - 15 September and the Junction of Third and Seventh Armies 12 September, 1944.	92

SECRET

CHRONOLOGY

1943

August Quebec Conference. Conception of plan to liberate S. France.

Nov.-Dec. Cairo and Teheran Conferences. Allied decision to mount Operation Anvil.

10 Dec. A.O.C. of C.A.F. assumed responsibility for preparing Corsica for supporting air operations.

1944

2 July Issue of order to launch Operation Anvil (later Dragoon) by C.C.S.

7 July Outline plans for Operation Anvil approved by S.A.C.M.E.D.

16 July Troop Carrier Air Div. (Prov.) established.

17 July Headquarters Troop Carrier Air Div. (Prov.) set up at Lido di Roma.

19 July Headquarters M.A.T.A.F. in Corsica opened near Bastia.

21-22 July Allied convoys sighted by enemy reconnaissance between Gibraltar and Oran.

31 July-1 Aug. Enemy attack on Allied convoy.

6 August Allied air attack on Orange and Valence airfields.

6-15th August Continuous air attacks on Rhone and Var bridges.

10 August Phase I of air operations ended.

10-0350 hrs. Phase II air operations - Operation Nutmeg - attacks on enemy radar.

15 August

10 August First convoys with air escort moved out of ports.

11 August Progress of convoys.

12 August Air convoy cover doubled. Enemy air reconnaissance over Naples and Ajaccio.
6th German Defence Flotilla ordered second degree readiness.

13-14 August Air attacks on Toulon defences.

14 August Assault convoys left assembly area, escorted by aircraft.
Enemy air reconnaissance of convoys.
Local fog in assault area.
Second degree of readiness in Genoa.
Peak air effort against enemy gun positions.

15 August D Day Operation Dragoon (formerly Anvil).

0331 hrs. Arrival of Airborne Force pathfinders at drop zones.

15 August

0349-1419 hrs. Airborne diversion drops (radio counter measures).

15 August

SECRET

CHRONOLOGY

1944

0350-H Hr.
15 August

Phase III air operations - Operation Yokum

0421-0514 hrs.
15 August

Albatross airborne drops.

0550 hrs.
15 August

First fighter patrol airborne.

0610-0730 hrs.
15 August

Operation Yokum air attacks on beaches and defences.

0926 hrs.
15 August

First drops by Bluebird airborne mission.

15 August

Romeo Force of French commandos, Sitka, Alpha, Delta and Camel Force landings. Air operation Ducrot maintained all day against beach and rear defences and communications. Beach patrols by land - and carrier - based fighters. Attacks by carrier-borne fighters on motor transport, roads and railways.

Light Ju.88 dusk attacks on shipping.

1749 hrs.
15 August

Second Bluebird airborne drops.

1804 hrs.
15 August

First Canary airborne drops.

1827 hrs.
15 August

First Dove airborne drops.

2034 hrs.
15 August

Do.217 attack on shipping. Allied radar jammed.

2330 hrs.
15 August

Surrender of Levant Is.

16 August

Main French landings at St. Tropez. Blue Line objectives reached at most points. 1st Airborne Task Force occupation of Draguignan. XII T.A.C. Forward Fighter Control operational.

16-20 August

Air attacks on Toulon defences.

17 August

First orders for German retreat issued. Surrender of Port Gros Is.

18 August

Allied air attacks on battleship Strasbourg and cruiser La Galissonière. U.S.S. Catocin hit by enemy aircraft. Enemy air force cessation of opposition and order to withdraw. First emergency aircraft landing on Ramatuelle and St. Raphael landing grounds.

19 August

Spitfire escort for bombers in battle area. Air patrol lines moved inland. End of beach cover by carrier aircraft.

20 August

Ramatuelle air strip operational and occupied by 1 Thunderbolt group. Carrier-borne aircraft attacks on enemy coastal shipping. Dispersal of German Air Force in S. France.

SECRET

CHRONOLOGY

1944

20-21 August Investment of Toulon.

21 August 2 Tac/R squadrons operating from Ramatuelle.

21-29 August Air participation in the battle of Montelimar.

22 August End of fighter control by Direction Tender 13. Ten coastal radar stations in operation. Fréjus air strip operational. End of Dragoon assault phase.

22-23 August Dismantling operations round Toulon.

23 August German Air Force evacuation complete. Capture of Valence and Grenoble. Port Bouc opened to Allied shipping.

24-27 August Definitive reduction of Toulon. Air attacks on Marseilles defences.

25 August 1st Airborne Task Force occupied Antibes and Cannes. Le Luc air strip operational and occupied by 2 groups of Thunderbolts.

27 August St. Raphael airfield operational. Capitulation of Toulon. Cessation of medium bomber attacks on guns.

28 August Cessation of medium bomber attacks on communications. All seaborne air controls released and full facilities ashore. 1st Airborne Task Force occupied Nice. Capitulation of Marseilles.

30 August 7 dry weather and 3 semi-all weather airfields operational in S. France.

1-4 September Close support operations by Royal Air Force Spitfires.

3 September Lyons occupied by French. Fréjus, St. Raphael, Le Luc and Ramatuelle airfields abandoned.

4 September Opening of operations by 64th Troop Carrier Group from Istres area.

4-22 September Solution of transport crisis by air supply.

7 September 324 Spitfire Wing moved to Lyons-Bron.

10 September Allied troops' entry into Dijon and Besancon.

12 September First contacts of Seventh and Third Armies.

14 September Firm junction of Seventh and Third Armies at Chaumont. Disbandment of 322 Wing. 324 Wing recalled to Italy. 6th Army Group took over command of Seventh U.S. Army and French Army B and was subordinated to S.H.A.E.F. for tactical operations.

22 September German Army Group G reported 209,000 men withdrawn from S. and S.W. France and 130,000 left.

25 September 1st Airborne Task Force holding French-Italian border.

4 October. Reliable railway service established. Supply of airfields by air ceased.

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CODE NAMES

Alpha Force	Part of Southern Attack Force.
Anvil	First code name for the amphibious assault against Southern France.
Avignon	Cancelled plan for airborne drop near Avignon.
Bluebird	Airborne mission
Camel Force	Northern Attack Force
Canary	Airborne mission
Delta Force	Part of Southern Attack Force.
Dove	Airborne mission
Dragoon	Later code-name for the amphibious assault.
Ducrot	Supporting air operations after H Hour on D Day.
Eagle	Airborne mission.
Eureka	Teheran Conference December 1943.
Ferdinand	Deception plan for pre-Dragoon period.
Ithaca	Initial point at which airborne missions passed over coastline.
Kokak Force	Comprised Camel, Delta and Alpha Forces.
Nutmeg	Supporting air operations between D minus 5 and 0350(B) hrs. D Day.
Overlord	Operation from the United Kingdom to secure a lodgement on the Continent from which further operations could be developed.
Romeo Force	French commando force landed near Cap Nègre.
Rugby Force	Seventh Army Airborne Division.
Sextant	Cairo Conference December 1943.
Sitka Force	Special force detailed to eliminate defences on Levant and Port Cros Islands.
Yokum	Supporting air operations between 0350(B) hours D Day to H Hour D Day.

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ABBREVIATIONS

A.A.F.	Army Air Forces
A.C.P.	Air Command Post
A.F.HQ.	Allied Force Headquarters
A.F.S.C.	Air Force Service Command
A.H.B.	Air Historical Branch, Air Ministry.
A.O.C.-in-C.	Air Officer Commanding-in-Chief.
Appx.	Appendix
C.C.S.	Combined Chiefs of Staff
C.O.S.	Chiefs of Staff
COSMED.	Prefix of signals from Chiefs of Staff to Mediterranean
C.O.S.S.A.C.	Chief of Staff to Supreme Allied Commander.
C.T.F.	Carrier Task Force
Do.	<u>Dornier</u>
F.D.T.	Fighter direction tender
F.6.F.	Hellcat aircraft
G.A.F.	German Air Force
G.C.I.	Ground Control Interception
J.G.	<u>Jagd Geschwader</u> (G.A.F. fighter wing)
J.P.S.	Joint Planning Staff
J.S.M.	Joint Staff Mission
Ju.	<u>Junkers</u> (German aircraft)
K.G.	<u>Kampf Geschwader</u> (G.A.F. bomber wing)
L.C.I.	Landing craft (infantry)
M.A.A.F.	Mediterranean Allied Air Forces
M.A.C.	Mediterranean Air Command
M.A.C.A.F.	Mediterranean Allied Coastal Air Force
M.A.T.A.F.	Mediterranean Allied Tactical Air Force
M.A.S.A.F.	Mediterranean Allied Strategic Air Force
M.B.C.	Mediterranean Bombardment Code
Me.	<u>Messerschmidt</u> (German aircraft)
MEDCOS	Prefix of signals from Mediterranean to Chiefs of Staff.
Mtg.	Meeting

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ABBREVIATIONS

M.T.O.	Mediterranean theatre of operations
N.C.W.T.F.	Naval Commander Western Task Force
O.K.L.	<u>Ober Kommando Luftwaffe</u> (High Command Air)
O.K.W.	<u>Ober Kommando Wehrmacht</u> (Supreme Command of the Armed Forces)
R.C.M.	Radio counter measures
R.P.	Rocket projectile
S.A.C.M.E.D.	Supreme Allied Commander Mediterranean
S.A.S.O.	Senior Air Staff Officer
S.C.A.E.F.	Supreme Commander Allied Expeditionary Force
S.H.A.E.F.	Supreme Headquarters Allied Expeditionary Force
T.A.C.	Tactical Air Command
Tac/R	Tactical reconnaissance
T.C.C.	Transport Carrier Command
T.F.88	Task Force 88
V FMI & VI FM2	Wildcat aircraft

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CHAPTER 1

THE STRATEGIC BACKGROUND

Evolution of Allied Strategy in 1943

Early Concepts

COS 234 paper
Min 3 para 24,
taken at CCS 88th
Mtg Trident
Conference
17 May 43.

In May 1943, it had been pointed out by the Combined Chiefs of Staff at the Washington Conference that Allied possession of Corsica and Sardinia would constitute a direct threat to the Germans in the South of France; they began to consider the possibility of some diversionary action to coincide with the main landing in France.

CCS.303/3 para 4
Quadrant
Conference
17 Aug. 43.

At the Quebec Conference in August 1943, the main Allied tasks were defined as maintenance of unremitting pressure on the German forces, and the creation of the conditions required for Overlord⁽¹⁾ and of a situation eventually favourable to the entry of our forces into Northern and Southern France. The decision in favour of the execution of Overlord at the tentative date of 1 May 1944 was made firm. Overlord was given overriding priority over further Mediterranean operations against the Axis, and, until its execution, remained the king post of the Allied strategic structure. It is very important whenever considering Operation Anvil and other projected or actual operations from the Mediterranean to relate them to Overlord; for although, as Sir Alan Brooke said at the Teheran Conference in November of that year, all action contemplated in the Mediterranean was strategically interlocked with the rest of the war, and played an important part both as regards Overlord and as regards holding divisions away from the Russian front, Overlord was the constant factor with which all else must be equated. On secondary operations, such as Anvil, there were differences and shifts of opinion among those responsible for Allied strategy. For months, the passage of events played on estimates of what was the best contribution the Mediterranean theatre could make towards Overlord and it will be seen how opinion crystallised in two fundamentally different moulds; but at no point was there any difference of opinion between the British and Americans as to the fundamental importance of Overlord itself. There were differences as to the necessary weight and timing of it, never any as to the need for it and the intention to execute it.

CCS II/para 14
Conclusions
Quadrant
24 Aug. 43.

Ibid -
CCS 319/5/-129
of COS (43)513(0)
(Pt.A.)
24 Aug. 43.

It was agreed that offensive operations against Southern France (to include the use of trained and equipped French forces) should be undertaken, to establish a lodgement in the Toulon-Marseilles area, and to exploit northward, so as to create a diversion in connection with Overlord. Up to the beginning of 1944, the return to the Continent might fall

COSSAC (43) 32
Final also
COS(43) 415(0)
21 July 43.

(1) An operation with forces and equipment established in the U.K. to secure a lodgement on the Continent from which further operations could be developed. The area finally chosen was the Cotentin Peninsula.

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Quadrant CCS 319/4
Sect. IV, para. 2 (d)

Draft Report by
C.-in-C. M.T.O. to
C.C.S.
24 Oct. 43.

Summary of Agreements
Decisions etc. arising
from the first four
Mtgs. between COSSAC
Mission and JPS AFHQ
AFHQ-C-3
25 Oct. 43.

A.890 M.A.C. to
A.C.P. 7 Dec. 43
re F.A.M. 283

within one or more of three 'Rankin' (1) conditions, depending on the position of the German armed forces. At the same conference, General Eisenhower was directed to submit an outline plan for an operation against the Southern coast of France. The project was studied from the outset jointly with C.O.S.S.A.C. (2) representatives sent to Algiers.

The pith of the findings of the COSSAC-AFHQ meetings as they affected the Mediterranean Air Forces lay in the desire of the C.O.S.S.A.C. mission for the early establishment of airfields in Corsica for the task. The landing in Southern France was to coincide with or follow the landing in N.W. Europe, but neither it nor any overland attack from Northern Italy into Southern France prior to D Day Overlord was acceptable. The planners' concept of Anvil was still, at that point, that of a diversion, not of a threat or major operation.

Early Definition of the Object of Anvil as a Threat

NAF 492
29 Oct.
SACMED to CCS.

The object of Operation Anvil was defined as the pinning down in the South of France of as many German divisions as possible to prevent the reinforcement of the Overlord area. General Eisenhower (then still SACMED) agreed with the C.O.S.S.A.C. mission that this object could be best achieved by mounting a threat on as large a scale as possible, rather than by launching an actual operation which, after the first 48 hours, would inevitably display its weakness. Owing to limitations of assault shipping and craft, no amphibious assault from the Mediterranean could, he said, be on a larger scale than one division, with two brigade groups in the assault. He did not even consider that an operation (either real or threatened) against Southern France was necessarily the best contribution his forces could make towards Overlord, and it was strategically unsound to decide this point at once. The British Chiefs of Staff agreed that a threat was preferable to an actual operation. The best contribution would be to contain German forces outside the strategic area of Western Europe altogether and in any case the threat should not become apparent until it was too late for the Germans to meet it by transferring divisions from outside W. Europe, i.e. not until D minus 2 or 3 weeks.

OZ 3611
8 Nov. 43.

Air C-in-C.
AEAF
TLM/MS. 182

C.O.S.S.A.C.'s comment on this last report was that a decision should be made at once that the threat was the best possible contribution from the Mediterranean theatre and that the necessary preparations should be put in hand immediately.

-
- (1) Operation Rankin - code name of an operation designed to comply, if opportunity arose, with para. 5 (b) of the C.O.S.S.A.C. Directive of 26 Apr. 1943. A return to the Continent in event of German disintegration at any time from then onwards, with whatever forces might be available at the time. Three possible cases were considered.
- Case A. Such substantial weakening of the strength and morale of the German armed forces as would permit successful assaults with the Anglo-American forces available prior to the target of Overlord.
- Case B. German withdrawal from occupied countries.
- Case C. German Unconditional surrender and cessation of resistance in N.W. Europe.
- Early in 1944, Rankin was subordinated to, and gradually submerged by the needs of Overlord.
- (2) Chief of Staff, Supreme Allied Commander.

The Cairo and Teheran ConferencesThe Need for Allied Agreement on Strategy

C.C.S. 409
25 Nov. 43
Note by British
C.O.S.
considered at
C.C.S. 130th,
131st and 132nd
Mtgs. Eureka
Conference
Nov. 43

C.O.S.(43)
791(0) Pt.I.

By the end of November it had become clear to the Allied Chiefs of Staff that they were not agreed as to what should be done next in the Mediterranean, with particular reference to the effect of any future action on Overlord. The main point at issue was how to preserve the 'sanctity' of Overlord in its entirety irrespective of developments in the Mediterranean. The British Chiefs of Staff affirmed once more their intention to proceed with Overlord, but did not regard its launching on a fixed date as the pivot of all our strategy. An opportunity for agreement was presented by the series of proceedings at Malta, Cairo⁽¹⁾ and Teheran⁽²⁾ between 18 November and 7 December 1943.

The Sextant and Eureka Conferences

Ibid
1st, 2nd and 3rd
Plenary Mtgs.

C.C.S. 132nd
Mtg. 30 Nov. 43.
Teheran.

COS(43) 791(0)
Pt. II. Eureka
Conference

After clearing up a number of relevant points, the President and Prime Minister accompanied by their service chiefs and advisors, proceeded to Teheran in Iran, where they were met by Marshal Stalin and his staff. There was unanimous agreement on the paramount importance of Overlord, but the three powers did not see eye to eye on the relative importance of the various complementary plans under discussion. Briefly the national standpoints may be summarised as follows. The Americans considered that an Anvil operation would afford the most immediate assistance to Overlord. The British, also impressed with the value of an Anvil, were both anxious to exploit the Italian campaign to the utmost, and, if Turkey should join with the Allies in active warfare, to insert an operation against Rhodes. The Russians, although not insisting on Anvil, preferred its launching to all alternatives, on the grounds, they stated, of the early help it would afford to Overlord, even at the expense of the Allied advance to Rome and the Pisa - Rimini line. The British Chief of Air Staff, concerned with questions of range, was not satisfied that the range from the available bases would allow of adequate air support to the operation. Marseilles was, he pointed out, 225 miles from the eastern side of Corsica, on which the best air bases were sited.

Decisions were rapidly arrived at, both at the meetings of the three Chiefs of Staff committees and at the Plenary Meetings presided over by the heads of state. The Combined Chiefs of Staff agreed that we should continue to advance in Italy to the Pisa - Rimini line and that an operation should be mounted against the South of France on as big a scale as landing craft permitted. For planning purposes D Day Anvil was to be the same as D Day Overlord. There was some discussion on the possibilities of a move eastward when Italy was conquered. Istria and Trieste, it was realised, were strategic positions. The Prime Minister was impressed by what he construed as the idea of the President of a move into the head of the Adriatic north-eastward towards the Danube and mentioned it at the first plenary meeting at Teheran. The agreements of the Combined Chiefs of Staff were embodied in the global decisions of the final plenary meeting at Teheran on 30 November.⁽³⁾ Overlord in conjunction with Anvil was to be launched in May 1944.

- (1) Sextant Conference.
- (2) Eureka Conference.
- (3) Refer to Appendix 1 for conclusions reached.

SECRET

4

Overlord and Anvil now the Supreme Operations

COSSAC(43)88

The President and Prime Minister then ruled that Overlord and Anvil were to be the supreme operations for 1944, and that nothing must be undertaken in any other part of the world to hazard the success of those two operations. It was proposed to include in Anvil six or seven French divisions trained in Italy, and some French air squadrons. This, it was held, would increase the chances of enthusiastic French co-operation both inside and outside France.

Fluctuating Conceptions of Anvil

Prime Minister
to President
No. 721
1 July 44.

From this time on, the Anvil plan was to undergo many modifications and to continue the source of misgivings in both the British and American camps. The Prime Minister was given to believe at the Cairo Conferences after Eureka that General Eisenhower disliked Anvil. General Eisenhower stressed the vital importance of continuing the maximum possible operations in an established theatre, since much time was invariably lost when the scene of action was changed, necessitating, as it did, the arduous task of building up a fresh base. The South of France was five hundred miles from the Normandy Front and to him and others it was, in effect, another theatre. Furthermore, the Prime Minister was impressed soon after, at the Marrakesh deliberations, by the estimates of General Montgomery that it would take ninety days for a force landed at Anvil to influence the Overlord operation. In the course of time, in view of changing circumstances, both these officers changed their mind and decided in favour of Anvil.

P.33
23 Jan. 44.

By 23 January, General Eisenhower, in his new appointment as Supreme Commander for Overlord operations, was pointing out to the Combined Chiefs of Staff that 'Overlord and Anvil must be viewed as a whole', for both areas could be covered by the enemy from one focal centre in France. He pressed for an immediate decision on Anvil, which, he claimed, would have a great psychological effect on the European war. Whether Anvil remained a threat or not depended on resources. The Combined Chiefs of Staff agreed with his thesis, but insisted on leaving the door open to a two-divisional Anvil.

COS (44) 55th Mtg.
Item 1. 22 Feb. 44.

Min. of Def: File D/
France 6/11/Overlord
Vol: 1/Paper 111.

COS (W) 1168
24 Feb. 44.

O.Z. 1046
COSMED. 43
26 Feb. 44.

The view of the American Chiefs of Staff at this stage was that an immediate decision on Anvil was not essential, but they held to the view that it was an operation, not a threat which should be planned for. They still believed that the Germans would, shortly before Overlord, execute a planned withdrawal from Italy, thereby neutralising our Mediterranean strategy. The general concern with the battle in Italy was reflected in the decision (agreed on by the President and Prime Minister and conveyed to S.C.A.E.F. and S.A.C.M.E.D.), that the campaign in Italy must, until further orders, have overriding priority above all existing and future operations in the Mediterranean theatre. The situation was to be reviewed on 20 March. In the meantime, the Prime Minister repeated an offer to the President that the U.S. Chiefs of Staff should come to London to clear up any differences with the British Chiefs of Staff. With Pacific problems pressing for early solution, they were unable to come at the time, but nominated General Eisenhower as their deputy. They came to London later, in June.

Viewpoint of the Supreme Allied Commander Mediterranean

Min. of Def:
File D/France/6/11/
Overlord
Vol: 1/Paper 193.

The precarious position of the Anzio beachhead forces in the third week in February gave rise to doubts in the mind of General Eisenhower whether Anvil would be possible at all.

DS 59741/1(18)

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SECRET

5

Soon after, the British Chiefs of Staff declared themselves "strongly opposed to the withdrawal of forces, particularly air forces, for other purposes until the capture of Rome was effected."

56453
25 Feb. 44
SACMED to
15 Army Gp.

The Supreme Commander Mediterranean - Sir H. Maitland Wilson - was fully aware of the vital part the air forces were playing in Italy. His plan, he stated, was to use the air to deprive the enemy of the ability either to maintain his position at the time (25 February) or to withdraw divisions in Italy in time for Overlord.

Min. of Def:
File D/France/6/
11/Overlord
Vol: 1 Paper 259
22 March 44.

The British Chiefs of Staff, on 22 March, told Field Marshal Sir John Dill of the Joint Staff Mission in Washington that it was clear that Anvil, as originally contemplated, could not be carried out, since it was not possible to withdraw in time land forces from Italy or landing craft from the maintenance of Anzio beachhead. It was arranged with the U.S. Chiefs of Staff to delay, not cancel Anvil, with a new target date of 10 July. The whole problem was again deferred until "sometime in June," when it might be clearer which of General Wilson's alternative plans for operations to follow the arrival at the Pisa-Rimini line and the junction of the beachhead and the main front was the best strategy.

Deception Plans

Active steps were ordered by the Supreme Commander towards air action in support of a deception plan.⁽¹⁾ It was most essential to show in February and March a regular and noticeable increase of the air effort against Balkan targets, with special attention to Crete. Anti-shipping operations in the Aegean and Ionian seas, especially on the Crete routes, were stepped up: regular Photographic Reconnaissance sorties were flown over Crete, Durazzo and the Peloponnese: gliders (including all possible unserviceable aircraft) were exposed in Sicily so as to show the maximum numbers to enemy air reconnaissance. Rigid restrictions were imposed on the moves of gliders and troop carriers from Sicily or Italy: and lastly, for about two months, camouflage and deception units displayed the maximum possible number of dummy single-engined fighters, amounting to five - six squadrons in the Lecce area.

The Final Decision

The Stanwell Meeting of the Combined Chiefs of Staff

C.C.S. 163rd
Mtg.
11 June 44.

The American Chiefs of Staff came to England in early June and the Combined Chiefs of Staff conferred at Stanwell, Middlesex on 11 June. They avoided the main issue as to whether or not Anvil was to be launched and discussed at length the various alternatives. General Marshall stressed the need to prepare at once and advance the date for some amphibious operation in the Mediterranean to help the Normandy landings, admitting the existence of doubts as to whether Operation Anvil would not be too slow to assist them greatly. Admiral King, U.S.N. agreed on the desirability of reserving for the present the decision as to which amphibious operation should be undertaken from the Mediterranean.

The Combined Chiefs of Staff agreed on four points. Firstly, there would be an amphibious operation with target

(1) Plan Ferdinand.

SECRET

6

date 25 July: secondly, this operation would be of approximately three divisional assault lift: thirdly, the objective for the operation was to be determined later: fourthly, plans for three alternative objectives were to be prepared - Cete, Istria and the Bay of Biscay, with particular attention to the mouth of the Loire and Bordeaux. They were, therefore, only six weeks from the event, not prepared to agree on the objective of the operation for which preparations had long been under way, and were still, in spite of the decisions of the Teheran and Cairo Conferences to launch Anvil, unprepared to give the orders to execute it.

OZ. 3410
C.O.S. to J.S.M.
28 June 44.

Events after the Stanwell Meeting

After the Stanwell meeting, the British Chiefs of Staff noted several significant changes in the situation. Anvil was, as General Wilson pointed out, impossible of achievement until one month later than contemplated. One Mulberry floating landing stage was rendered completely unserviceable and another partially so and many landing craft damaged during the great gale of 19 - 21 June on the Normandy coast. The German mine menace had developed appreciably and called for increased use of landing craft of all kinds. Lastly, it now became clear to them that Hitler's and Kesselring's policy was definitely to stand and fight south of the Apennines, not, as was believed in American official quarters, to withdraw to the Alps, thereby releasing divisions and rendering Allied strategy in Italy bankrupt.

Visit of American Chiefs of Staff to Mediterranean

SAC(44)
Special (2)
Minutes of a
special meeting
with General
Marshall and
General Arnold
at A.F.H.Q.
17 June 44.

On 17 June, grand strategy moved nearer the battlefield again. Two American members of the Combined Chiefs of Staff Committee - General George C. Marshall⁽¹⁾ and General Henry H. Arnold⁽²⁾ - attended a conference at A.F.H.Q. held by General Sir Henry Maitland Wilson. Among those present were Lieut. General I. Eaker⁽³⁾ and Sir John Slessor⁽⁴⁾

At this date, the position in the west was that Overlord had gone in and General Eisenhower now wanted Anvil and wanted it quickly. The capture of either Bordeaux or Marseilles was necessary if he was to deploy forces in the shortest possible time. He must have a port. Marseilles was that port. An assault on Bordeaux from Mediterranean bases was ruled out as impracticable; for one reason, air forces in suitable weight could not be deployed in time. In favour of Anvil, General Marshall said that the success of the Resistance movement in France had exceeded expectations and combined with the German fear of other landings in N.W. Europe, was considered to have stretched enemy resources to the point at which it was impossible for him to move any substantial reserves to the Overlord area.⁽⁵⁾

General Wilson pleaded for the continuance of the battle in Italy. If available resources continued to be allocated, the Allies might capture the Ljubljana Gap by the end of August 1944. Only a threat to the Danube basin, he believed,

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- (1) C.O.S., U.S. War Dept.
 - (2) Chief of Air Corps U.S. War Dept.
 - (3) Commander-in-Chief Air Forces Mediterranean.
 - (4) Deputy C-in-C Air Forces Mediterranean.
 - (5) In the event, as recorded later, the Germans took advantage of the withdrawal of airforces from Italy in the late summer to transfer two fighting divisions from Italy to the Overlord area.

would compel the Germans to react; and this as an objective had the great military advantages of keeping the enemy on the run, retaining Allied Armies (and the co-operating Air Forces) intact as a fighting machine and involving no time-lag. A thrust north-west from the Po Valley (followed probably by an amphibious operation at the head of the Adriatic, for example, an attack on Trieste) offered the best threat the Mediterranean could produce to a vital enemy area, and the best prospect of reaching German soil, i.e. through the Hungarian plain. It was therefore likely to draw the maximum German forces away from other fronts. If, however, Anvil were decided on, (and it was the best alternative), then the best area for landing was the Toulon area. Light was thrown on Allied strategy affecting operations in the Balkans⁽¹⁾ by General Marshall. The Combined Chiefs of Staff, he said, had no intention of penetrating into the Balkans unless the Russians themselves did so.

Meeting of
Combined Chiefs
of Staff
29 June 1944
Informal - no
minutes -
verbatim state-
ments only
recorded.

General Marshall listened to unanimous arguments put up by the Mediterranean commanders in favour of their theme, but was unconvinced. Perhaps his mind was already made up. The Germans, he said, might well not defend the Pisa - Rimini line, but might withdraw through the Alps.⁽²⁾ They had nothing to lose by so doing 'since the loss of morale had already occurred.' He did not agree with General Eaker and Air Marshal Slessor, who felt that adequate air support could not be given both to Anvil and to Italian operations. Their viewpoint and that of General Alexander were unacceptable. They were, he felt, the perfectly comprehensible ones of commanders in the field who desired to keep the maximum number of forces available to them in being. Both he and they felt they were defending the principle of concentration of forces, but whilst they saw Italy as the vital theatre of operations, he saw only the Overlord area as the decisive field of victory.

U.S. Chiefs of Staff's Call for Anvil

C.O.S. 603
168th Mtg. (5)
Memo by U.S.
C.O.S.
24 June.

Things began to come to a head a week later. Views were, at last, crystallising into concrete patterns. The American Joint Chiefs of Staff, rejecting the Mediterranean command's alternatives, called emphatically for Anvil, as the only operation which provided early and maximum support for Overlord and the additional major port required by General Eisenhower, would put the French forces into the battle for their homeland and contribute to putting into the fight the battle-trained U.S. divisions in the Mediterranean and a larger number of the trained forces then available in the U.S.A., and which would utilize to the best advantage the air build-up in Corsica, concentrate our forces and put them into battle in the decisive theatre. The commitment to Anvil of the resources it required would still leave large forces available to General Wilson to exert a very heavy pressure on the enemy in Italy. His massive preponderance of air power would enable him to exert overwhelming air pressure both in Italy and in support of Anvil. They submitted a draft message to General Eisenhower to release necessary shipping and naval forces for Anvil not later than 1 July. General Wilson was to be informed and arrange with

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- (1) Istria and the Trieste area were Italian territory and not politically part of the Balkans proper.
 - (2) Shortly afterwards, this conjecture was proved to be incorrect.

SECRET

8

General Eisenhower for the temporary release from Overlord for a one-divisional air lift.

British Chiefs of Staff Opposal to the Anvil Plan

C.C.S. 603/1
(enclosure)
C.O.S.(W) 130
Memo by
representatives
of British
C.O.S.
26 June 44.

Events in June had seriously shaken the British Chiefs of Staff's belief in Anvil. The disastrous damage inflicted by the great gale off Normandy and the mine menace rendered it, they felt unsafe to deplete Overlord shipping while the crisis lasted. Their belief in the retention of the integrity of the Allied fighting machine in Italy had been heightened by the success of its advance through Rome and the knowledge that the Germans intended to stand and fight and could therefore, they argued, hardly afford to give up troops to the Western Front. They gravely doubted whether there were sufficient air resources in the Mediterranean to give simultaneously to Anvil and to operations in Italy that degree of support proved necessary if rapid progress on land was to be made. Anvil would hamstring the Italian Campaign and weaken Overlord: its advantages were, they now felt, illusory. They advocated cancelling it, strongly recommending making available some or, if need be, all of the French and American divisions earmarked for it, for Overlord as soon as shipping and port capacity permitted their transportation and maintenance in the battle area. In short, everything should be done to exploit both Overlord and the advance in Italy, from which area the threat of an assault on the south coast of France could be emphasized without the waste and dubious chances of success of an actual landing.

U.S. Chiefs of Staff's Rejection of British Proposals

C.C.S. 603/2
27 June 44.

The U.S. Chiefs of Staff rejected the British assumptions and proposals as both unrealistic and unsound when viewed against the need for the early termination of the war and were puzzled at the protraction of discussion at a time of crisis. With preparations under way to meet a German counter-attack in Normandy in the face of massive Allied air superiority it seemed to them a reflection on the quality of our ground troops in Italy to suggest they could not make headway against Kesselring's crippled armies with the strong air force and wide margin of air superiority which the Anvil withdrawals would still leave us there.

Overlord's needs were paramount, Eisenhower had said so and everyone agreed on it. If he needed Marseilles, if Anvil were the quickest way of providing it and were a quicker means of deploying the great reserves then in the U.S., then they were convinced; if Eisenhower could spare the landing craft, they were prepared to accept these positive premisses as likely to pay bigger and quicker dividends than the long and difficult series of alternative projects against an enemy now known to be intent on opposing any progress in Italy.

Although up to this stage in the war the American Chiefs of Staff had, by and large, proved themselves co-operative and on many occasions accommodating in their views in the interests of concord, they felt the decision had to be made, and asked for the immediate despatch of their proposed directive to General Wilson.

C.C.S. 603/3
28 June 44.

British Chiefs of Staff's Maintenance of their Viewpoint -
Decision referred to Prime Minister and President

Anvil, replied the British Chiefs of Staff, could not mature during the following three critical months, whereas a

continued offensive in Italy, with the air superiority just proved so mandatory in Diadem, would destroy Kesselring's forces in being at the time, use up his four reserve divisions and draw off another six from other fronts. The commanders on the spot, including the Air Commander-in-Chief, were, they believed, agreed that to divide our air forces between both operations would violate the root principle of concentration of force. Maximum force was being applied in Italy. Its continuity should not be broken. Patient discussion was imperative. The matter was referred to the Prime Minister for direct exchange of views with the President.

IZ 4837 from
J.S.M.
29 June 50.

There was an informal meeting held in Washington the same day between the U.S. Chiefs of Staff and the British Joint Staff Mission and although certain minor points were conceded it was clear that opinion on each side had taken a certain clear-cut form which appeared perfectly reasonable to its own members, but incomprehensible to the other group.

Prime Minister's
telegrams to
President Nos.
717 (28 June)
719 (29 June) and
721 (1 July 44)
and President's
telegrams to
P.M. Nos. 573
(28 June), 574
(29 June) and
577 (2 July)
(S.I.C. File
D/France/6/14
Vol.I)

Exchanges between Prime Minister and President

Both the Prime Minister and the President took it very much to heart that these differences should have arisen and that the Combined Chiefs of Staff should have separated after the Stanwell meetings before the big issue had been decided. A series of telegrams passed between 28 June and 1 July in which the two heads of state tried to reduce to simple terms the arguments of their advisers.

The President reminded the Prime Minister of their long agreed policy to make Overlord the decisive action. Grand strategy was aimed at the heart of Germany, its unconditional surrender and the early conclusion of the war. It was agreed at Teheran to mount Anvil. So far the plan had gone well and nothing had occurred to require any change. He could not agree to the employment of U.S. troops against Istria and into the Balkans, nor, he thought, would the French. There was enough Allied air to cover all commitments. He, like his Chiefs of Staff, believed any delay now would kill the prospects of an Anvil in time to be of major benefit to Overlord, and his interest and hopes centred on defeating the Germans in front of Eisenhower.

Minute dated
30 June from
British Chiefs
of Staff to
Prime Minister.

After further consideration, the British Chiefs of Staff could report no change in their attitude. On all grounds, they could not see how Anvil could assist Overlord in time to be effective and they were apprehensive as to the effect on the Italian campaign. They wished, however, to remove any suspicion that might exist that they were using such delaying tactics as would render Anvil impossible and therefore reluctantly agreed to the American proposition. The Prime Minister made this clear to the President, explaining how the President's own interest in going into Istria, the earlier opinions of commanders and the pressure of events had persuaded them against Anvil. None of them had ever considered moving armies into the Balkans, but operations from Italy, such as discussed, against Trieste and Istria had great possibilities. The President had had, he said, at Teheran, a series of raids in force in Istria in mind, if the Germans had started a general retirement from Greece and the Dodecanese. That had not happened and Tito's position appeared to be weaker.

O.C.S. 168th Mtg.
28 July 44.

It was therefore agreed that the draft directives submitted by the American Chiefs of Staff should, with certain modifications, be despatched, but it was made clear as late as

SECRET

10

28 July by Admiral Noble, one of the British representatives on the Chiefs of Staff Committee in Washington, that neither H.M. Government nor the British Chiefs of Staff considered that Operation Anvil was our correct strategy. It was also made quite clear, however, that having accepted the decision, the British would do their very utmost to make Anvil a success.

Order to launch Anvil

COSMED 139
2 July 44.

The order to launch Anvil went out on 2 July in the following terms:-

"Anvil will be launched at the earliest possible date. You will use every effort to meet a target date of 15 August. You will prepare for the Operation on the basis of approximately a 3 Division Assault. An Airborne lift of a strength to be decided later, and a build-up of at least 10 Divisions as soon as the resources made available to you will permit. Having in mind in your preparations the steady reduction of German capacity to resist and the vital importance of prompt support of the Overlord Operation.

2. You will use all available Mediterranean resources not required for Anvil to carry out your present Directive with regard to Operations in Italy.

3. By copy of this message SCAEF is directed to release to SACMED as early as practicable the additional resources required for Anvil. These resources and the dates on which they should be made available should be decided in consultation between the Supreme Commanders."

Directives to Mediterranean Commanders

FX.68641
5 July 44.

On 5 July, this directive was interpreted into military terms to the Mediterranean Commanders, as it affected operations in Italy. General Alexander was given a new directive in place of that of 22 May, (1) of which the following were the salient points:

"....it is not planned to remove from your command.... more than 3 U.S. Divisions and 4 French Divisions....

Your task will continue to be the destruction of the German forces in Italy. To this end:- (a) You will advance through the Apennines and seize the line of the River Po to secure the area Ravenna-Bologna-Modena to the coast covering Leghorn....(b) Thereafter you will advance north of the Po and secure the line Venice-Padua-Verona-Brescia. It is appreciated that these manoeuvres coupled with the advance of the Anvil formations up the Rhone Valley, will almost certainly result in the clearance of northwest Italy of all German formations without the necessity of undertaking an offensive in that direction...

5. To enable you to carry out these operations all available resources of the Mediterranean Theatre at the disposal of A.F.H.Q., less those required for Operation

(1) F.49066.

Anvil and internal security purposes, will be made available to you.

6. Air C.-in-C. has been requested to afford you maximum air support consistent with the overriding priority given to Anvil."

Directive to Air C.-in-C., Mediterranean on Italian Operations

Directive for
Air C.-in-C.
Med: Gen. Wilson
to Gen. Eaker
5 July 44

Simultaneously a directive was sent to General Eaker, which stated:-

"... You are requested to provide the fullest air support to these operations (those given in the directive to General Alexander) consistent with the priority which has been accorded to Operation Anvil."

Inevitable Reduction of Air Participation in Italian Campaign

MEDCOS 167
Wilson to CCS
5 Aug. 44.

By 5 August, the full implication of Anvil as affecting the balance of air forces was clear. Up to that date, operations of the Tactical Air Force in support of the battle in Italy had continued as related, on a diminishing scale, and had resulted, the Supreme Commander affirmed, in inflicting very severe damage and dislocation on the enemy's road and rail communications in the Po Valley. When Dragoon⁽¹⁾ was launched, the whole effort of XII Tactical Air Command, including three British Spitfire wings then concentrated in Corsica, as well as that of the medium bombers, would have to be switched to its support although there should from time to time be occasions when the medium bombers could be made available for action in Northern Italy.

By accepting additional risks and diverting squadrons from Coastal Air Force and the Eastern Mediterranean, it had been possible to build up the strength of Desert Air Force, (left to support Allied Armies in Italy) to a total of twelve light and medium bomber squadrons, eighteen fighter and fighter-bomber squadrons and four tactical reconnaissance squadrons by the second half of August, a strength which, in view of the negligible effort of the Luftwaffe in the Mediterranean, should afford appreciable help to the Armies. By diverting from defensive tasks squadrons of a class unsuitable for support of Allied Armies Italy, it had been possible to offset in Balkan Air Force the reductions necessitated by the withdrawal of light and fighter-bomber squadrons for employment by Desert Air Force. The Strategic Air Force, while taking every opportunity of continuing operations against oil and industrial targets in the Balkans and Southern Germany, was being used, when essential, to supplement the Tactical Air Forces in connection with Overlord and Dragoon. As regards Coastal Air Force, it was anticipated that once the Dragoon forces were established ashore and the ports of Marseilles and Toulon captured or neutralised, substantial reduction of its forces might be feasible. The Supreme Commander Mediterranean, summing up, affirmed himself satisfied that they had at their disposal "adequate forces to afford a most formidable degree of support to the land operations in Italy and Southern France."

British Chiefs of Staff's Proposal to switch Anvil to Brittany Coast

MEDCOS 154
5 July 44

On 5 July, General Wilson recorded his 'delight', (which

(1) New code name for Anvil.

there is plenty of evidence to confirm was universally shared in the theatre) that a firm decision had been made on Anvil. On 5 August, the decision appeared not so firm. The position in France was that the Allies had made rapid progress on their Western flank and it seemed likely that the ports on the Brittany coast might soon be in our hands.

COS(W) 229
5 Aug. 44
COS to JSM
Information
AFHQ and SHAEF.

The Prime Minister and the British Chiefs of Staff pointed out the priceless opportunity they felt existed to concentrate in that decisive theatre the greatest possible force in the shortest possible time. Dragoon, they foresaw, was fairly certain to involve an opposed landing and in any event could not exercise any direct effect on the main battle for a considerable time. On the other hand, the Brittany coast was almost certain to afford unopposed landings at points within a few days march of the main battle. Accordingly the resources then allocated to Dragoon should be regarded as available to move into Northern France via ports on the Brittany coast.

Consideration by Allied Force H.Q. of Implications of suggested Switch to Brittany

Draft MEDCOS
AFHQ - JPS
6 Aug. 44

The effect on the Mediterranean Command of this last-minute prospect of a change in strategy may well be imagined. Work by the Joint Planning Staff proceeded with a view to determine what forces could be diverted, the method of diversion and the time factor involved. Among the snap decisions on the forces which might be diverted was one that it would not be practicable to switch XII Tactical Air Command in the early stages, even if this was desired. Complete re-planning was necessary to divert that air force to Brittany. Air protection for disembarkation and tactical air support for Seventh Army thereafter would have to be provided by S.H.A.E.F.⁽¹⁾ A final decision one way or the other was needed within one week.

U.S. Chiefs of Staff's Disagreement with proposed Switch

On 6 August, the U.S. Chiefs of Staff signalled General Wilson through his American Deputy, General Devers,⁽²⁾ their reply to the British Chiefs of Staff. Briefly, they did not agree with either the conclusions or proposals of the British Chiefs of Staff. The situation, as they saw it, had not changed sufficiently to warrant such a radical change in plans. The date when we could use the Brittany ports and their communications was unpredictable. Overlord was behind schedule. Eisenhower was not short of troops. The Dragoon landings, they affirmed, would be successful, and a rapid advance up the Rhone Valley aided by French Resistance Groups might well contribute the knock-out punch to the German army in France. The idea of the switch to Brittany was dropped.

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- (1) Supreme Headquarters Allied Expeditionary Force.
 - (2) At the conference of 17 June reported above. General Devers declared himself in favour of Anvil/ Dragoon. On 30 July he, who was at the same time Commanding General of N.A.T.O.U.S.A., received authority from Washington to actuate Sixth Army Group H.Q. - first known as Advance A.F.H.Q. Detachment.

SECRET

13

CHAPTER 2

PLANS

The General Outline Plans

B.585
A.F.H.Q.
7 July 44

The Mission and Command of the Operation

On 7 July, the Supreme Allied Commander Mediterranean approved the outline plan and directed the Air Commander-in-Chief, the General Task Force Commander, Headquarters Force 163 and the Naval Commander-in-Chief Mediterranean to prepare and launch, with a target date of 15 August, the amphibious Anvil operation. The two-fold mission of the operation was:-

- (a) To establish a beachhead East of Toulon as a base for the assault and capture of Toulon;
- (b) Thereafter to capture Marseilles and exploit towards Lyon and Vichy.

The Naval Task Force Commander was to assume command of the entire seaborne expedition from time of sailing until the Ground Force was firmly established ashore, after which command of ground operations passed to the Ground Forces Commander ashore. The Air Commander-in-Chief was to nominate an Air Task Force Commander and provide full air support. Responsibility for operations would remain with S.A.C.M.E.D. until such time as S.C.A.E.F. could assume operational control. The assault was to be on a three-divisional basis, with an airborne lift of a strength yet to be decided. A build-up of ten divisions was aimed at.

Additions to the Directive to Task Force Commanders

B.997
11 Aug. 44

It was foreseen that if the enemy was unable to prevent us exploiting up the Rhone valley by any other means, he might stage a protracted defence of Marseilles in the hope of hindering both Dragoon and Overlord. If that happened, General Patch (Commander of Seventh Army), was to exploit on the general axis Aix - Avignon, secure this area, and advance up the Rhone valley, also preparing to thrust with light forces northward up the Durance River Valley towards Sisteron, with a view to gaining touch with and stimulating the Maquis in the Vaucluse area; he was to contain Marseilles.

Air, Ground and Naval Outline Plans

In the long period from its conception to the acceptance of the final outline plans, a great deal of abortive as well as fruitful planning was carried out. All this has no value now except as a study of experiment. The main features of the outline plans of the three Services will now be given. An epitome of the ground plan is given at Appendix 2. After brief consideration of the naval plans to put the ground forces and certain air ground staff ashore, the objectives of the army will be given. Then the air plan will be given, not in full, but in sufficient detail to be clearly visualised. The sub-plans developed by Tactical Air Force and its subordinate command XII Air Support Command and Coastal Air Force will be drawn on to give an all-round view. Thereafter, the practical steps taken to implement the plan, including the outstanding achievement of the build-up in Corsica, will be outlined.

Outline of Naval Plan

M.A.A.F./P.1
(Final) Annex A.
12 July 44 and
Ops. Instruction
No.7 M.A.C.A.F.
25 July 44

Task Organisation

The naval expedition was to be controlled by four distinct forces, namely a Force Flagship, Picket Groups, a Demonstration Group and certain Special Assault Groups. There were three forces, namely the Northern or 'Camel' Attack Force⁽¹⁾ the Southern Attack Force, sub-divided into Delta and Alpha⁽¹⁾ Attack Forces, a Carrier Force and Train.⁽²⁾

Area of Operations⁽³⁾ and Shore Organisation

Ibid

The area of operations was bounded on the East by longitude 10 degrees East; on the South by latitude 41 degrees North and on the Southwest by a line joining the Spanish border to the position 41 degrees N. and 4 degrees E.

Captured enemy ports were to be operated by the U.S. Army⁽⁴⁾ and the French Navy, with British Navy liaison and communication parties. Some of the Salvage Parties would be British.

Ibid

Mission and Tasks

Force 163 was to be firmly established ashore, in a position to capture Toulon and the adjacent airfields and to support the military forces. The Picket Groups were to screen the flanks of the Attack forces. The Demonstration Group was to create diversions. The Special Assault Groups were to land commandos and special Service forces at selected points, notably on two islands off the coast.

The naval force was considerable, comprising:-

- 4 Battleships
- 2 Heavy Cruisers
- 14 Light Cruisers
- 9 Aircraft Carriers
- 105 Destroyers

and numerous supporting craft, cargo ships and assault craft.

Areas assigned

Ibid

The Northern Attack Force was to land forces in the St. Raphael - Agay area (Camel Beach). The Delta section of the Southern Attack Force was to land forces in the St. Tropez - St. Maxime area and the Alpha section forces in the Cavalaire area.

Composition of the Carrier Force

Ibid

The Carrier Force was predominantly British. Seven carriers were from the Royal Navy, two from the U.S. Navy - all escort carriers. Two of the British carriers were to be fitted with nine Swordfish and four Martlet aircraft suitable for anti-submarine patrol. Four of the British carriers were

-
- (1) Named after the three beaches.
 - (2) Auxiliary force of ships and craft responsible for repair, supply and maintenance of naval units.
 - (3) See Maps 1 and 4.
 - (4) This clause must be noted, in connection with the Air Force project of the opening of Port Bouc, recorded later.

to carry twenty-four Seafires each; one carried twenty-two Hellcats and two carried twenty-four Wildcats each; the U.S. carriers were to carry twenty-four Hellcats.⁽¹⁾ These carriers (as at Salerno) were to augment the scale of fighter cover over the beaches; while in the assault area, they were under control of XII Tactical Air Command.⁽²⁾ At least twelve Hellcats and twelve Seafires were to spot for naval gunfire; in addition, XII Tactical Air Command was to provide twenty-four naval spotting missions daily.

Outline of Army Assault Plan⁽³⁾

Ibid

Forces

It was planned to employ one U.S. Corps, two French Corps and an Airborne Force. The breakdown of the entire force may be traced in Appendix 2, where it will be seen that French troops were to play a predominant role. In the initial assault, however, the only French troops were to be of the commando type. Preceded by the maximum available air and naval bombardment, the main assault was to be launched at H hour on D Day by three (U.S.) divisions, reinforced near beaches between Cap Cavalaire and Agay. French commandos were to secure their (U.S.) left flank by a landing near Cap Nègre. An airborne force was to be dropped early on D Day in the Argens valley, between Le Muy and Carnoules, to block enemy reserve movements and secure the high ground northwest of the local corridor. On D plus 5 to D plus 10, the French Parachute Regiment was to be dropped in Maquis-held localities.⁽⁴⁾ Immediately after dark on the night of D minus 1, a Special Service Force was to be landed on the islands of Port Cros and Levant, to neutralise their defences so that shipping might enter the Bay of Cavalaire.

The Operational Outline Air Plans

General Operational Problems

M.A.A.F./P.1

(Final)

12 July 44

TAF/65/18/AIR

and amendments.

8 July 44 etc.

Ops. instruction

No.7 and amend-

ments.

25 July 44 etc.

Task

The tasks of the Air Forces in Operation Anvil were sub-divided as follows:-

- (a) To neutralise the enemy air forces.
- (b) To provide air protection to the assault convoys and subsequent operations.
- (c) To prevent or subsequently retard movement of enemy forces into the assault area.
- (d) To assist the assault and subsequent operations of the ground forces by air action.
- (e) To transport and drop airborne troops engaged in the operation.
- (f) To support operations by the Maquis by air action and air supply.

-
- (1) F.6F,-3.
 - (2) See Chapter 2 and Appendix 7 for full details.
 - (3) See Appendix 2 and Map 4 for fuller details.
 - (4) This operation was cancelled.

These tasks were to be achieved without jeopardising tactical surprise and with due regard for the safeguarding of French lives and property.

The Three Main Air Problems

Ibid The main problems confronting the Air Forces before Anvil were:- firstly, to build up sufficient air forces in Corsica and Sardinia in time to ensure adequate air support for the operations; secondly, to support the operation from those bases and others in Italy and North Africa; and thirdly, to move thereafter adequate air forces to the mainland of France in continued support of Anvil.

Corsica and Sardinia Bases

Ibid Construction of airfields had for some time been proceeding in Corsica up to the limits of its terrain possibilities and was complete as regards base accommodation by 12 July. On that date one wing of medium bombers and some of the fighters and fighter-bombers were located on the island, together with most of the Coastal Air Force units participating.⁽¹⁾ A wing of medium bombers and certain anti-shipping, anti-submarine and convoy protection Coastal Air Force units were based on Sardinia.

Air Support of the Operation

Ibid Air Operations in support were visualised in three⁽²⁾ phases, namely the period D minus 30 to D minus 7 (approximately); the period D minus 7 to D minus 1; and, thirdly, the period of D Day and thereafter. The first period was to be marked throughout by attacks on occupied enemy airfields, with the object of driving enemy aircraft out of range of the beach-heads. As D Day approached, attacks were to be made on the enemy's supply and transportation system in Central and Southern France and South Europe and on submarine bases. Attacks in connection with Operation Overlord and sabotage by the Maquis were already seriously interfering with traffic in some areas. In view of the favourable view taken by S.C.A.E.F. of the assistance already afforded by the Maquis, M.A.A.F.⁽³⁾ was to step up supply to the Maquis and increase the infiltration into France of Special Service troops. If the Maquis could seize and hold airfields in advance, the position of the Air Forces might be accordingly strengthened.

During the second period, the anti-air offensive was to be intensified, not only with the object of drawing the Luftwaffe out of range, but of rendering it impossible for him to operate at all from any base to which he might still be clinging. If this anti-airfield offensive was successful, the main bomber effort would be freed for direction against enemy communications; its object was to retard movement and if possible, isolate the assault area.⁽⁴⁾ Shortly prior to D Day, certain special tactical targets were to be attacked in sufficient and yet not in too great weight, so as to prepare

-
- (1) The record of the build-up and locations of air forces in Corsica on the eve of the operation is given in the following Section and Appendix 3.
 - (2) Altered to 4 in the Bombing Plan.
 - (3) As well as S.H.A.E.F.
 - (4) In spite of previous conclusions that an area of battle could not be strictly isolated, the possibility still remained under consideration.

OPERATION ANVIL-DRAGON

ASSAULT CONVOY ROUTES



the ground for the assault, without (if possible) prejudice to the element of surprise. The day before D Day, there was to be a concentration against the enemy reinforcement routes. An airborne force was to come into play here.⁽¹⁾ The night of D minus 1 was to be marked by the movement of the assault convoys protected by unbroken night fighter cover. The preliminary assaults by commandos were to be assisted by air attacks and the way so prepared for the main assaults.

The third phase was to begin at first light on D Day. From that moment, continuous fighter cover was to be maintained over the assault convoys, and, once the main assault was launched, over the assault area and ships lying off the beaches. To retain the maximum density of cover, ships were to endeavour to lie as close inshore as possible. A strong force of carrier-borne fighters from the seven British and two U.S. escort carriers was to assist in the protection of the assault and in the provision of close support and artillery spotting for the Navy. Day fighter cover of the beaches was to last until the tactical situation allowed of its withdrawal.⁽²⁾

Beach defences (known to be strong) and local strong points were to be attacked by medium and heavy bombers during the approach of the assault forces.⁽³⁾ Fighter bombers and naval elements were also to bomb shore targets in co-ordination with bombing by medium and heavy aircraft.

-
- (1) Details of the airborne plan are recorded later.
 - (2) Defensive fighter patrols on D Day - refer Map 3 - were in three layers and covered four beats.
 - (i) Cap Benat - St. Maxime at 6,000 to 9,000 feet. Thunderbolts (XII T.A.C.), Hellcats (H.M.S. Emperor) and Wildcats VI (H.M.S. Pursuer).
 - (ii) St. Maxime - Cap Roux at 6,000 to 9,000 feet and to seaward. Thunderbolts (XII T.A.C.), Hellcats (U.S.S. Tulagi and Kasaan Bay).
 - (iii) Fréjus - Hyères at 12,000 to 15,000 feet. Lightnings (XII T.A.C.).
 - (iv) Cap Roux - Hyères at 22,000 feet. Spitfires (XII T.A.C.).

(Source: Final Report on Task Force 88 operations (Admiralty) O.R.B.'s of the 3 R.A.F. Spitfire Wings, Air Outline Plan and 'The A.A.F. in the Invasion of Southern France' - H.Q., A.A.F. Washington). Daytime control was handled primarily by 63rd Fighter Wing, (copies of whose records cannot be traced in this country). The number of aircraft on the four patrols varied from 28 to 32. After D Day the schedule was not adhered to. Night fighters were handled by R.A.F. personnel, with one U.S. controller on duty to assist with other matters. There were 4 to 6 night fighters on patrol - by XII T.A.C. from dusk to dawn - 2 aircraft. By M.A.C.A.F. from dusk to dawn - 2 aircraft reinforced by a further 2 aircraft on the dusk and pre-dawn patrol. (Source - Outline Plan M.A.T.A.F.). For further details of patrols from carriers refer to Appendix 7.
 - (3) The elaborate air bombing plan will be dealt with separately.

The air offensive against enemy airfields and the co-operation by medium and heavy bombers against battlefield targets was to continue, so long as the ground situation demanded. Close support bombing on short call could not be expected until about one week had passed, by which time, it was hoped, the first fighter-bomber group would be based on the mainland. In the meantime, a certain degree of offensive action on prearranged targets was to be carried out by the fighter and fighter-bomber cover patrols and these aircraft, as had been proved by experience, might be briefed in the air.

Freelance attacks were part of the plan; these were, as in previous similar situations, to take advantage of the appearance of concentrations of troops and artillery and assist in the general attack on enemy communications. Considerable troop-carrying forces were prepared to fly in supplies and troop reinforcements. The fly-in of aircraft was to begin, if possible, on D Day and to follow in harmony with the preparation of airfield or strip accommodation. Night fighter protection of the assault beaches and ships, controlled at first by seaborne G.C.I. and later from shore-based controls, was to be given until, as in the case of the day fighters, the tactical position no longer called for their assistance.

Control of Operations

Signal
Instruction No.10
H.Q. M.A.T.A.F.
in Corsica
18 July 44

Changes within Mediterranean Air Forces

To meet the new situation it was decided to split the Tactical Air Force into two air forces - 'M.A.T.A.F. in Corsica' and 'M.A.T.A.F. in Italy'. While Desert Air Force and a skeleton of XII Air Support Command remained in Italy for the support of land operations there, the following moves were directed to cover the needs of Anvil. Headquarters Mediterranean Tactical Air Force closed down at Bolsena at 1200 B hours 19 July and reopened simultaneously at a site near Bastia in Corsica, leaving a portion of the Headquarters to continue alongside H.Q. Allied Armies in Italy. The tactical force in Corsica was known as 'M.A.T.A.F. in Corsica', while the portion operating with Allied Armies was known as 'M.A.T.A.F. in Italy'. The latter moved to a site near Siena. A wireless station with twenty radio channels was set up by 63rd Fighter Wing of Coastal Air Force for the use of H.Q. Tactical Air Force Corsica.

Air Outline
Plans
M.A.A.F./
M.A.T.A.F.
S.A.S.O.
ORB/Appx.

Control and Command - Tactical Air Force

H.Q. Mediterranean Allied Air Forces exercised general control and co-ordination of operations. The responsibilities of the Commanding General, Tactical Air Force were enlarged, after energetic discussion, to cover, in addition to his existing functions in the theatre, the following duties: the detailed air planning for Anvil, including provision of cover over the assault and close support for shore operations and co-ordination of all bombing in the assault area; intruder operations; protection of convoys within 40 miles of the beaches, until the Air Officer Commanding, Coastal Air Force took over the defence of Southern France as well as convoy protection; in agreement with Coastal Air Force, Air/Sea rescue, in the assault area, equipment to be supplied by the latter force; lastly, the organisation and direction of Troop Carrier operations.

The Commanding General of XII Tactical Air Command, directing his own and auxiliary units (such as 42nd and

57th Bombardment Wings), was responsible for the provision and co-ordination of air forces in close support and for cover over the assault area - in a word, the tactical air operations linked with the land battle. He prepared his own plan, which was co-ordinated with those of the Naval Task Force Commander and the Commanding General, Seventh U.S. Army.

The Commanding Generals of the medium bomber wings - 42nd and 57th - were to exercise their existing operational control and, under the direction of General Cannon (T.A.F.), provide maximum support. Troop carrier operations came under control of the Commanding General, Provisional Troop Carrier Air Division, himself directed by the Commanding General, Tactical Air Force.

XII Tactical Air Command Control of Operations in the Assault Area

Ibid

While over the assault area and until facilities were established ashore, control of tactical units was to be exercised from a Fighter Direction Ship, (H.M.S. Ulster Queen) and a first, second and third stand-by Fighter Direction Ship (H.M.S. Stuart Prince, U.S.S. Catoctin and H.M.S. Bulolo respectively). Operations of carrier-borne fighters were to be closely co-ordinated with those of land-based fighters. If they landed on shore, they came under control of XII Tactical Command. While the two long-range fighter groups lent by Strategic Air Force co-operated during the assault phase, control of them was to pass to Tactical Command. Direction of Tactical bomber operations were to be determined by Tactical Air Force. Headquarters of XII Tactical Air Command were, initially, divided. An advance echelon was to function afloat, a rear echelon in Corsica: both were to rejoin later ashore.

Control of Operations - Mediterranean Coastal Air Force

Ibid

In addition to his normal responsibilities, the Air Officer Commanding Coastal Air Force was responsible for three broad functions, namely the defence of convoys, reconnaissance and local anti-shipping operations and air/sea rescue outside Tactical Air Force's area. Defence of convoys extended to a point 40 miles from the assault beaches, where it was handed over to Tactical Air Force. The cover during the early stages from first light on D Day was to be a matter of joint contribution by 63rd Coastal Fighter Wing and XII Tactical Air Command.

A programme of special oversea reconnaissance along the enemy coast, to the East and West of the beaches, was prepared. Although no enemy submarines were at sea, when the convoys were known to be sailing, they might put out from Toulon and Spezia. Plans were made to put a considerable effort into play if this happened; it was highly probable that extra cover might be called for for all convoys from the South of Sardinia onwards to the beaches.

It was thought probable, too, that the enemy would use all his available 'E' and 'R' boats for night operations against assault shipping, as well as for mine laying.⁽¹⁾ The Navy planned to compete with any such operations, but could request air assistance; in such cases, a 'Free' area was to be declared cleared of friendly shipping and passed to

(1) He did both in the event.

the Commanding General 63rd Fighter Wing by the Coastal Officer aboard U.S.S. Catoclin.

Control of Strategic Bombers

Ibid

The Commanding General, Strategic Air Force was responsible for his own bombers operating in support of Anvil. Any requirements were to be determined in detailed planning with Commanding General, Tactical Air Force. Both day and night heavy and medium bombers were to be required during the assault phase. The procedure would run to established pattern. Tactical passed the request to Strategic, who approved and passed back to Tactical the task of co-ordinating the attacks with parallel action by other air units and naval and land forces engaged. If an emergency justified it, the Air C-in-C. might decide to concentrate the entire heavy bomber effort in direct support.

Air Defence of Southern France

Ibid

Once the beachheads had been established, the need for standing defence of the coasts of Southern France would arise. This responsibility was to be Tactical Air Force's until sufficient airfields could be made available to Coastal Air Force. Thereafter their joint plan for transfer to Coastal Air Force was to be passed to M.A.A.F. for approval. The tentative date of change-over was accepted as D plus 30; but 63rd Fighter Wing was ready to assume control if the Army advance was quicker than planned.

A Fighter Sector 'X' was to be thrown off by 63rd Fighter Wing to provide for the air defence of ports, anchorages, certain airfields and shipping. The first squadrons to operate in the sector were to be three French Spitfire and one U.S. Beaufighter squadrons, both administered by their own national units. To neutralise enemy air reconnaissance, the work of French Spitfires were to be supplemented by a flight of eight British Spitfires VIII and IX based in Corsica.

Air Sea Rescue

Ibid

While XII Tactical Air Command was afloat, the responsibility for air/sea rescue outside the assault area lay with 63rd Fighter Wing, inside the area (i.e. a radius of 15 miles of the Fighter Director Ship) with Tactical Air Force. Once the Command was established ashore, the definition of 'the assault area' changed to 'up to 40 miles to sea' and the whole of this area fell to Tactical Air Force, leaving the space outside it to 63rd Fighter Wing. Coastal Air Force lent Tactical Air Force a Flying Control Team,⁽¹⁾ and Air/Sea Rescue aircraft and marine craft.

A British ship - H.M.S. Antwerp - was to be the Air Sea Rescue ship, positioned between Corsica and the assault area.

The build-up of air forces in Corsica, Sardinia and France merit separate treatment. The utmost flexibility was the aim, so as to be able to switch them to meet whatever situation might arise in both France and Italy.

(1) With a R.A.F. Squadron Leader in charge.

Outline Plan for Airborne Operations
in Anvil - Dragoon

Build-up of Airborne Forces in Italy

A.G. 370.2/171
G.C.T.-O
Report on
Airborne
Operations
in Dragoon AFHQ.
30 Oct. 44
(AHB/II.T.1/
146/14/4A)

When preliminary planning for the airborne operations in Anvil - Dragoon was begun by Force 163 in February 1944, none of the airborne or troop carrier units ultimately involved were prepared for operations. After the dissolution of XII Troop Carrier Command, the 51st Troop Carrier Wing, composed of three groups, remained in the theatre. But only a portion of it was available for airborne training, because of the demands for its aircraft for special operations, air evacuation of casualties and general transport. A few of its aircraft were attached intermittently to the Airborne Training Centre. Here the First French Parachute Regiment, two pathfinder platoons and the American replacements received training. The British 2nd Independent Parachute Brigade was, in February, in the Eighth Army line as infantry. Elements of U.S. Parachute and Parachute Field Artillery Battalions were in the line with Fifth Army.

By May, the situation had bettered. These parachute units were withdrawn from the line and intensively trained with a full troop carrier group in the Salerno area, following the displacement forward of the 51st Troop Carrier Wing from Sicily to Italy. The non-materialisation of plans to use parachutists in Italy helped the build-up for Dragoon. American parachutists and glider infantry were shipped to Sicily - the former for training, the latter for ten days' battle experience in Italy. By mid-June, there were considerable forces in the theatre available for Anvil. Cohesion was secured by moving the Airborne Training Centre and all units attached to it, as well as the troop carrier aircraft, (now increased to two full groups of 51st Troop Carrier Wing) to the Rome area, where a compact forward base was organised. Gradually the Airborne Division was built up to a balanced force, including field artillery battalions, signal and anti-tank companies. One company⁽¹⁾ had to be re-equipped with the British Airborne six-pounders, since the U.S. 57 mm. anti-tank gun did not fit into the Waco glider.

To cover the shortage of qualified airborne officers in the theatre, the U.S. War Department sent out by air, in mid-July, thirty-six qualified staff officers.

Build-up of Troop Carrier Elements in Italy

Ibid

The troop carrier force had to be built up to a minimum of four hundred and fifty aircraft. In two days, with a loss of only two aircraft, four hundred and thirteen aircraft were moved from the U.K. via Gibraltar and Marrakesh in eight echelons.⁽²⁾ Air Transport Command, to assist, transported a Medical Air Evacuation Squadron,⁽³⁾ various signal detachments, parapak equipment and three hundred and seventy-five glider pilots. On 16 July, Brigadier General Williams, in command of the two wings from U.K., arrived in Italy and established the Provisional Troop Carrier Air Division. By 20 July, the entire division had arrived in the theatre and

-
- (1) 442nd Infantry Anti-tank Coy., from the Japanese - American Regt.
 - (2) 50th and 53rd Wings of IV T.C.C. in U.K. complete with administrative and maintenance echelons.
 - (3) The 819th.

SECRET

22

was stationed at its allotted airfields.⁽¹⁾ The British airborne forces had fifty Horsa gliders to provide for all their needs. The one hundred and thirty operational Waco gliders were hastily reinforced from U.S. by another three hundred and fifty. These arrived on schedule and were assembled in record time and were ready for operations ten days before D Day.

After long discussion, it was decided to use two glider pilots per glider. On 1 August, three hundred and fifty extra glider pilots were asked for and sent out from U.K. in good time. The overall requisition for the parachutes and equipment needed for the planned aerial resupply effort was submitted on 16 July. Some 600,000 pounds weight of these supplies arrived in the theatre in time for Dragoon, by ship-ment lasting until D minus 4. Every item requisitioned arrived on time and preparations ran to schedule.

Concentration of Units

Ibid

Before final detailed planning could begin, the First Airborne Task Force, as it was renamed, and the Provisional Troop Carrier Division had to be organised and their units concentrated. The move of the Training Centre and one Wing to the Rome area has been referred to. Ciampino and Lido di Roma were the main airfield bases: on 3 July they were operationally ready. Step by step, from overseas and from the front line in Italy, units reported to the Training Centre. By 17 July, General Frederick's H.Q. had moved to Lido di Roma and detailed planning was ready to begin.

Detailed Plans for Airborne Operations

Troops for, and Mission of Airborne Operations

MATAF/65/18/Air
27 July 44

HQ. Prov. Troop
Carrier Air Div.
(USAAF)
Field Order No. 1
7 Aug. 44

Under command of Brigadier General R. T. Frederick (U.S.) airborne forces were to land as from first light on D Day on high ground North and East of Le Muy, and on high ground North of Grimaud, with the primary mission of preventing movement of enemy forces into the assault area from the West and North-west, and with the secondary mission of assaulting enemy defences from the rear.

Seventh Army Airborne Division (Provisional), known as Rugby Force,⁽²⁾ included an entire British brigade - the 2nd Independent Parachute Brigade.

The Troop Carrier units, all based in Italy, were under command of Brigadier General Paul L. Williams (U.S.). They then comprised (in addition to an H.Q. and Pathfinder units), two groups of 51st Wing, four groups of 53rd Wing and four groups of 50th Wing.⁽³⁾ Operations fell under five mission headings;⁽⁴⁾ 50th, 51st and 53rd were to carry out Albatross;

(1) Refer to Map 3.

(2) The division comprised:-

2nd Independent Parachute Brigade (Br.).

517th Parachute R.C.T. (U.S.).

509th Parachute Battalion (U.S.).

1st Battalion, 551st Parachute Regt. (U.S.).

550th Infantry Bn. (Glider) (U.S.).

Supporting troops.

(3) Refer to Map 3 for assembly areas, routes etc.

(4) Code names:- Albatross, Dove, Bluebird, Canary, Eagle.
See Map 3 for run-in and route.

50th and 51st Dove, and 53rd Bluebird, Canary and Eagle. Parachute drops and glider landings were to follow one another alternately in the initial operation.

Detailed Planning for Airborne Operations

Ibid

In addition to Ciampino and Lido di Roma airfield, the following were selected for take-off:- Galera, Marcigliana, Fabrisi, Viterbo, Tarquinia, Voltone, Montalto, Canino, Orbetello, Ombrone, Grosseto, Fallonica and Piombino. The Troop Carrier Air Division plans involved high level co-ordination, timing, routes, corridors, rendezvous and traffic patterns. Details such as selection of drop zones, landing zones and composition of lifts, were left to the units involved.

As the troop carrier crews were experienced in night take-off operations, and as pathfinder technique had by that date markedly improved, the idea of a pre-dusk operation was rejected and an initial vertical attack after the opening of the amphibious assault decided on for pre-dawn execution. The early idea of staging in Corsica was rejected, as Corsican airfields could hold no more aircraft and the maximum possible had been built under the limitations of terrain and climate; besides, this would have meant dangerous flying for loaded aircraft and Dakotas towing gliders over 9,000 feet peaks.

The final plan envisaged the following schedule:- on D Day, at 0323 hours, the airborne pathfinder crews were to drop: between 0412 and 0509 hours, the main parachute lift of three hundred and ninety-six aircraft loads followed down: at 0814 hours the follow-up glider landings by Waco (U.S.) and Horsa(1) (British) gliders were to begin and continue until 0822 hours. Later in the same day, forty-two paratroop aircraft loads were to be dropped, followed by three hundred and thirty-five Waco gliders, an operation to last from 1810 to 1859 hours. Automatic air re-supply was to begin on D plus 1; one hundred and twelve aircraft were planned for. Reserves were held for emergencies.

Route(2)

Ibid

Because of high features in the landing area it was decided to drop paratroopers and release gliders at exceptionally high altitudes - between 1,500 and 2,000 feet. One of the main problems was the choice of the best route. To give an idea of the intricacies of planning such operations, it may be noted that all the following factors had to be borne in mind: the shortest feasible distance; traffic control routes; position of beaches; primary aerial targets; enemy radar installations; prominent landfalls; position of enemy flak installations.

Difficulty in Procurement of suitable Maps and Models

Ibid

The difficulties in the way of procuring sufficient, adequate maps in the early days of the Italian campaigns will be recalled. Much had been done by Engineer Command to alleviate the position; but that there was still room for improvement is clear from the report on Dragoon by Mediterranean Allied Air Forces H.Q. Sorties had increased,

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- (1) 35 were employed in the operation and carried the British Parachute Brigade.
 - (2) See Map 3.

organisation was more refined, output greater, but M.A.A.F. was not satisfied that enough of the right kind of maps were issued. In the early days of the campaign, the same complaint had been made by fighter-bomber pilots on Salerno beachhead patrols. In the landings in Southern France it was the Airborne forces who complained.

Map shipments in many cases were reported as late in arriving or improperly made up. Terrain models on a scale 1: 100,000 were available, but the most useful terrain model, or photo-model in scale of 1: 25,000 was available only in one copy, wholly inadequate to serve both the Troop Carrier Division and the Airborne Task Force. Most desirable of all, but not produced for the critical occasion, was a 1: 10,000 photo-model of the dropping and landing zones. The large scale photographs of these zones were excellent, but arrived too late for general use. They arrived just in time for certain specific use, for they uncovered the previously unknown element of anti-glider poles on flat landing areas. All previous oblique photographs had failed to reveal this pertinent information.

Plan for Airborne Diversion

Objects of Diversions⁽¹⁾

MATAF/65/19/AIR
8 Aug. 44 and
Annex I to same,
Ops. Instruction
No.8

The history of the Dragoon assault is to a large extent a record of elaborate and successful deception. Among the methods employed was the interesting airborne diversion, which figured in the general plans for naval and airborne diversions in an area west of the actual landing sectors. The general objects were, firstly, to deceive the enemy as to the area where the actual assaults took place; secondly, to divert his forces; and thirdly, to deceive radar, ground observation and other coast watching defences by multiplicity of targets and by jamming; in particular to simulate a large-scale airborne attack on the left Allied flank by Radio Counter Measures (R.C.M.). In addition, small naval forces, with shipborne jammers covering coast watches and coastal gunnery radar frequencies, were to proceed within enemy radar range towards the Gulf of Genoa, then swing sharply westward to 'bombard'⁽³⁾ the Nice - Cap d'Antibes area.

Plan of Operations

Five Dakota⁽⁴⁾ aircraft, each simulating a serial of forty troop carriers by means of continuous dropping of 'Window', were to approach the Baie de Ciotat from the South from a point outside enemy radar detection range; then, to proceed to a dummy drop zone N.W. of Toulon and drop five hundred miniature parachute dummies; thereafter, they were

-
- (1) The full narrative of how lessons learned in Overlord were rapidly applied to the planning for these diversions, and how British and American air and ground signals staffs proceeded to the Mediterranean to plan conjointly with Mediterranean Allied Air Force staff is recounted at length in the R.A.F. Signals Monograph. This narrative is only concerned in recording the outline plan and operations.
 - (2) Two gunboats and several motor launches.
 - (3) In the Signals nomenclature sense.
 - (4) C-47 type.

to withdraw, continuing the use of 'Window' until once more outside enemy radar range. The course may be traced on Map 2.

Aircraft, Crews and Materials

Ibid

An R.A.F. Squadron Detachment⁽¹⁾ provided the five aircraft and five crews. The Air Re-supply Organisation⁽²⁾ provided five crews. Galera was the base for loading. By 1700 B hours on D minus 1 Day they were to proceed to Ajaccio airfield, the mission base. They were to take off at five-minute intervals and fly at 1,000 feet when over the sea, dropping to 600 feet over the dropping zone.⁽³⁾

Bombing Plan

General Features

MATAF Op.
Instruction
No. 3/65/17/AIR
4 Aug. 44.

The final air bombing plan was issued by Mediterranean Tactical Air Force on 4 August, by which time the latest requirements of the Army and Navy were sufficiently firm to be taken into full account. Important features of the plan were its division into four phases and the exploitation of deception and diversion factors. The three original air phases were now four. An indication will be given later of the considerable contribution by naval forces to the general plan of attack, as well as to the part British and American naval fighter aircraft played in the cover of the assault and the support of the ground advance: with these naval and carrier operations the air bombing was closely integrated. Eighth Air Force, based in the U.K., was prepared to assist Dragoon by aiding the Resistance movement, by attacking airfields north of the Dragoon perimeter and by cutting off reinforcements.

Ibid

The Four Phases of Offensive Air Operations

Offensive air operations were to be conducted in four phases:-

Phase I - Period prior to D - 5.

Phase II - Period D minus 5 to 0350 (B) hours D Day.
To be known as Operation 'Nutmeg'.

Phase III - Period 0350 (B) hours D Day to H Hour D Day.
Operation 'Yokum'.

Phase IV - Period after H Hour D Day.
Operation 'Ducrot'.

Ibid

Phase I

During this phase, targets were to be chosen in the light of the extent to which they might benefit operations in Normandy, Italy and Southern France. The three main tasks were counter air force operations, interdiction of communications and attacks on submarine bases. The three main airfield areas involved were Marseilles - Toulouse, Udine and the Po Valley. The first two were allotted to Mediterranean Strategic Air Force, the third to Mediterranean Tactical

(1) No. 216.
(2) 334 Q.M. Coy.
(3) Refer to Map 2.

Air Force. Initially airfields and later, aircraft, were to be the targets.

As regards interdiction, the division of responsibility was to be as follows. Tactical Air Force was to continue its current programme in Northwestern Italy and on the coastal railway system between Cannes and Genoa, and to destroy the rail bridges across the Rhone River south of Valence. This latter programme was to begin after the principal bridges on the Cannes - Genoa route had been destroyed or after D minus 10 Day, whichever was the later date. Strategic Air Force was to block, and keep blocked, the rail line Valence - Grenoble - Montmélian - Modane. If the Maquis could keep this line closed no air action would be needed. No road communications in Southeastern France within an area bounded on the west by the Rhone and on the north by the rail line Valence - Modane were to be attacked before D Day, so as to preserve as far as possible the element of surprise. Photographic reconnaissance was to watch for any submarine movements.

Phase II - Operation Nutmeg

Ibid In the five days terminating in the early hours of D Day morning, Operation Nutmeg was to assist in the accomplishment of three objects. Firstly, it was to neutralise threatening main coast defence batteries in the Dragoon area; secondly, by concentrated bombing attacks, it was to bring about a lowering of morale and effectiveness of coast defence troops, i.e. bring about that state of psychological numbness often previously aimed at, the whole point of which was the attack that was, in theory, to follow immediately in adequate strength; thirdly, neutralise all enemy radar stations which might in any way give warning of the assault approach. These three objects were to be somehow achieved without jeopardising tactical surprise.

The four Areas in the Deception Plan chosen for pre-D Day Bombing

Ibid Operation Nutmeg attacks fell (in addition to those on radar installations from Viareggio to Sète) on coast defence batteries in four areas. These areas figured in the general strategic deception plan; attacks and manoeuvres were to be so made as to confuse the enemy as to the exact place and time of the assault. The four areas were the Sète, Marseilles, Dragoon and Genoa areas. The play of weight of effort on these areas, both by Mediterranean Allied Air and Naval Forces and any forces from U.K. detached to assist Dragoon, was to be orientated on a basic quantity, namely, the effort required to achieve a satisfactory degree of neutralisation of the batteries in the Dragoon area. Further, these efforts had to be so co-ordinated with attacks in other areas, such as North Italy, that our intentions were not perceptible by inference to German Intelligence.

SAC(44)69 (Revised)
29 July 44

J.C.S.1970
Dep. Air C.-in-C.
27 July 44

Report of Naval
Commander Western
Task Force
15 Nov. 44
AHBII J.1/339/1

The Problem of the Dragoon Coastal Defences

The defences of Southern France were by this time formidable. The Navies asked the Air Forces to neutralise thirty-two coastal defence batteries which could threaten the assault during approach and disembarkation. These fell into two groups - those in open emplacements (the majority), and those sited in heavily protected casemates. This was the first time in a Mediterranean amphibious operation that large scale air and naval bombardments were to be employed.

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MAP 2

When the Germans took over the south coast of France in November 1942, the area was already in a state of defence. Toulon was a fortress area and naval base. The Germans inherited all this, in addition to numerous coastal batteries and railway spurs developed by the French for the use of mobile long range heavy artillery: they extended these defences to cover the entire coastline, intensifying the task after the surrender of Italy. Owing to the inability of the Todt Organisation and the local cement factories to compete with pressing commitments here and elsewhere, the Germans determined on certain priority areas; the first of these was the Sète - Agde area, between the Spanish frontier and the Rhone delta; second in priority was the Marseilles - Toulon coast, and third, the coast from Giens Peninsula to Nice. Examining the two last priorities, which directly concerned the air task in this operation, the two major ports had the heaviest concentration of batteries. The rugged coastal terrain and the small islands flanking the approaches had had, it was believed, their defences modernised and extended. There were underwater obstacles (such as concrete pyramids with mines attached) on the embayed beaches of La Ciotat, Sanary and Bandol. Between Giens and Nice there were plenty of casemates, and underwater obstacles; construction of jetted wooden rails under water was still proceeding on one beach at the time of the landings.

To protect naval approach there were minefields, nets, booms and long range batteries on headlands and islands. To prevent landings there were elaborate systems of shallow water mines, underwater obstacles, barbed wire and land mines on the beaches, casemate guns and pillboxes. To obstruct exits from beaches and prevent movement inland, there were anti-tank traps, walls, road blocks, land mines, strong points and mobile batteries. To mention only two of these items, two with which the air forces were to be closely engaged, the guns⁽¹⁾ and the mines⁽²⁾ were known to be formidable.

Decision on Bombing prior to D Day

Ibid

There was considerable discussion as to the advisability and pattern of pre-D Day bombing. Without going into details here, it may be said briefly that the Navy felt it was essential to their safety of approach, the Army was afraid it would jeopardise tactical surprise; the Air Forces saw snags in every possible course of action. They would not guarantee the destruction or complete neutralisation of any gun positions and were afraid the effort would seriously prejudice operations in Italy and they called for the maximum weight of co-operative naval gunfire. They rejected other suggestions,

-
- (1) There were some 199 batteries (75 mm to 340 mm) from Marseilles to Nice, totalling some 647 guns. 107 of these were in casemates. The heavily fortified St. Mandrier Peninsula near Toulon held some 57 guns as well as 6 A.A. batteries.
 - (2) Mine patterns on beaches ranged from 1 row of Tellermines to 4 rows, as on Camel Red Beach. On Camel Yellow Beach, the first LCI(L) to beach set off an explosion of mines along the water's edge for 100+ yards, by sympathetic detonation. Inland were many anti-personnel mines which caused loss of a leg. Snaglines of lights betrayed in daylight the presence of large shells fitted with detonators. At St. Raphael there were trip wires in the streets with T.N.T. charges.

in favour of a sharp culminating attack in fullest weight concentrated into a few minutes prior to the assault, this to follow a graduated series of attacks on guns and radar falling within the pattern of the general deception plans.⁽¹⁾

Nutmeg Operations planned against enemy Radar

Ibid

Operations
Instruction
No.65 - MAAF
4 Aug. 44

Numerous ways in which radar could function in war had by this time become increasingly clear to both sides and had been duly exercised during Operation Overlord. In the planning for Dragoon, lessons learned from the landings in Normandy and facts on the best forms of air attack were made the subject of a study by Allied Expeditionary Air Force⁽²⁾ and the recommendations were used by M.A.A.F. in their decisions. As in the case of shore batteries, a list of targets in the four cover areas was drawn up. Stations in the Dragoon⁽³⁾ area are given in the footnote. The uninterrupted employment of the complete chain of radar stations on the southern coast of France and on the Italian coastal areas of the Gulf of Genoa would give the Germans early warning of the size, composition and direction of approach of our airborne and naval forces. Successful action against the whole chain, therefore, was essential if we were to reduce its efficiency, preserve tactical surprise and bring off our own radio counter measures plan. Repeated photographic coverage as well as concentration of all listening devices and a speedy assessment of this and other intelligence were necessary.

There were by now important developments showing up in the defences of radar installations. Würzburgs, both small and giant, could not be protected, (for technical reasons), by blast walls, but Freyas and Coastwatcher huts could. Formulae were worked out showing in some cases the high expense of sorties and ammunition necessary to cripple an installation. Whereas rockets were selected for some targets, fighter bomber cannon or machine gun fire was the best form of attack for others. Those with concrete hoarding protection were a serious problem, for to secure a 70 per cent chance of

- (1) The following total air effort was involved.
M.A.S.A.F. 42 Gp. missions heavy bombers plus escort fighters detailed for R.C.M. targets.
 20 night bomber sorties.
M.A.T.A.F. 28 Gp. missions Med. bombers. 42nd, 57th Wings
 512 fighter-bomber sorties XII T.A.C.
 escort for med. bomber missions "
 fighters for R.C.M. targets "
 12 night bomber sorties. "

(2) By Mr. Farmer of the Operational Research Section.

(3)	STATION	GRID POSITION	DESCRIPTION
*	Cap d'Antibes	S.872517	Seetakt
***	St.Raphael	U.658341	Wasserman
***	St.Raphael	U.658341	2 Giant Würzburgs
**	St.Raphael	unknown	Seetakt
**	St.Raphael	"	1 Giant Würzburg
***	Cap Camerat	U.525093	Seetakt
**	Cap Camerat	unknown	2 Giant Würzburgs
***	Ile des Hyeres	"	1 " Würzburg
**	Cap Blanc	Z.277956	Seetakt
**	Cap Blanc	unknown	1 Giant Würzburg

First priority ***
 Second " **
 Third " *

one direct hit with a 500 lb. bomb from 12,000 feet, an attack by no less than five hundred and forty-two Marauders would be required, it was estimated. On the other hand, a few low level fighter fixed gun attacks would account for other types of installation.

Ibid

Plan of Attack⁽¹⁾

From a.m. on D minus 5 until the night of D minus 1 / D Day, the Tactical and Strategic Air Forces were to work to the plan outlined in the footnote. It will be noticed that the escorting fighters were to attack radar.

Alternatives to Nutmeg Plans

Ibid

If weather or other factors compelled postponement of D Day, one day's delay would simply mean cancellation of the programme for the afternoon and night preceding D Day, but once the afternoon heavy bomber programme had been completed, there was no question of any postponement. Should they be already airborne, they were to be diverted to the Genoa area.

Operation Yokum

Task

Ibid

One hour after the cessation of Operation Nutmeg, but not before first light on D Day, Operation Yokum was to open. It was hoped and planned that Nutmeg had by this time accomplished its objects, among which the neutralisation of guns on the islands of Levant, Port Cros, Porquerolles and on Giens Peninsula figured as vital to the success of Dragoon as

-
- | | | |
|------------------|------|---|
| (1) D - 5 S.A.F. | a.m. | 4 Heavy Gps. attack C.D. guns and escorting fighters attack radar, Sète area. |
| | a.m. | 5 Heavy Gps. v C.D. guns and escorting fighters v radar - Dragoon area. |
| T.A.F. | a.m. | 256 F/B sorties v C.D. guns Genoa area. |
| | p.m. | 7 Med. Gps. v C.D. guns and escorting fighters v radar - Marseilles area. |
| D - 4 S.A.F. | a.m. | 5 Heavy Gps. v C.D. guns and escorting fighters v radar - Marseilles area. |
| T.A.F. | p.m. | 7 Med. Gps. v C.D. guns and escorting fighters v radar - Genoa area. |
| D - 3 S.A.F. | p.m. | 8 Heavy Gps. v C.D. guns and escorting fighter v radar - Sète area. |
| T.A.F. | a.m. | 7 Med. Gps. v C.D. guns and escorting fighters and radar - Dragoon area. |
| | a.m. | 256 F/B sorties v C.D. guns Genoa area. |
| D - 2 S.A.F. | | Counter air and communication targets. |
| T.A.F. | | - " - |
| D - 1 S.A.F. | a.m. | 4 Heavy Gps. v C.D. guns and escorting fighters v radar - Marseilles area. |
| | a.m. | 8 Heavy Gps. v C.D. guns and escorting fighters v radar Genoa area. |
| | p.m. | 8 Heavy Gps. v C.D. guns and escorting fighters v radar - Dragoon area. |
| | p.m. | Night-bombers v shipping targets in Marseilles - Toulon area and intermittent attacks on beaches. |
| T.A.F. | a.m. | 7 Med. Gps. v C.D. guns and escorting fighters v radar - Dragoon area. |
| | p.m. | 12 night intruders attack road targets in Marseilles - Toulon area. |

a whole. Yokum as a whole was to last until H Hour, (1) (0800 hours British time), but there were to be no attacks by heavy or medium bombers after 0730 hours.

Targets (2)

Ibid

The Yokum targets were all immediately related to the assault. In co-ordination with naval gunfire, targets ran in the following priority:- enemy artillery threatening shipping, artillery and installations threatening the advance over beaches, armed features delaying the general advance and, lastly, enemy airfields within close fighter operating range of the assault area.

Strategical Air Force detailed twelve groups of heavy bombers with escorts. The 42nd and 57th Wings of Tactical Air Force detailed seven groups of mediums. XII Tactical Air Command planned for four hundred and eight fighter-bomber, one hundred and twenty fighter (plus standing patrol), and eight night fighter sorties (plus standing patrol). The Carrier Task Force (3) planned for forty-eight fighter-bomber and eighteen standby sorties.

Rendezvous and Approach

Ibid

The complex nature of the joint plan of assault and the varied types of air units co-operating called for careful planning for rendezvous and approach. Reference to Map 3 will show how the problem was solved and how aircraft were routed so as both not to interfere with other formations, either air, naval or ground, engaged on complementary tasks, and to avoid attack by friendly batteries, either seaborne or shore-based.

The Fifteenth Air Force units were to rendezvous over or near Corsica at altitudes above 12,000 feet, approaching the

(1) Air considerations affected directly the choice of H hour, which was a compromise between two requirements; the first was the necessity of having it late enough to permit adequate bombing and shore bombardment in sufficient daylight immediately before landing to destroy or neutralise the defences; the second was that of permitting unloading during daylight for a period long enough to ensure establishment of the beachhead and more rapid build-up than the enemy's.

(2) The outline plan of attack was as follows:-

0550-0610 Small formations of 4 F/Bs. to patrol assault area and silence any guns firing.

0610-0730 Small formations of H/Bs. M/Bs. and F/Bs. to carry out repeated attacks v selected C.D. guns in assault area.

0635-0730 Small formations of F/Bs. to attack guns in assault area.

0700-0730 M/B and H/B formations on drenching attacks v assault beaches - object to beat down underwater obstacles and beach defences. Each beach to be covered over their entire length and, if possible, attacked by 2 or more waves.

0800 onwards 8 Navy F/Bs. 8 Navy R/P fighters and 16 F/Bs. of XII T.A.C. on call to attack remaining targets.

(3) Dealt with in detail later.

assault area northeast of the Naval convoy lane. 57th Bombardment Wing were to rendezvous over their bases in Corsica at altitudes below 10,000 feet, approaching the assault area in the same lane. XII Tactical Air Command fighters and fighter-bombers were to rendezvous in the Corsican areas of Borgo, Cap Corse and Calvi, at altitudes below 10,000 feet, approaching the assault area on either side of the Naval convoy lane. The 42nd Bombardment Wing, based in Sardinia was to rendezvous over the western coast of that island and approach the assault area down its own lane, 5 miles wide, the centre line of which ran from Oristano (on the west coast of Sardinia) direct to the centre of the channel between Port Cros and Porquerolles islands.⁽¹⁾

Beach Bombing

Ibid

Dragoon (first known as Anvil) was the last operation of its kind in Europe in the Second World War and embodied much technique acquired to that date. All aspects of it are for that reason especially worthy of study. The reduction of the beach defences was by no means the least interesting test case and the following points should be set against the record of actual results later in this narrative.

As regards the pattern of bombing, beaches were to be bombed over their whole length, the bomb pattern commencing 75 yards to seaward of the water line. Beach 265A, being only 80 yards long, was to be bombed approximately 450 yards on each side. A watch would have to be kept on the positioning of naval craft, which by 0730 hours would be within 1,000 yards of the beaches.

Defences were treated in two categories - gun positions, and other beach defences (mines etc.). As regards guns, some called for incendiary bombs (other than white phosphorus), some for large demolition bombs. For other beach defences, fragmentation or demolition bombs not exceeding 250 lbs. in weight were to be used, preferentially 100 lb. bombs, but if these ran short, 500 lb. bombs were to be employed. All missions were to avoid the commando and paratroop operational areas; special bomblines information was to be issued to aircrews.

Operation Ducrot

Ibid

Objects

While the four phases under review had separate objects, certain tasks were constant throughout until fulfilled or until necessity for them had been annulled by the military situation. The first three phases were to see the assault forces ashore, the fourth - Operation Ducrot - began after H Hour. It had three objects; firstly to cause maximum destruction to enemy coastal and beach defences within the assault area, thus carrying forward the task covered by Yokum. Secondly, to isolate the battlefield; this it was hoped to achieve by destroying the remaining railway and road bridges across the Rhone up to its junction with the Isère River and those across the Isère and Durance Rivers, and by blocking defiles and rail lines running through the Alps⁽²⁾ from the

(1) See Map 3.

(2) It must be borne in mind that there was a standing threat (small it is true) of interference by German armed forces from N.W. Italy.

Isère southwards. Thirdly, to attack any troop movements in the XII Tactical Air Command area.⁽¹⁾ Strategic Air Force and the two medium bomber wings (42nd and 57th) were to operate from H Hour to the end of D Day.

Objectives

Ibid

There were five objectives in Ducrot. Firstly, military installations and guns, initially those covering the beaches and their approaches; subsequently movement in the XII T.A.C. area, close support for the ground forces on their initial move westward to Toulon, and support of Naval operations in the same direction. Secondly, bridges on the Rhone, Isère and Durance Rivers, supplementing the effort to isolate the battlefield, and, in conjunction, continued attacks on bridges and defiles in the Alps from their junction with the Isère south to the coast. Thirdly, long-range armed reconnaissance by fighter-bombers, briefed on the reports of tactical reconnaissance aircraft, to hinder reinforcements. Fourthly and fifthly, rail cuts and measures against airfields or aircraft capable of reaching the assault area.

Plan of Attack⁽²⁾

Ibid

Again the three main forces, XII T.A.C., Fifteenth Air Force and 42nd and 57th Bombardment Wings were responsible. The division of labour was adjusted to meet a more fluid situation. For six and one-half hours, fighter-bombers were to carry out counter-battery attacks (again co-ordinated with Naval fire), on guns both holding up the assault and delaying our advance. Thereafter, guns remaining active were to be silenced, but the main effort was to switch against troop reinforcements, or alternatively the Durance River bridges (if any still functioned). All heavy bombers in reserve were to attack the defences of beach 264A and road bridges across the Rhone. The medium bombers were to concentrate on road bridges across the Rhone and at Sisteron.

The Air Build-Up in Corsica

State of Corsica at the End of 1943

The views expressed by the C.O.S.S.A.C. mission on 25 October 1943 after its meetings with the Joint Planning Staff at Allied Force Headquarters tallied with the report sent the previous day by the Commander-in-Chief to the Combined Chiefs of Staff. Corsica was to be the fighter base

M.A.C.A.F.
(Air Staff)
O.R.B./Appx D.3
August 44

A.F.H.Q. Memo/
File S.38
WVD/Jap
10 Dec. 43

- (1) Boundaries: W - Rhone River, N - Isère River,
E - Western watershed of the Alps.

- (2) Forces involved in Ducrot on D Day were:-

M.A.S.A.F.

9 Groups of heavy bombers
Escorting fighters.

M.A.T.A.F.

7 Groups of medium bombers
464 sorties from fighter-bombers of XII T.A.C.
32 Night intruder sorties.

Carrier Task Force 88

154 Fighter-bomber and Rocket Projectile sorties.

Full details of suggested targets and other complementary matters involved in the plan should be studied in M.A.T.A.F. Operational Instruction No.3 of 4 Aug. 44 at Appendix C/SASO/50 to H.Q. M.A.T.A.F. ORB. (A.H.B.II.M/A.41/1(c)).

for covering an attack on Southern France; the necessary airfields could be made ready within two months. On 10 December, the Air Officer Commanding Coastal Air Force was given responsibility for rendering this island suitable for mounting the air forces required, as well as for the air defence of both Corsica and Sardinia. He found the island in a primitive condition from both a military and civil point of view.

Although the French authorities had done their best to hasten a return to normal after the defeat of the German occupants, there still remained a formidable amount to be done. All communications on the east side of the island - the only suitable area for a number of new airfields - had been cut, as well as those from the east side to the interior. Roads and bridges damaged or destroyed by bombing or demolitions were still unrepaired or mined. There were few land-lines. The population was half-starved and would have to be fed, thereby causing interference with military traffic and air supplies.

There was only one port usable - Ajaccio. Bastia was too near enemy occupied territory at that time, and Porto Vecchio (on the S.E. coast) was too small and in any case could not be reached on account of road demolitions. On 17 September 1943, the two French Spitfire squadrons - Groupe de Chasse I/3 and II/7 had landed at Ajaccio to reconnoitre. They returned to North Africa, reporting lack of fuel, equipment and airfield facilities. 63rd Fighter Wing, U.S.A.A.F. arrived with Sector Operations Rooms at Borgo and Ajaccio, with two French squadrons linked in their radar system. The day fighters were based at Borgo and Ajaccio while work on a temporary landing strip, from which Hudsons and Wellingtons could operate, was begun at Ghisonaccia.

Malaria was rife in Corsica. It caused the Germans considerable anxiety while they occupied the island in 1943, when incidence of the disease was very high. On the eastern coast, as a contrast to the mountainous interior, there was a narrow, low-lying belt of streams and marshland, which, after drying-up in the fierce summer, provided ideal breeding grounds for anophelene mosquitoes. Before the war the French constructed a canal and pumping systems along the shores of Lake Biguglia and in the coastal area as far south as the Alto River. Before he left the island, the enemy destroyed or damaged all pumping stations.

The Original Airfield Position

Ibid

The French had left airfields at Ajaccio, Borgo and Calvi. The Germans had maintained fair weather fields at Ghisonaccia, Aghione and Casabianda. None of them were suitable for all-weather operations by aircraft then classed as modern, or for fair weather operations by anything but day fighters.

The responsibilities allotted to the A.O.C. Coastal Air Force were delegated to the Air Commander Corsica, who was at the same time the Commanding Officer of 63rd Fighter Wing. The main task - the preparation of Corsica as an air base and its defence - could not commence until the roads and bridges were repaired. Work was begun forthwith.

Preparations for Airfield Construction

Ibid

Between Borgo and Porto Vecchio alone, fifty-eight bridges were built, and many more bridges leading to the interior and the only port were repaired. Ground engineers followed the mine clearance squads, and were in turn followed by telephone linesmen. A survey of roads, bridges, telephone facilities and areas suitable for airfields was made; priorities were allotted for essential shipment, arrangements to maintain shipments already arrived were made, current anti-shipping operations laid on and the build-up for Dragoon begun. Meanwhile, the Air Commander Corsica decided all priorities, which were met according to requirements by North African Theatre of Operations U.S.A., Mediterranean Allied Air Forces, Engineer Command or the Royal Navy.

To begin with, petrol to drive the airfield machinery had to be landed by L.C.T. off the east coast, but could only be brought ashore by hand. Men had to struggle in the sea with the 50 gallon drums and float them inshore. Later, a bay suitable for landing craft was found and transport arranged to cover the 12 mile journey from railhead.

Ground for airfields was selected at Aghione, Alesan, Bevinco, Calenzana, Casabianda, Poretta, St. Catherine, Alto, Serragia and Solenzara. Improvements were begun at Ajaccio, Borgo, Calvi and Ghisonaccia. Italian workmen provided most of the labour under French supervision, controlled by the Air Commander through the French Garrison Commander. Lack of transport, tools and equipment and a lack of harmony between the French and Italians accounted for the poor progress made before the aviation engineers arrived; steam rollers carrying supplies plied between Ajaccio and Ghisonaccia at a rate of four miles per hour over a snow-covered pass of 5,600 feet height. First roads were improved and bridges repaired. Then work on airfields was begun under American supervision with Italian labour, using French equipment with Spanish operators! Mechanical transport and fuel were lacking where needed. The only railway still workable ran from Ajaccio to the centre of the island, but was already used to its low capacity to carry food and supplies to the destitute civilian population.

By February, it was possible to motor from Bastia to Porto Vecchio on quite passable roads, but traffic being abnormal the rate of deterioration was rapid. All sawmills were taken over; wood for bridges became first priority. There was no time to elaborate huts or tent floors as yet. At one stage the only road to the east coast was cut by a landslide and personnel isolated lived on food flown in by Dakotas using the as yet unserviceable runway at Ghisonaccia.

There were no good landlines in Corsica⁽¹⁾ to speak of and few in Sardinia. The cable connecting the two islands had been cut. By the time of the Dragoon assault, the two islands were reconnected by cable and all airfields and operations rooms were connected by telephone and teleprinter. 2,500 miles of telephone wires were laid.

Results

Ibid

First, all fighter sorties surplus to the defence

(1) Corsica was No. IV Aviation Engineer Area; Sardinia was No. III.

requirements of the two islands were directed against the German army supply system in Italy. The two French squadrons were then augmented by the 52nd and 390th Fighter Groups U.S., equipped with Spitfires and Airocobras respectively. The Spitfires operated against enemy shipping, the Airocobras combined anti-communication with anti-shipping attacks. Early in 1944, the U.S. Mitchells of the 310th Bombardment Group arrived. The various operations subsequently carried out by these formations have been related.

At the time of the launching of Dragoon, there were in Corsica no less than two thousand, one hundred and fifty-six aircraft, supported by sufficient petrol, supplies and ground and administrative staff to maintain them until established ashore in the South of France. In Sardinia there were four hundred and sixty-eight operational aircraft, including a concentration of Coastal Air Force aircraft. There were in the bays of Western Corsica over three hundred ships calling for air escort and anti-submarine protection. The same applied to the numerous reinforcement and build-up convoys which were to follow from Italy and North Africa. Details of these aircraft will be given later when the order of battle is explained. The point made here is the progress made from the early days described above to the days of the landings, when the air units occupied thirteen airfields in Corsica⁽¹⁾ and ten in Sardinia.⁽²⁾ The dimensions and capacity of most of these fields are given in the footnote. There were, in addition, the full complementary units of signals, stores, air/sea rescue, intelligence and every type of ancillary unit.

Administrative Air Plans

MAAF/P.1 (Final)
12 July 44 and
TAF/65/18/Air
8 July 44

Supplies for R.A.F. Units in Corsica and Sardinia

Supplies for American units in Corsica and Sardinia were provided by XII Air Force Service Command,⁽³⁾ whereas most

(1) Corsica

<u>Airfield</u>	<u>Length of runway</u>	<u>Capacity</u>
Calvi	3,000 feet	84 aircraft
Calenzana	3,500 "	64
St. Catherine	5,000 "	140
Borgo	4,500 "	80
Bavinco	3,500 "	50
Serragia	6,000 "	180
Poretta	6,000 "	210
Alto	6,000 "	180
Aghione	5,500 "	180
Ghisonaccia	6,000 "	120
Ajaccio	4,000 "	75
Alesan	5,000 "	100
Solenzara	6,000 "	140

(2) Sardinia

Alghero	
Capoterra	
Chilivani	
Decimomannu	6,000 "
Elmas	
Milis	
Monterrato	
Oristano	
Venafiorita	
Villacidro	6,000 "

- (3) For a full account of XII A.A.F.S.C. in Operation Dragoon, refer to the report issued by H.Q. Twelfth Air Force dated 15 May 1945 (A.H.B.IIM/A41/1C - Appx D/SASO/13).

items needed by the R.A.F. and French Air Force units were provided by the Director of Maintenance and Supply⁽¹⁾ of M.A.A.F., who established a special administrative group for this purpose and their maintenance in France subsequently. Sometimes the two national systems afforded mutual aid. For example, ammunition and pyrotechnics for aircraft of British origin were shipped by D.M.S., M.A.A.F., T.A.F. and C.A.F. and conveyed by XII A.F. Service Command from the port of unloading to the No. 125 Air Ammunition Park Sections dumps in the Bastia and Calvi areas. Allied Force Headquarters arranged for rations, and N.A.A.F.I. items for British personnel, to be supplied to a centrally-situated store.⁽²⁾

Technical supplies for the R.A.F. Spitfire Wings and ancillary units were drawn from an R.A.F. Air Stores Park⁽³⁾ which also supplied these items and oxygen to a U.S. Beaufighter Squadron⁽⁴⁾ and a French Spitfire Squadron.⁽⁵⁾ The plan was for the bulk of supplies both for R.A.F. and U.S.A.A.F. to be in position by D minus 40.

Repair, Salvage and long-range Tanks

Ibid In addition to needs of normal operations, a large number of long-range tanks were necessary; six thousand 115 gallon tanks were supplied for Thunderbolts, and one thousand five hundred 75 gallon tanks for Warhawks were provided by XII Service Command, and one thousand six hundred 90 gallon tanks for the Spitfires. The Spitfire tanks were in short supply from the U.K. All available supplies of them already in the island and in Italy were assembled. Hurricane 45 gallon tanks were modified and used for the Spitfires, care being taken to leave a reserve of both types in the island.

Conformity with the general plan of one service system to each national series of aircraft was observable in the oxygen supply plans. Mediterranean Allied Air Forces organised individual supply machinery in the form of mobile oxygen plants,⁽⁶⁾ transport cylinders⁽⁷⁾ and aircraft bottles⁽⁸⁾ for the use of the British Spitfire Wings, the U.S. Beaufighter Squadrons and the French Spitfire Squadrons.

Other administrative Matters

Ibid It is not proposed to enter here into a complete account of the huge administrative plan. It is sufficient to appreciate that it was comprehensive and thorough and on an unusual scale, as befitted the magnitude of an operation which was by no means to end with the assault, but involved an elaborate build-up and eventual merger to conform with the general offensive in N.W. Europe.⁽⁹⁾ All the various problems, such as a reserve aircraft pool, hospitalisation, evacuation, replacements of air crews and ground personnel, defence against chemical warfare, the issue of summer khaki

(1) D.M.S.

(2) D.I.D.

(3) No. 135.

(4) No. 415.

(5) No. II/33.

(6) 4.

(7) 280.

(8) 400.

(9) Its great weakness was that it was based on the assumption of slow progress and made no allowance for the possibility of early victory.

and so forth were all considered and planned for. Note should be taken of the anti-malarial campaign.

Responsibilities and Methods of Malaria Control in Corsica

Malaria Control in Corsica - article by R.A.F. Medical Branch in R.A.F. Mediterranean Review No.9

At the end of 1943, Corsica was surveyed by U.S. Army Malaria Control.⁽¹⁾ The memorandum they issued in January 44 covered the eight main areas of the island. It showed that larvae control was necessary on 2,413 acres of open pond, 1,280 acres of marsh and 259 miles of stream. It called for mass spray killing of adult mosquitoes and the provision of some 4,000 square yards of window screening.

Responsibility for anti-malaria measures in the Calvi and Ajaccio areas and over the eastern coastal plain north of the Alto River was delegated to the R.A.F. The French supervised the large towns, the Americans the remainder of the island. The R.A.F. units were assisted by Army units and over two hundred hard-working Yugoslav labourers.

Heavy oiling of water and dusting by aircraft⁽²⁾ was carried out systematically. The districts most heavily populated by service personnel were the Bevinco, Borgo, Poretta, Serragia and Alto. Here all anopheles breeding grounds were sought out and dealt with. In the Ajaccio and Calvi areas a great deal of clearance and oiling of drains, ditches and wet areas went on.

The combined efforts of the medical services and personnel taking various precautions produced satisfactory results. No unit suffered operationally from the effects of malaria. For the R.A.F. only 4 per cent of personnel became cases during April and May, 6 per cent in June and 10 per cent in July and August. In the U.S. forces the rate was steadier, averaging 5 per cent over the five months April - August 1944.

Air Build-Up in Southern France

Planned Airfield Build-up

Appendix
D/SASO/9 to
M.A.T.A.F.
O.R.B.

From February 1944 onwards, a special planning staff of engineers from Engineer Command Mediterranean (Air) exploited intelligence information on terrain, geological conditions, local resources, weather data and so forth, and prepared estimates and schedules for Engineer troops, equipment and supplies to meet the requirements of the air forces.

In view of the need for maximum close air support, which Corsican and air carrier bases could not indefinitely maintain, a rapid building programme between D day and D plus 20 was planned.⁽³⁾ Eleven dry weather airfields were planned to be serviceable by D plus 20. By D plus 35, the first all-weather airfield was to be ready, followed by three others, so that by D plus 50 there were to be four. First priority was given to a crash strip.

There was a high degree of uncertainty as to the outcome of the first assault and the overall plan was based on a slow advance, the capture of Marseilles being scheduled for a date

-
- (1) Detachment No. 2655.
 - (2) 1 Lysander, 1 Boston (U.S.) and 1 Argus.
 - (3) It involved 3,400 personnel and 1,016 vehicles, - 6 battalions in all.

between D plus 40/D plus 60, for example. In selecting sites for development, some areas were known to be more favourable than others, especially those which the enemy was using in the La Crau plain. The Air Forces hoped therefore for a speedy break-through. With so many imponderables it was natural that the list of fields chosen for possible development was lengthy.⁽¹⁾ This preliminary note on the airfields plan is given as it is not generally realised that some of these bases at any rate were essential for the execution of the transfer of considerable air forces, who progressively moved from Italy and Corsica into France, some to join in the attack on Germany, some to return to Italy when the battle there called for air reinforcements.

Technical Supply and Maintenance - (R.A.F.)

M.A.A.F./
P.1 (Final)
12 July 44

Squadron A and B parties were each to carry a 7 day pack-up of spares and technical stores. An Air Stores Park was to move to the mainland in echelons, with a 30 day range and three Repair and Salvage Units were to be established in the same way, i.e. advance parties by D plus 15 and rear party not later than D plus 25. Questions of movement, assembly, waterproofing, equipment, etc., were dealt with on a comprehensive scale, within the pessimistic framework of the outline plan, massive co-operation being assured by Air Force Service Command. One feature common to most units involved was that there had been ample time for planning and training, although these activities had been to some extent adversely affected by the long standing doubts as to the certainty and precise nature of the operation.

(1) Planned schedule of airfield development, S. France

<u>Name</u>	<u>Type</u>	<u>D/W - A/W</u>	<u>Operational Date</u>
Ramatuelle	F.	D/W	D + 3
St. Raphael No.2	Crash	D/W	D + 1
Fréjus	F.	D/W	D + 4
Grimaud	F.	D/W	D + 7
St. Raphael No.1	F.B.	D/W	D + 8
Le Puget	F.B.	D/W	D + 12
Cagolin	F.	D/W	D + 12
Les Ares	F.B.	D/W	D + 13
Le Luc	F.B.	D/W	D + 17
Gonfaron	F.B.	D/W	D + 20
Cuers	F.	D/W	D + 22
La Crau	F.B.	D/W	D + 25
Grimaud	F.	A/W	D + 35
St. Raphael No.1	F.B.	A/W	D + 45
Hyères	F.	A/W	D + 50
La Crau	F.B.	A/W	D + 50

F. = Fighter. F.B. = Fighter Bomber.

Planned Order of Build-up of Air Forces into Southern France⁽¹⁾

Ibid

In view of the doubts as to the outcome of the landings, it was natural that in the outline plan of the Tactical Air Force the air build-up should only be described as 'probable'. Reference to the footnote reveals the interesting fact that the first two air units to operate from French bases were to be R.A.F. - a Spitfire Wing and a Tac/R Squadron. How far it was possible to maintain the balance of forces for the prosecution of the campaigns in both Italy and France could only be decided at a later stage.

The Plan for Aircraft Carrier OperationsTasks and Organisation

Report of
N.C.W.T.F.
Sect. 48

The aircraft carrier force,⁽²⁾ organised in two groups,⁽³⁾ was assigned the following tasks. Firstly, to provide fighter protection and spotting aircraft; secondly, close support; thirdly, own protection against enemy air and submarine forces. Rear Admiral T. Troubridge, R.N. was in command of the Force. Seven of the CVE escort carriers were Royal Navy and two U.S. Navy, each with their own escorts. The two groups were loosely co-ordinated.

Aircraft aboard numbered about twenty-four per carrier.⁽⁴⁾ The R.N. Squadrons were disposed as follows: H.M.S. Attacker

(1) Probable Air build-up into Dragoon

<u>Order</u>	<u>Type of Unit</u>	<u>Probable Unit</u>
1	Spitfire Wing (Br.)	324 Wing
2	Tac/R Squadron (Br.)	225 Squadron
3	Tac/R Squadron (U.S.)	111 Squadron
4	Tac/R Squadron (Fr.)	II/33 Squadron
5	Spitfire Wing (Br.)	322 Wing
6	Fighter-Bomber Group (U.S.)	324 Group
7	" " "	27 Group
8	" " "	79 Group
9	" " "	57 Group
10	P.R. Squadron (U.S.)	23 Squadron
11	Spitfire Wing (Br.)	251 Wing
12	Fighter-bomber Group (Fr.)	IV Group
13	" " "	LXXXVI Group
14	Night fighter Squadron	415 Squadron
15	Light Bomber Group (U.S.)	47 Group

(2) T.F.88 - Task Force 88.

(3) T.G.88.1 (Rear Admiral Troubridge R.N.) T.G.88.2 (Rear Admiral Durgin U.S.N.)

H.M.S. <u>Royalist</u>	H.M.S. <u>Stalker</u> (carrier)
H.M.S. <u>Delhi</u>	H.M.S. <u>Hunter</u> (carrier)
H.M.S. <u>Attacker</u> (carrier)	U.S.S. <u>Tulagi</u> (carrier)
H.M.S. <u>Emperor</u> (carrier)	U.S.S. <u>Kasaan Bay</u> (carrier)
H.M.S. <u>Khedive</u> (carrier)	H.M.S. <u>Caledon</u>
H.M.S. <u>Searcher</u> (carrier)	H.M.S. <u>Colombo</u>
H.M.S. <u>Pursuer</u> (carrier)	U.S.S. <u>Jeffers</u>
H.M.S. <u>Troubridge</u>	U.S.S. <u>Butler</u>
H.M.S. <u>Tuscan</u>	U.S.S. <u>Shubrick</u>
H.M.S. <u>Teaser</u>	U.S.S. <u>Gherardi</u>
H.M.S. <u>Tumult</u>	U.S.S. <u>Murphy</u>
H.M.S. <u>Tenacious</u>	U.S.S. <u>Herndon</u>
H.M.S. <u>Navarinon</u>	

(4) H.M.S. Emperor carried 22, the rest 24 each.

and H.M.S. Khedive carried Seafires⁽¹⁾ H.M.S. Pursuer and H.M.S. Searcher carried Wildcats⁽²⁾ and H.M.S. Emperor flew Hellcats.⁽³⁾ H.M.S. Hunter and H.M.S. Stalker carried Seafires.⁽⁴⁾ The U.S. Navy squadrons were Hellcats in both carriers.⁽⁵⁾ In addition, ten night fighter Hellcats were based at Solenzara, Alghero and Casabianda for night carrier cover, anti-submarine cover and ferry operations.⁽⁶⁾ The missions assigned to carrier aircraft⁽⁷⁾ included spotting, beach cover, bombing and straffing, tactical, photographic and armed reconnaissance. It was thought initially that the most important weight of effort would be directed on spotting for naval aircraft. Events proved otherwise. The fact that the carriers were able to render valuable close support on call to the ground forces was an interesting development. Indeed, as this was the largest and last operation of its kind in the Western Hemisphere, the whole subject cannot be omitted from any comprehensive study of Dragoon.

Carrier Force Operating Area

Ibid The area within which the Carrier Force began to operate is shown on Map 3. On D Day its approximate position was to be as far eastward in the area as practicable. As the invasion progressed westward and northward up the Rhone Valley, the carrier force was to shift its position to the western edge of the area so as to give greater range to its fighter-bombers and reconnaissance aircraft.

But for our air superiority over the Luftwaffe as a whole, as distinct from our local air superiority, it would have been impossible for the carrier force to operate at all under the given conditions. Had the enemy air position locally been much stronger it would not have been possible for the parent ships to operate without frequent manoeuvring, or for them to move, as they did, relatively close inshore. This move inshore made it clear early in the assault period that these aircraft were, for a time, available for offensive missions to a greater depth and for a longer combat sortie period than our Corsica-based fighters.

Aircraft Control Systems

Ibid So long as the Air Commander was in U.S.S. Catoclin, the system of control was as follows. When aircraft took off, the Fighter Direction Officer of the carrier force notified the air control ship in the assault area of the type of aircraft, call sign, attack order, mission and targets on which aircraft just airborne had been briefed. As the mission

- (1) Of 879 and 899 Squadrons respectively, 879 Sqn. flew Seafires LIIC and LIII: 899 Sqn. flew Seafires LIII.
- (2) Of 881 and 898 Squadrons respectively, 881 Sqn. flew Wildcats VI: 898 Sqn. flew Wildcats V.
- (3) Of 800 Squadron which flew Hellcats.
- (4) Of 807 and 809 Squadrons respectively, 807 Sqn. flew Seafires LIIC and LIII: 809 Sqn. flew Seafires LIIC and LIII.
- (5) Squadron VOF.1 - U.S.S. Tulagi.
" VF.74 - U.S.S. Kasaan Bay.
- (6) There were in reserve 25 aircraft at Casabianda (Corsica) and 8 on Malta.
- (7) Seafire LIIC and LIII.
Hellcat F6F.
Wildcat V FM1.
Wildcat VI FM2.

reached the assault area, it checked in with the fighter direction ship if on patrol missions, and to the amphibious flagship if on offensive missions. Its targets were either confirmed or new ones assigned. The forward control ship controlled it while in the forward area and passed it back to the carrier flagship when released. This system operated until 19 August, when XII Tactical Air Command established its headquarters ashore. The carriers reduced defensive missions and the carrier flagship then controlled all offensive carrier air operations.

The Rise of No. 4 Naval Fighter Wing

Study of a brief outline of the history of No. 4 Naval Fighter Wing to this point presents a microcosm within which one may perceive the development of Allied ideas on the capacity of carrier forces. During 1942, two small-scale experiments were made with carrier-based aircraft, one at Madagascar, one in the North-west Africa landings. In both cases, the air support provided was mainly confined to fighter protection over convoys and beaches; little liaison with the Army was effected.

Ibid and records
of No.4 Naval
Fighter Wing

During the landings at Salerno, five escort carriers and two fleet carriers operated with appreciable effect in the fighter cover plan. When the force left, twenty-four Seafires remained, it will be recalled, to provide a link in the provision of close support for the Army, while the R.A.F. short-range fighters moved in to the strips.

After Salerno, H.M. Ships Hunter, Attacker and Stalker were formed into a force equipped for the special role of assault. Each carrier was given a squadron of twenty Seafires. Out of these three squadrons, No. 4 Naval Fighter Wing was created. It began training in the same month - September 1943 - for its role of Army Support. The aim was that by January 1944 each squadron was to be capable of every one of the following roles - air fighting, tactical reconnaissance, photographic reconnaissance with vertical and oblique cameras, artillery reconnaissance, bombardment spotting, ground attack, dive and low-level bombing. R.A.F. pilots were attached as trainers: an Air Liaison Section attached to each squadron co-ordinated training with Army requirements on the same basis as was in practice in Desert and Tactical Air Forces. Preparations for operations in the Far East continued until January 1944, when the Wing was detailed for operations 'elsewhere'. Intensive training in conjunction with Army units followed.

In June 1944, the Wing was given ship and shore training with the armies in Italy, attaining some seven hundred sorties in all the roles expected of them, beginning their education as number two to the veterans of Nos. 208 R.A.F. and No. 40 S.A.A.F. squadrons on tactical and artillery reconnaissance work. They were split up among bomber and fighter wings and taken to the front before Arezzo to study ground conditions. When the two task groups of Force 88 were formed, H.M.S. Attacker passed to Group 1⁽¹⁾ and H.M.S. Hunter and Stalker passed to Group 2.⁽²⁾ The latter group, as part of the general diversion plan, sailed towards Alexandria thus affording valuable practice in station keeping and general flying staff work.

-
- (1) Under command of Rear Admiral Troubridge.
 - (2) Under command of Rear Admiral C. T. Durgin, U.S.N.

Training

Ibid

The two U.S. escort carriers(1) left the United States on 30 June, conducting training for flight operations, glide bombing attacks and anti-submarine operations while en route for Oran. Prior to leaving Oran on 17 July for Malta, they supplied aircraft for gunfire support ships training in the Oran area. It was at Malta that Task Force 88 was divided into two groups. Group 2 left on its deceptive run to Alexandria; Group 1 began training at Malta in the last week of July.

The second official full-scale rehearsal for Dragoon was intended, among other things, as a communication and fighter direction test. Task Force 88, operating 40 miles off Salerno, covered the assault area with fighter protection and launched tactical missions dropping live bombs on selected targets. All this training and rehearsal was felt to be vital, inasmuch as after Salerno in 1943, as will be recalled, it was reported that insufficient practice had been a direct cause of many failures and accidents.(2)

The Opposing Air ForcesAllied Air ForcesAllied Air Tactical Order of Battle for Operation Dragoon

Outline Air
Plans M.A.A.F.
and
M.A.T.A.F.

Mediterranean Tactical Air Force had four main elements available for Dragoon: XII Tactical Air Command and 87th Fighter Wing(3) with Headquarters at Naples and Furiani in Corsica respectively and their aircraft on Corsican fields; 42nd Bombardment Wing(4) - H.Q. at Elmas, (Sardinia) and its squadrons on two Sardinian fields; 57th Bombardment Wing(5) - H.Q. at Prunello, (Corsica) and the Provisional Troop Carrier Air Division(6) in the Rome area. Thus practically half the

(1) C.V.Es.

(2) Rear Admiral Bisset was in charge of the carrier force until just before D Day, when he was taken ill.

(3) Aircraft	No. of Sqns.	I.E.	A/C. on I.E.	Squadrons divided as to nationality	
P-47s	18	25	450		
Spits.	11	16	176	U.S.A.A.F.	26
A-20s.	4	16	64	R.A.F.	12
Photo/R.	2	16	32	F.A.F.	1
Spit. Tac/R. P.R.	1	9	9		39
Spit. Tac/R.	1	16	16		
Mosquito Tac/R.	1	1	1		
Beaus (N)	1	18	18		
	39		766		

766 aircraft at 80% operational serviceability
= 612 aircraft approx.

(4) B-26s = 16 squadrons at 16 I.E. = 256 aircraft
256 aircraft at 80% operational serviceability
= 204 aircraft approx.

U.S.A.A.F.	12
F.A.F.	4
	16

(5) B-25s = 12 squadrons at 16 I.E. = 192 aircraft
192 aircraft at 80% operational serviceability
= 153 aircraft approx.

all U.S.A.A.F.

(6) C-47s (Dakotas) = 32 squadrons at 16 I.E. =
512 aircraft
512 aircraft at 80% operational serviceability
= 409 aircraft approx.

all U.S.A.A.F.

Note: The figure of 80% operational serviceability was computed by the Statistical Control and Operations Record Unit of M.A.A.F. from a recapitulation of Weekly Status Reports. It was 75% for July 44. (A.H.B.II.J.1/36.)

Tactical strength was British - excluding the medium bombers. To this British complement must be added the seven squadrons of the British Fleet Air Wing No. 4.

Also available, if need arose, were the thirty-two squadrons of Desert Air Force⁽¹⁾ in Italy. Under his operational control the Air Force Task Commander had two fighter groups⁽²⁾ assigned to Fifteenth Air Force based in Corsica during the initial phases of the operation, and the carrier-based aircraft.⁽³⁾

In addition, heavy bombers of Strategic Air Force in Italy were available for D minus 1 and D Day and thereafter in emergency, when requested by the Air Force Task Commander and approved by the Commanding Generals, Tactical Air Force and Mediterranean Allied Air Forces. The locations of the Tactical units are given in Appendix 3.

Coastal Air Force Order of Battle

M.A.C.A.F.
Report
Appx. D.3
(Air Staff)
O.R.B.

As in all amphibious operations, the tasks allotted to Coastal Air Force units were manifold. On this occasion they included convoy protection, intruding, night fighting, anti-aircraft gunfire control, reconnaissance, anti-submarine offensive patrols, leaflet dropping, air/sea rescue aircraft control, aircraft movement liaison, balloons, mine detection and diversionary operations.

The fighter force⁽⁴⁾ consisted of one hundred and eighty-six aircraft, of U.S., British and French nationalities.

(1) H.Q. Frigge

			32 squadrons	
Aircraft	Sqns.	I.E.	Aircraft on I.E.	Nationality
Spitfires	14	16	224	R.A.F. 18
Kittyhawks	5	16	80	S.A.A.F. 9
Baltimores	4	16	64	R.A.A.F. 3
Marauders	3	16	48	R.C.A.F. 1
Mustangs	3	16	48	Polish A.F. 1
Bostons	2	12	24	
Beaus (N)	1	16	16	
	32		504	32

504 aircraft at 80% operational serviceability = 403 aircraft approx.

- (2) 6 Squadrons of Lightnings at I.E. 25 = 150 aircraft.
150 aircraft at 80% operational serviceability = 120 aircraft.
All U.S.A.A.F.

(3) Aircraft embarked

Ship		Type	No.	Sqn.	Duties
T.G.88.1	Attacker	Seafire	24	879	F, F/B, Tac/R, P/R spotting
	Emperor	Hellcat	22	800	F, F/B
	Khedive	Seafire	24	899	F, F/B, Spotting
	Pursuer	Wildcat	24	881	" " "
	Searcher	Wildcat	24	898	" " "
T.G.88.2	Tulagi	Hellcat	24	VOF.1	F, F/B, R/P, Spotting
	Kasaan Bay	Hellcat	24	VF.74	F, F/B, R/P
	Hunter	Seafire	24	807	F, F/B, Tac/R, P/R
	Stalker	Seafire	24	809	F, F/B, Tac/R, P/R Spotting
			214		

There were, in addition, 10 aircraft ashore in Corsica and 33 reserve aircraft in Corsica and Malta.

- (4) 3 U.S. P.-39/P-47 Squadrons (70 aircraft) at Alghero
3 French Spitfire Squadrons (48 aircraft) at Ajaccio
3 U.S. Beaufighter Squadrons (36 aircraft) at Alghero
Solenzara and Borgo
1 British Mosquito Squadron (20 aircraft)
Detachment of British Beaufighter Squadron at Alghero
(12 aircraft)

The general reconnaissance force⁽¹⁾ available was one hundred and twelve aircraft, mostly British.

German Air Force

Rise and Fall
of the German
Air Force
Air Ministry
(Restricted)

C.A.F. ORB

Outline Air
Plan

German Air Force Appreciations of imminent Allied Landings

It was at the beginning of the fourth week in July that the German Air Force Intelligence, having correctly judged from accumulating evidence from air reconnaissance, signals intercepts and other sources that an Allied landing in the Western Mediterranean area was imminent, took steps to meet the threat. They identified certain Tactical Force Headquarters in Corsica; they noted the state of readiness of our aircraft carriers and, excluding the possibility of their use in any move in the Adriatic, decided that this fact pointed to the French or Ligurian coastline. They proceeded to fill in the incomplete coverage of Allied assembly ports by stepping up their reconnaissance and had correctly estimated by 30 July that Allied shipping assembled in Naples, Sicily and North Africa was complete and an operation imminent. One piece of evidence that this was the case was the resumption on the night of 31 July/1 August of anti-shipping operations. Forty Ju.88 torpedo bombers which had been operating against Overlord shipping were detailed to attack a convoy with special long-running torpedoes. Thirty of them reached the convoy off Cap Sigli, but their attack was a complete failure.

It might have been expected that the Germans would reinforce the South of France; premature estimates of possible reinforcements to the area, both to meet the threat and the results of the Allied thrust in Normandy and Brittany, were made of some fifty long range bombers and twenty ground attack aircraft from Northern France, and up to sixty fighters from Italy and S.W. Germany.

Luftwaffe Reactions to the Threat

Ibid

A fortnight before the invasion, Allied Intelligence could perceive no sign of any such moves. On the contrary, Fliegerkorps II transferred its headquarters from France to Bulgaria, in sympathy with the needs of Turkey's hardening policy. It was to remain on the defensive, since the Germans were not in a position to attack Turkey. Allied landings near the Turko-Bulgarian frontier were being considered as a possibility by the German High Command.

O.K.W. Markbuch
20 June 44
(Captured German
document)

The mixed reconnaissance force of Ju.88s, Ju.188s and Me.410s remained steady at a total of twenty and were fully employed. The small fighter force, which consisted of a second-line unit flying Me.109s, stood by. The bomber force was reduced progressively until on the eve of the landings there were only seventy torpedo bombers of unreliable serviceability and some twenty-five Do.217s available for use. The tendency to move back bases northwards was continued. Orange and Valence were kept stocked for both types of bomber units.

- | | | | |
|-----|--------------------------------|---------------|------------|
| (1) | 1 R.A.A.F. Wellington Squadron | (20 aircraft) | at Alghero |
| | 1 R.A.F. Wellington Squadron | (20 aircraft) | " " |
| | 1 S.A.A.F. Ventura Squadron | (16 aircraft) | " " |
| | 1 R.A.F. R.P. Beaufighter Sqn. | (16 aircraft) | " " |
| | 1 French Walrus Squadron | (12 aircraft) | " " |
| | 1 R.A.F. Marauder Squadron | | |
| | (Shipping reconnaissance) | (8 aircraft) | " " |
| | 1 R.A.F. Wellington Squadron | (20 aircraft) | " Foggia |

The idea that two groups of Lehr Geschwader I might be drafted to the area came to nothing. The only sign of reinforcement was the preparation on a field near Nîmes for the reception of a single-engined fighter rocket mortar group. Fuel was short, although not yet desperately so, serious enough, at any rate, to prohibit the use of the up-to-date He.177s with their glider bombs, which were moved north or destroyed.

The main bomber base build-up was clearly taking place in the Lyons - Dijon area. Salon, Istres and La Jasse were now dead letters, Orange and Valence only emergency airfields. The ground organisation in the Lyons - Dijon area was strengthened by the transfer thereto of an equipment issuing station from Bourges, and of G.A.F. Station Command Le Mans to Valence. Not only was this tendency the index of the tactical need to escape the weight of Allied bombing of their Mediterranean bases, but was an intelligent move ahead of events. The transfers had to be made - therefore it was best to make them before a rapid Allied advance either from Liguria or the South of France put them out of the question altogether. Furthermore, the growing strength of the Resistance movement and the constant attrition of acts of sabotage and dislocation of traffic by guerilla activities all hastened the shortening by the Germans of their lines of communication. It was thought in German circles that some time in mid-August there would be a general uprising in France. Already long range bombers had joined with specially appointed air units in anti-resistance operations.

Summing up the position before the event, some air opposition to the landings was expected, but it was likely to be mediocre. Fliegerdivision 2 was to control operations. The German bomber forces in Northern Italy were not overlooked and steps were taken to nullify their power of interference.

Fluctuating Enemy Estimates of Allied Intentions

OKL to GHQ
Luftflotte 2 -
18 Aug. 44
Translation of
German document
AHB6/VII/82

Rise and Fall of the
German Air Force
Air Ministry
(Restricted)

Address by Gen. Devers
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It is sometimes loosely stated that the landings in Southern France were effected under conditions of complete surprise. Study of the preceding paragraphs, of the record of the state of the enemy defences and the appendix⁽¹⁾ dealing with the disposition of the enemy ground forces should prove the inaccuracy of such a claim. The Germans had many sources of information apart from air reconnaissance, for example the diplomatic service and the Abwehr - and other secret intelligence organisations - and they were not slow in appreciating from about mid-February 1944 onwards that massive preparations were under way. One of their main problems, namely whether the Mediterranean move would coincide with, precede or follow the entry into N.W. Europe, was resolved in June when Overlord went in. All through June, local commanders tended to the belief that an invasion was imminent from time to time against one of several possible points along the southern coast of France or against the coast of Liguria. The High Command, on the other hand, with a wider perspective, held the view that our preparations were not sufficiently advanced for action.

During July, there was greater disagreement as to the nature of the Allied operations by then rightly believed to be imminent. As can be seen from the various evidence presented, opinion hardened into two main schools of thought and Allied

(1) No. 5.

air attacks certainly played their part in lending weight to each of the conflicting theories in turn. The reports of successful German air reconnaissance were sometimes correctly interpreted, sometimes left the enemy still guessing.

On 10 July, there was an air attack on Toulon. This fact was linked by the Intelligence Branch on the staff of Commander-in-Chief West with the fact that Allied landing craft resources now roughly approached the level of pre-Husky days. On 19 July, the Luftwaffe General in Italy pointed out that in the previous week one bomber wing, two ground attack wings and the advanced H.Q. of close support forces had all moved to Corsica and a landing was a possibility. Aircraft had reported cruisers, a battleship and three or four auxiliary aircraft carriers and some destroyers in Algerian ports and the departure on 21 July from Gibraltar into the Mediterranean of another carrier. They were sighted off Tres Forcas (130 miles west of Oran) early on 22 July.

At the end of the month, the Naval War Department in Germany made a shrewd summary of the facts as known and decided that the French Mediterranean coast was the most probable objective. As will have been noted, this tallied with opinion in other high German military circles, although it was not universally believed in as a dead certainty. The grounds selected for this decision are interesting, especially when they are set alongside our deception plans. It can be seen that the Germans still retained a good grip on essentials. Ten new hospital ships had been accounted for, another striking parallel to conditions on the eve of the landings in Sicily. French naval and air forces were more concentrated than ever before in a position to attack France. A landing by these French forces in Southern France would effect a rallying of the support from the still largely indifferent French civilian population: it would link up with the Maquis in the Massif Central. A big landing and a deep thrust would, they perceived, have a decisive effect on operations on the Western Front. Another strong political factor was the known desire of Free French Circles to take a preponderant part in the liberation of their country, so ensuring their share in the ultimate shaping of her destiny. Their views hardened in the second week in August, in face of the unfavourable development in the ground situation in Brittany and Normandy. On 12 August, the 6th Defence Flotilla was ordered the second degree of readiness and all seaworthy craft got ready to sail.

The movement of aircraft back from the coast proceeded during the first half of August. The reconnaissance forces were ordered to carry out full coverage of Allied shipping by every available means, but by 12 August Flieger Division 2 had to admit its coverage of shipping at Naples and Salerno was still incomplete. Alerts and warnings increased as the days passed and early on 14 August Naval Group West announced that the Allies were at the ready. Reconnaissance aircraft saw the Ajaccio convoys leave at 1715 hours on a westerly course (soon changed). That night there were many warnings, Genoa itself being put in the second degree of readiness at 2045 hours. It took the Germans most of the day on 15 August itself to decide just where the main weight of the attack was falling.

CHAPTER 3

PRE - ASSAULT AIR OPERATIONSPhase ICounter Air Force Operations

Report on
Operation
Dragoon
M.A.T.A.F.
1 Nov. 44
Appendix D/
SASO/9 to
O.R.B.

The weakened state of the Luftwaffe rendered it only necessary for Tactical Air Force to attack one of the list of seven air bases envisaged. On 9 August, 42nd Wing made a reasonably successful attack on Bergamo/Seriate, achieving good coverage, destroying eight aircraft and inflicting much damage to installations and runway.

From 6 to 9 August, the Strategic Air Force carried out its own commitment, which was, it will be recalled, counter air force attacks in Southern France, following on attacks on enemy installations, both in that region and at Genoa, as part of both the deception plan and the general strategic effort against the German war potential.

On 6 August, a night of great activity in the Dragoon area, fifty-nine Lightnings destroyed seven aircraft on the ground at Orange/Plan de Dieu and Valence/La Tresorerie airfields. So satisfied was Allied Intelligence with their own forecasts of ineffective German air reaction that no other attacks on airfields were carried out in this phase and only one other small attack⁽¹⁾ in Phase II.

Interdiction of Communications

Ibid

Before the first day of Phase I of the Bombing Plan, heavy and medium bombers had succeeded in creating ten railway cuts between Lyons and the mouth of the Rhone. The rail bridges at Arles and Tarascon and both bridges at Tarascon were photographed and showed as temporarily unserviceable. In addition to important cuts on the lines running parallel to the Rhone, four cuts were created by our bombers at rail bridges across the Var River. Avignon bridge was attacked on 6,⁽²⁾ 7,⁽³⁾ and 8⁽⁴⁾ August, but not conclusively. The consummation of our efforts was not to be evident until D Day, after a heavy expenditure of effort against this costly type of target. Meanwhile the remainder of the objects of Phase I communications offensive were steadfastly pursued. Admirable bombing on 6 August by 319th Group,⁽⁵⁾ destroyed two spans, leaving gaps of 185 feet each, at one of Tarascon's road and rail bridges. Arles bridge was attacked on 6 August in two successful missions. Lavoulte (Rhône River), Livron (Drome River), Avignon and Pont St. Esprit were all well hit, by Mitchells on 7 August; again, on 8 August, these Mitchells from Corsica heavily damaged Pont St. Esprit and Avignon. The Germans worked hard on repairs, especially at Avignon.

Results of Air Attacks on the River Bridges and Riviera

Appendix D/
SASO/9 to
MATAF O.R.B.

The task continued until D Day, when of the six railway bridges across the Rhône between Lyons and the sea, five were unserviceable. The only serviceable bridge was that at

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- (1) On 13 August by 31 Lightnings on Montelimar airfield.
 - (2) By 36 Mitchells.
 - (3) By 36 Mitchells.
 - (4) By 39 Mitchells.
 - (5) By 154 Marauders.

SECRET

48

Avignon. An early attack had cut it; the Germans had single line traffic running across it again two days before D Day. The double track lines on either side of the Rhone between Lyons and Avignon were each cut in two places. The main Riviera route on the French - Italian frontier was cut at the Var River, Ventimiglia and Imperia. The bridge across the Var north of Nice, leading to the Cuneo route into Italy was cut. Patriots both sides of the frontier had been engaged in acts of sabotage. The only route into the bridgehead from the west was over the one bridge at Avignon. Direct traffic from Lyons was blocked, so were the French - Italian frontier routes. The line Grenoble - Marseilles remained open.

Phase II - Operation Nutmeg

Ibid

General Effect of Bad Weather on the Operation

The main point of Operation Nutmeg, which, it will be recalled, lasted from D minus 5 (10 August) until 0350 hours on D Day, was to put out the coastal artillery and radar defences and intensify the chances of tactical surprise by attacking four areas more or less simultaneously. Weather spoiled the exact execution of the plan from the outset and changes in it were forced on us. Unfavourable weather on the first day had several unfortunate results. It forced the compression into four days of a five-day programme; it prevented full attention being paid to enemy radar targets in the Genoa area.

Attacks on Radar Installations

Ibid

Radar installations were attacked by fighters with cannon and by fighter-bombers with fragmentation bombs. In the case of the Strategic Air Force contribution, fighter attacks were carried out by a proportion of the fighters, (escorting heavy bombers, attacking coastal defence positions in the same area). In the case of Tactical Air Force, some attacks were carried out by fighters escorting medium bombers; but in addition, in line with the findings from the Overlord pre-assault operations, many separate fighter and fighter-bomber attacks were made.

On D Minus 5, bad weather tied down the heavy bombers, but Tactical Air Force launched attacks with one hundred and forty-six sorties against twelve radar sites in the 'Dragoon' and Marseilles areas. On D minus 3 Day, all four areas were attacked, two installations in the Genoa area,⁽¹⁾ six in the 'Dragoon'⁽²⁾ area, six in the Marseilles area⁽³⁾ and six in the Sète area.⁽⁴⁾

On D minus 2 Day, attacks were restricted to the 'Dragoon'⁽⁵⁾ and Marseilles areas.⁽⁶⁾ On D minus 1, confusion of enemy estimates was again the aim, and the three areas -

-
- (1) 20 sorties by M.A.T.A.F. and one fighter attack by M.A.S.A.F.
 - (2) 59 sorties by M.A.T.A.F. and one fighter attack by M.A.S.A.F.
 - (3) 18 sorties by M.A.T.A.F. and six fighter attacks by M.A.S.A.F.
 - (4) 6 attacks by M.A.S.A.F.
 - (5) 36 sorties by M.A.T.A.F. and one fighter attack by M.A.S.A.F.
 - (6) 178 sorties by M.A.T.A.F.

Genoa, (1) Sète (2) and Dragoon (3) were all attacked, this time with the greatest weight on the Dragoon area, so as to neutralise every possible unit capable of detecting the approach of the convoys and alerting the defences. Seven installations, mainly Würzburg and Coastwatcher types, were chosen for elimination.

Satisfactory Results of Air Attacks on Enemy Radar

Ibid (Radio)

For technical reasons Allied Intelligence's analysis of the cumulative results of these air attacks was most reliable in the Dragoon area, but the degree of local tactical surprise actually achieved points to a considerable, if not complete degree of success in the other three areas.

The table of estimated enemy radar status on the night D minus 1/D Day (1) reveals several interesting points. In the Genoa area six known stations appeared to be still functioning. This may not have represented the failure some might read into it. The information circulated from Genoa when the course of the convoys were initially laid in that direction (as part of our deception tactics) seems to have been responsible for a widespread alerting of units for a landing in that area and subsequent corrections proved fatally late in reaching those concerned. The greatest success of immediate tactical and psychological value was attained in the Dragoon area itself, where it appears that only two stations (a Coastwatcher and a Giant Würzburg) were operating on D Night, both in St. Raphael sector. The outlay of effort expended to bring about that state of unserviceability was not unreasonably heavy. The front gunfire probably did more damage to the actual radar installation, when found, but the fragmentation bombs caused important damage to the buildings on the site and confusion among personnel manning it.

- (1) 24 sorties by M.A.T.A.F. and one fighter attack by M.A.S.A.F.
- (2) 2 attacks by M.A.S.A.F.
- (3) 38 sorties by M.A.T.A.F. and three fighter attacks by M.A.S.A.F.
- (4) x Serviceable. xx Unserviceable. xxx Probably Unserviceable.

Genoa Area

Cap Ferrat	x
Moneco	x
Capo Mile	x
Savona/Varazzo	x
Voltri	x
Portofina	x

Dragoon Area

Cap Blanc	xx
Cap Blanc	xx
Cap Camerat	xx
Cap Camerat	xx
St. Raphael	xx
St. Raphael	x
St. Raphael	x
Cap d'Antibes	xxx

Marseilles Area

Ceret	x
Toulon	xx
Cap Couronne	xx
Marseilles	xx
Marseilles	xx
La Ciotat	xxx
Cap Couronne	x
Golfe de Giens	xx

Sète Area

Cap Leucate	xxx
Cap Leucate	x
Cap Leucate	x
Narbonne	xxx
Sète	x
Sète	x
Montpellier Lattes	xxx

Air Attacks on Coastal Batteries and Gun Positions

Ibid
and Report by
N.C. Western
Task Force.
(AHB.II J.1/
339/1)

The growth of the air effort against guns and batteries may be studied in the footnote,⁽¹⁾ where Operation Nutmeg merges into Operation Yokum and Ducrot on D Day. The peak is seen to come on D minus 1 Day. On D Day itself, the sting had already been taken out of the enemy coastal fire power.

As in the case of the offensive against radar, this programme played on the same four areas and one finds similar series of variations timed to deceive as to our intentions for as long as possible - on 11 August medium bombers in the Dragoon area and fighter bombers round Genoa: on 12 August, a replica of the 11th. On 13 August, Mitchells and Marauders in the Marseilles area, Tactical fighter bombers in the Genoa area. On 14 August, the medium wings returned to the Dragoon area for the last stroke of prelude operations.⁽²⁾ As the effort reached its crescendo during the next phase - Yokum, reports on the effectiveness of the whole programme will be dealt with under that heading.

Phase III. Operation Yokum
Pre - H Hour D Day Bombing

Tactical Air Support for the Landings

Report on
Dragoon
M.A.T.A.F.

This section of the Bombing Plan was executed under the control of XII Tactical Air Command and was characterised by a high degree of co-ordination with other air commands and all naval gunfire support groups. It amounted to an assault by some one thousand three hundred aircraft over a period of only one hour and twenty minutes on a front forty miles long. It supported the landing until H Hour and caused considerable damage to the enemy coastal and beach defences. The highest priority was accorded to attacks on those batteries which might oppose the approach of naval ships. The tactical air support of the navy gave assurance that gunfire support ships and minesweepers got into position and that they, in turn, supported the approach of landing craft and combat loaders.

For these purposes, twelve groups of heavy bombers and their escorts, the entire resources of the 42nd and 57th Bombardment Wings of Tactical Air Force and of XII Tactical Air Command were employed. Except for a number of 57th Wing Mitchell missions cancelled on account of foggy weather, the plan was adhered to: the only change was that conditions of

(1)	<u>Date</u>	<u>H.B.</u>	<u>M.B.</u>	<u>L.B.</u>	<u>F/B</u>	<u>Tons Bombs</u>
	10 Aug.				107	36
	11 Aug.		233		87	444
	12 Aug.	556	236	4	273	1778
	13 Aug.	428	267	-	23	1452
	14 Aug.	538	240	22	103	1744
	15 Aug.	252	288	16	591	1105

- (2) Attacking airfields at Les Chanoines, La Jasse, Istres, Salon, Toulouse and Valence in the course of their flight.

light compelled postponement of the moment of opening from 0550 to 0610. Thereafter, the attack was maintained on the lines given in the footnote.⁽¹⁾

Rendezvous and Areas of Attack

Ibid

42nd Wing rendezvoused over the western coast of Sardinia and approached down its own lane. It bombed the beach east of Cavalaire in two missions and flew three missions each against batteries at Cap Benat, La Londe and Ile de Giens. 57th Wing rendezvoused over its bases in Corsica and approached the assault area in a lane N.E. of the Naval convoy lane. It bombed the beach at Agay, west of Cap Roux (two missions) and flew three missions each against batteries at Pointe des Issambres, St. Tropez, Agay and Cap Roux. XII Tactical Command fighters and fighter-bombers rendezvoused in the area Borgo, Cap Corse and Calvi and approached along air lanes on either side of the Naval convoy lane. From here the fighter-bombers flew armed reconnaissances over the entire area from the Ile de Giens to the Ile de Lerins, silencing any guns seen firing; in addition they attacked twenty-nine batteries along the landing coast, in particular those massed in the zone from Cap Camarat - Cap Roux. The timing of attacks, meticulous throughout, became of paramount importance as H Hour drew near, for by 0730 hours small Allied Naval craft were already within 1000 yards of the beaches, a condition in itself only possible by virtue of the success of air attacks on guns to that point. All missions avoided the areas Cap Nègre, Ile du Levant, Port Cros, (the objects of special ground missions), and the paratroop drop areas; all were geographical units with individual bomb-lines it was essential to respect.

Naval Satisfaction with Results of Air Attacks on Guns

Ibid

Scattered low clouds over some batteries, patches of fog and the poor early morning light made complete success out of the question. There was a shift of some missions to secondary targets (strongpoints).⁽⁴⁾ On the whole, things worked out well for the air forces and many guns were squarely hit, as for example the four 150 mm guns near the Saline d'Hyères, hit by fourteen Marauders. The coastal defence troops were not of the first category⁽⁵⁾ and some guns were either abandoned or weakly fought.

-
- (1) 0610-0730 Small formations, each of 4 fighter-bombers, patrolled assault area and silenced any guns seen firing.
Small formations of heavy, medium and fighter-bombers carried out repeated attacks to destroy selected coastal defence guns in assault area.
 - 0635-0730 Small formations of fighter-bombers attacked selected gun positions in assault area.
 - 0700-0730 Formations of medium and heavy bombers carried out drenching attacks on assault beaches with object of beating down under-water obstacles and beach defences. Each beach was covered in its entire length, and where possible, attacked by two or more waves.
 - 0800 onwards Eight Navy fighter-bombers, eight Navy rocket-firing fighters and sixteen fighter-bombers of XII T.A.C. were on call to attack any remaining targets.
 - (2) Marauders.
 - (3) Mitchells.
 - (4) About one-fifth of tactical air support was shifted from Navy to Army.
 - (5) But their well-organised and fanatical contribution to the defence of Toulon and Marseilles soon afterwards provided a problem.

The Navy considered that results exceeded expectations and Vice Admiral Hewitt, U.S.N. pointed out how successful had been the intricate choice of targets and alternatives. He would have liked, in view of the handicap imposed by the overcast, to see the pathfinder technique employed by aircraft, and radar control on the gunfire support ship forces.

The Bombing of the Beaches, pre-H Hour

Ibid

Results of the air attacks on the actual beaches, shallow water and approaches were watched with great interest. It was uncertain how the effect of the blast would effect deeplaid mines, wire entanglements and under-water obstacles. The 100 lb bomb was mostly used, as well as some up to 260 lb. These categories were in fairly short supply, so loads were sometimes completed with 500 lb bombs. No phosphorus or incendiary bombs were used.

The beach at Agay, only 80 yards long, was bombed about 450 yards on each side, so as to neutralise the stiff defences. One hundred and thirty-five Marauders attacked Beach 259 (Alpha Red) with one hundred and eighty-six tons of bombs, achieving good concentration. The attack by eighty-six Fortresses against Beach 261 (Alpha Yellow) was also a heavily-concentrated success made from 12,500 - 16,000 feet altitudes.

Air Protection of the Assault Convoys

Mounting, Staging and Sailing of Assault Convoys

Reports in
'M.A.C.A.F. and
the Invasion of
S. France'.
Appx. D3 and D4
M.A.C.A.F. ORB.
Aug. 44.

The assault was mounted from ports in Italy, Corsica, North Africa and Malta. In Italy, the base for all units withdrawn from the Italian front, Naples and its satellites, was the principal mounting port and here three divisions⁽¹⁾ were loaded. At Taranto and Brindisi two French divisions⁽²⁾ were loaded, the locality being chosen both to relieve congestion at Naples and contribute to the deception plan. At Agropoli, south of Naples, troops of the 1st Special Service Force and the 1st Groupe Commandos d'Afrique were loaded. Oran in Algeria was the second principal mounting post and here most of the French armoured forces embarked. Malta was selected as the terminal port for the aircraft carriers and one naval gunfire support group. The Air Force units were loaded at Calvi and Ile Rousse, (in Corsica); and one French division⁽³⁾ at Ajaccio.

Because of the distances involved, landing craft and troops were staged off the west coast of Corsica prior to setting course to the points of assault and gathered in anchorages at Ajaccio and Propriano. The aim of the convoys was to approach the assault area during darkness. The routes were so designed as to enable Coastal Air Force to provide maximum air coverage outside forty miles of the assault area. At this point, it will be recalled, XII Tactical Air Command assumed cover responsibilities. Convoy courses were maintained in a northerly direction towards Genoa until off the northwest tip of Corsica, where the naval approach lanes commenced. The eastern diversion group supported this deception

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- (1) 3rd, 26th and 45th Divs.
 - (2) 1st, Fr. Inf. Div. and 3rd Algerian Inf. Div.
 - (3) 9th Colonial Inf. Div.

threat by proceeding in a direct course to Genoa until 2300.(1)
(2)The turn thereafter westwards was made in mist.

Approach Corridors

Ibid.

The four main assault task forces will be recalled: Camel, Delta and Alpha against the beaches and Sitka with special commando type assignments against the islands and mainland. Camel Force was assigned the right (northeasterly) corridor. Delta Force the centre and Alpha the left (south-westerly) corridor. Reference to Maps 3 and 4 will show how these approaches fitted into the overall design for the approach of air, airborne, diversionary and naval assault elements.

Air Convoy Protection and the Watch on Enemy Shipping

Ibid

Coastal Air Force's main preoccupations at this stage were the cover of the convoys, the watch on enemy surface forces and the foiling of enemy air reconnaissance. These tasks, because of Allied air superiority and the low strength of the enemy air forces, it fulfilled without the loss of any naval units. The importance of the small enemy air reconnaissance forces was out of all proportion to their strength: they had, in their favour, superior speed and height, and it was always possible that if their evidence, added to that from other sources, should uncover our real intentions, strength and whereabouts, the landings might be prevented, or at any rate defeated on the beaches in the manner advocated by Rommel. Greater emphasis was placed on night cover than day after the convoys were well out in the open sea. Experience had proved that sustained daylight or dusk raids by the enemy long range bomber force were unlikely, but an effort of some kind was certain.

10 August

Ibid

Coastal Air Force's role in Operation Dragoon began on the afternoon of 10 August (D Minus 5), when the first convoys, naval forces and support troops began to move out from their loading ports. Throughout that night the seaborne forces moving Southwest from Taranto were covered by No.242 Group with night Beaufighters, and by Wellingtons for anti-submarine protection. The convoys which left Naples in the late afternoon were covered until dusk by Thunderbolts and Airocabras(3) and throughout the night by Beaufighters. In the Western Mediterranean, it was correctly believed, no U-boats were active and economies in cover were thus effected. The Oran convoy was covered on its eastward route by Mosquitos.(4) The night 10/11 August was one of bad flying weather: the plans of Coastal Air Force in the Corsican area were abortive and it was unlikely that enemy air reconnaissance sighted anything worth reporting. Intruders who set out to attack enemy air bases at Bergamo, Valence and Toulouse abandoned their missions.

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- (1) It reached a point 43°31' N, 08°15' E. before turning roughly westward towards the beaches and there is some evidence that this contributed to some fruitless alerting of the defences in the Genoa area.
 - (2) See Map 1 for assault convoy routes.
 - (3) Both of 62nd Fighter Wing.
 - (4) Of No.210 Group.

11 August

Ibid

All day on 11 August the convoys were at sea, covered by Airocobras and Thunderbolts; Wellingtons, Warwicks, Marauders and Cants⁽¹⁾ gave anti-submarine cover between Taranto and Sicily. In the Sardinian area, fighters gave the alarm that two submarines were some 50 miles off Toulon. No photographic cover had been furnished since 8 August. These might be two of the three U-boats still capable of putting to sea. Our own submarines were clear of the area, so the 'Total Bombing Restriction' was lifted and four Wellingtons were airborne on a search, but found nothing.

Enemy aircraft came in high close to Oran, and a Ju.88 was pursued by two Airocobras from 60 miles N. of Cap Falcon to 20 miles inside Spanish territory and hit. Sardinia - based Marauders swept the French and Italian Rivieras, bringing back the latest reports on the shipping and port position. All this had been accomplished with seventy-six sorties.

12 August

Ibid

This number doubled for the next twenty-four hours from dusk to dusk. Convoy escort and harbour patrols were stepped up. Practically all night Beaufighters were called in. A squadron of Wellingtons⁽²⁾ and one of Mosquitos⁽³⁾ moved to Alghero (Sardinia). Cover was now active over forces in the Malta Channel, Tyrrhenian Sea and off Corsica and Sardinia.

Photographs showed at the close of the day - 12 August - that all the U-boats were present in harbour. The Wellingtons on search were then released from sea sweeping. Seven others and two Beaufighters had attacked Imperia and Sestri Levante, and a convoy of five small vessels off Nice was attacked with some success. Enemy reconnaissance aircraft were over Naples and Ajaccio; some of our aircraft scrambled without success.

13 August

Ibid

During the next 24 hours, fighter cover dropped and harbour protection rose. Seventeen convoys and gun support groups were at this time - night 12/13 August and day 13 August - concentrated off and in Corsica and Sardinia. Venturas and Wellingtons pinned down surface forces in enemy ports and bombed the oil installations at Vado Ligure. The invasion coast was closely watched by Marauders. Enemy aircraft got through to Ajaccio both by night and day. Night fighters intercepting could not compete with their superior speed and manoeuvrability. They were not so successful over Algiers and were chased, vainly, by two Beaufighters.

14 August

Ibid

The assault convoys began to leave the assembly area on D minus 1 Day (14 August), forming an unbroken stream of shipping protected by a continuous patrol of twelve day fighters. Coastal Air Force was obliged to call on Tactical Air Force to reinforce with eighty-two sorties. The period from 1800 hours on 13 August began with all the

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- (1) Italian Air Force aircraft.
 - (2) No.36.
 - (3) No.256.

assault forces in Corsican and West Italian areas, a situation calling for a doubling (up to eighty-one sorties) of the defensive air harbour patrols. As the convoys weighed anchor and swung outward to Southern France, the day cover came into play and with the reinforcements from 87th Fighter Wing (T.A.F.) registered two hundred sorties in all on this task.(1)

During the night of 13/14 August the game of hide and seek with enemy reconnaissance, which included some of the new fast Me.410s, went on. The force of Mosquitos and Beaufighters made observation by them difficult, but one aircraft did reach Ajaccio for a quick sighting.

Nine Wellingtons and Venturas set shipping and installations afire in the ports of Cannes, Imperia, Sestri Levante and Savona. Venturas hit a vessel, but one failed to return. The Air/Sea Rescue organisation functioned on all these days, employing with some success Catalinas, Venturas, Warwicks, Walruses, Airocobras and high speed launches. Sorties rose to a total of three hundred and twenty-five.

Among the minor operations worthy of record was a small formation of a single aircraft escorted by four Beaufighters and a Catalina. It was the Rt. Hon. Winston Churchill and Sir Henry Maitland Wilson proceeding from Naples to Ajaccio to observe the assault.

During the evening of the 14th, stratus patches which had been forming over the N.W. Mediterranean drifted in towards the Southern France coast, and though mainly thin, cloud base occasionally fell to 200 feet. There were local banks of thick fog in the eastern area of the Gulf of Lyons. In the remainder of the Mediterranean, skies were clear with a visibility of ten miles and winds were light variable with calm seas.

(1) To render this task possible, the 346th Squadron of Airocobras and Thunderbolts moved from W. Italy to Alghero the same day.

CHAPTER 4

THE ASSAULTS

The Airborne Diversion, Airborne and Parachute OperationsThe Airborne Diversion - Operations

Report on
Airborne
Diversion
M.A.T.A.F.
Appx. D/SASO/
8/3 M.A.T.A.F.
O.R.B.

After flying from Galera airfield to Ajaccio, the five Dakotas detailed for the airborne diversion took off with a complement of ten personnel(1) and a load of 5780 lbs.(2) on board each aircraft. As far as the turning point, navigation was assisted by controllers at A.M.E.S. 8001 who gave course directions out to 50 miles and a ground speed check at that point. Thereafter, navigation was on dead reckoning; on such short course legs astro-navigation was impracticable. After each alteration of course, back bearings were taken from specially laid flame floats.

After an overwater flight they made a precise land-fall in the centre of the Bay of Ciotat. They met no opposition but the last aircraft saw some red tracer fire from Ciotat and from afar they could see fires at Marseilles lit by the forty-eight Wellingtons bombing by flare light, and heavy flak bursts at Toulon. Their course can be traced on Map 2.

As they proceeded the illusion was built up, by window dropping and other means, of a force of about two hundred aircraft flying in normal troop carrier formation of five serials of forty aircraft each. They arrived over the Drop Zone at intervals from 0349 to 0419 B hours. Dropping to heights of 600 - 700 feet above the ground they dropped the dummies and fire simulators. Flashes, coloured lights and faint explosions showed that everything was functioning as it should. Aided on the homeward, as on the outward, journey by Allied radar from Corsica, they returned to base without incident. This airborne diversion was closely linked with complementary deceptive operations by small naval forces simulating, by radio measures, a large assault convoy.

The Six Troop Carrier Missions - Routes and Formations

Troop Carrier
Operations 1944
H.Q. 12th Air
Force
15 Mar. 45

Five of the six troop carrier missions preceded H Hour D Day. These were, it will be recalled, one pathfinder, two paratroop(3) and two glider-borne missions.(4) The sixth(5) comprised three serials of aircraft, totalling to one hundred and twelve aircraft who flew re-supply missions on the morning of D Day.

-
- (1) Pilot, co-pilot, navigator, radio operator, and six trained para. re-supply men for dispensing the Window and para. dummies at the Drop Zone.
 - (2) Comprising:-

Parachute dummies	2400 lbs.	Pintails	150 lbs.
Rifle simulators	210 "	Panniers for	
		paras.	150 "
Window Type 'N'	750 "	Crew re-	
		supply	1400 "
" " CHR - 1	720 "		
		TOTAL	5780 lbs.
 - (3) Missions Albatross and Canary.
 - (4) Missions Bluebird and Dove.
 - (5) Mission Eagle. In addition, 3 emergency missions were flown on 17 August, when 39 aircraft dropped rations.

The missions proceeded from their Italian bases⁽¹⁾ to the Command Departure Point,⁽²⁾ on to the Initial Point at Agay,⁽³⁾ at an altitude of 2,000 feet along a 10-mile wide corridor over naval craft markers, thence to their drop zones.⁽⁴⁾ After drops and releases, the aircraft climbed to 3,000 feet and returned to home bases, all this being accomplished without the loss of an aircraft or a glider en route.

Navigational aids were ample in this operation. There were three boats at intervals between the French coast and Corsica. Thereon, on Giraglia Island, off the northern tip of Cap Corse and three capes on the Italian coast there were Holophane lights,⁽⁵⁾ Eureka beacons⁽⁶⁾ and M/F beacons. There was, in addition, the 'candle'⁽⁷⁾ used as a rendezvous beacon for some other air units over Corsica.

Drop Zones

Ibid It will be seen by reference to Map 3 that the three parachute Drop Zones and the one glider Landing Zone were in the general area Le Muy - La Motte - Trans-en-Provence, in and closely adjacent to the Argens River Valley. They were styled Zones O, A and C. Zone O for parachutes and gliders was largely one of good capacity fields and pasture lands, low and rolling and generally ideal for the task. Zone A - for parachutists only - was flat, gently sloping, but sharp high points on the perimeter presented dangers. Zone C was of great tactical importance, since it commanded high ground above the river valley.

Pathfinder Mission

Ibid Nine aircraft took off from Marcigliana airfield with pathfinder teams. The three serials reached the three Dropping Zones about one hour ahead of the main parachute columns, at 0331, 0334 and 0353 hours. Dense fog covered the terrain; the sky was overcast. Without the radar and radio aids provided and of which every advantage was taken, it is doubtful if they would have found their way in. The teams dropped through the fog and proceeded to set up beacons, smoke signals and panels to aid the glider and paratroop landings.

Albatross Mission

Ibid Three hundred and ninety-six aircraft in eleven serials dropped paratroops on three zones from 0421 to 0514 hours through dense fog up to 500 feet, with a high degree of accuracy. Troops and canisters landed uneventfully except for light small arms fire. Two passes were made, for orders were that no paratroops or gliders were to return to Italy.

Bluebird Mission

Ibid Bluebird was flown after H Hour. Of the seventy-six aircraft that landed with gliders, the first serial of forty landed at 0926. The weather worsening, the second serial was

-
- (1) Orbetello, Lido di Roma and Tarquinia.
 - (2) N.E. tip of Elba Is.
 - (3) Code name Ithaca. Position 43°26'N. - 06°53'50"E.
 - (4) Given in detail below.
 - (5) Reception from 25 - 30 miles.
 - (6) Reception from 1 - 10 miles.
 - (7) Vertical searchlight beam.

recalled and made a second and successful attempt in the afternoon, landing at 1749 hours.

Canary and Dove Missions

Ibid

Canary and Dove formed a column of fifty-seven minutes' time length. The Canary serial of forty-one aircraft dropped its paratroops at 1804 hours. The Dove force of seven serials totalling one hundred and forty aircraft, towing an equal number of Waco gliders landed on D Day from 1827 to 1900 hours.

Fighter Escort

Ibid and
MATAF/65/18/
1/AIR
7 Aug. 44.

Although probable enemy fighter intervention was rightly construed just before the event as unlikely to be serious, the threat existed. It was clearly not great enough to justify the elaborate precautions in the way of fighter cover provided over the sea journey, but on the other hand it was not possible to predict precisely at what point on the air passage into France the enemy air force might strike if it chose to. That is why the airborne operation, which in the event was not opposed from the air, bears the stamp of a set-piece operation teaching few lessons beyond those to which good organisation invariably points.

Without going into considerable detail of the effort put up in support of the missions by the various air formations - M.A.A.F., M.A.T.A.F., M.A.S.A.F., M.A.C.A.F. and D.A.F. - in the way of day night and intruder support, mention of the support carried out for the Albatross mission alone will convey its comprehensiveness. In the case of that mission the diversion force whose activities were given above simulated an airborne assault; radar jamming forces covered the approach area, night fighters patrolled the corridor, four intruders covered the corridor from 5 miles offshore to the drop zones to attack any active flak or searchlights; thirty-six Spitfires covered the returning column from first light until it was clear at Elba; and, lastly, a fighter patrol covered possible intervention from the Italian line Cuneo - Genoa - Imperia - from first light until 0630 hours.

Landings and Action by Airborne Forces(1)

Ibid

No Allied ships fired on the Troop Carrier aircraft. Some difficulty was experienced on certain ground which the Germans had studded with anti-glider poles. Fortunately many had been deliberately planted either too far apart to prevent glider landing or too loosely to stand much pressure. Dove mission suffered most of this type of trouble. Because of the rolling terrain, many gliders were released appreciably higher than the normal 800 feet. There were cases of overcrowding and they ran into a profusion of poles. Five pilots were killed and twenty-five injured. Most of the late D Day mission's gliders were wrecked beyond salvage in landing, but all cargoes were landed and unloaded in good condition. Glider pilots helped unload cargoes, then made for their Command Post.

(1) Statistical summary of Troop Carrier operations:

987 sorties flown	56,896	lbs. rations carried
9,000 airborne personnel carried	744,831	" miscellaneous equipment delivered to combat zone.
221 jeeps carried		
213 artillery pieces carried	2,365,254	lbs. total weight of equipment exclusive of personnel.
407 gliders towed		
1,270 gallons gasoline carried		
4,938 lbs. bombs carried		
759,112 " ammunition carried		

SECRET

60

No aircraft were lost because of any direct enemy action. Only one aircraft sustained a few holes from flak and small arms. Not more than one-hundred and seventy-five paratroops (just over 2 per cent) suffered jump casualties, many of them slight. The combined landing casualty figure for parachute and glider troops was roughly 3 per cent. Two hours after the landing of the glider force, they had established radio communication with Rear H.Q., Airborne Task Force in the Rome area. The Task Force went into action without delay and from 0423 to 1200 hours on D Day occupied Le Mitau, La Motte, Castron and Les Serres. They continued their task of blocking the move of enemy reserves into the assault area and successfully exploited the wedge thus driven in the enemy positions. Strays found their way with the aid of the F.F.I. to the assembly area near Le Muy. No. 509 Parachute Battalion sent working parties to the shore. Partial contact was established during D Day between the Airborne Division and the 36th and 45th Divisions.

Airborne Forces Operations after D Day⁽¹⁾

Ibid and
N.C.W.T.F.
Report

While the Americans pushed northward and the French westwards, the airborne forces concentrated on clearing up the eastern coastal sector. On 16 August, they occupied Draguignan and Les Arcs. They were augmented on 19 August for their advance to the east on the right flank. They occupied Callion on 20 August and captured high ground northwest of Cannes. On 25 August they occupied Antibes and Cannes and crossed the Var River against stiff resistance two days later. On 28 August, they occupied Nice and moved on eastward. Monaco resisted first attempts at assault. By 11 September, they were operating in the vicinity of Menton and Tête de la Lavina. At Menton they were counter-attacked, but passed it and blocked the road north, building up area defensive positions. On 20 September, they were still fighting in the Ventimiglia area.

By 25 September, with 6th Army Group fighting, with XII Tactical Air Command support, on the southern sector of the Western Front, 1st Airborne Task Force held a line roughly along the French - Italian border touching the coastline about $3\frac{1}{2}$ miles W. of Ventimiglia and $1\frac{1}{2}$ miles E. of Menton. The line ran Balzi - Rossi - Cima - Pongoira - St. Antonin.

Sitka and Kodak Force Landings

Sitka Force

Arrival of Convoys

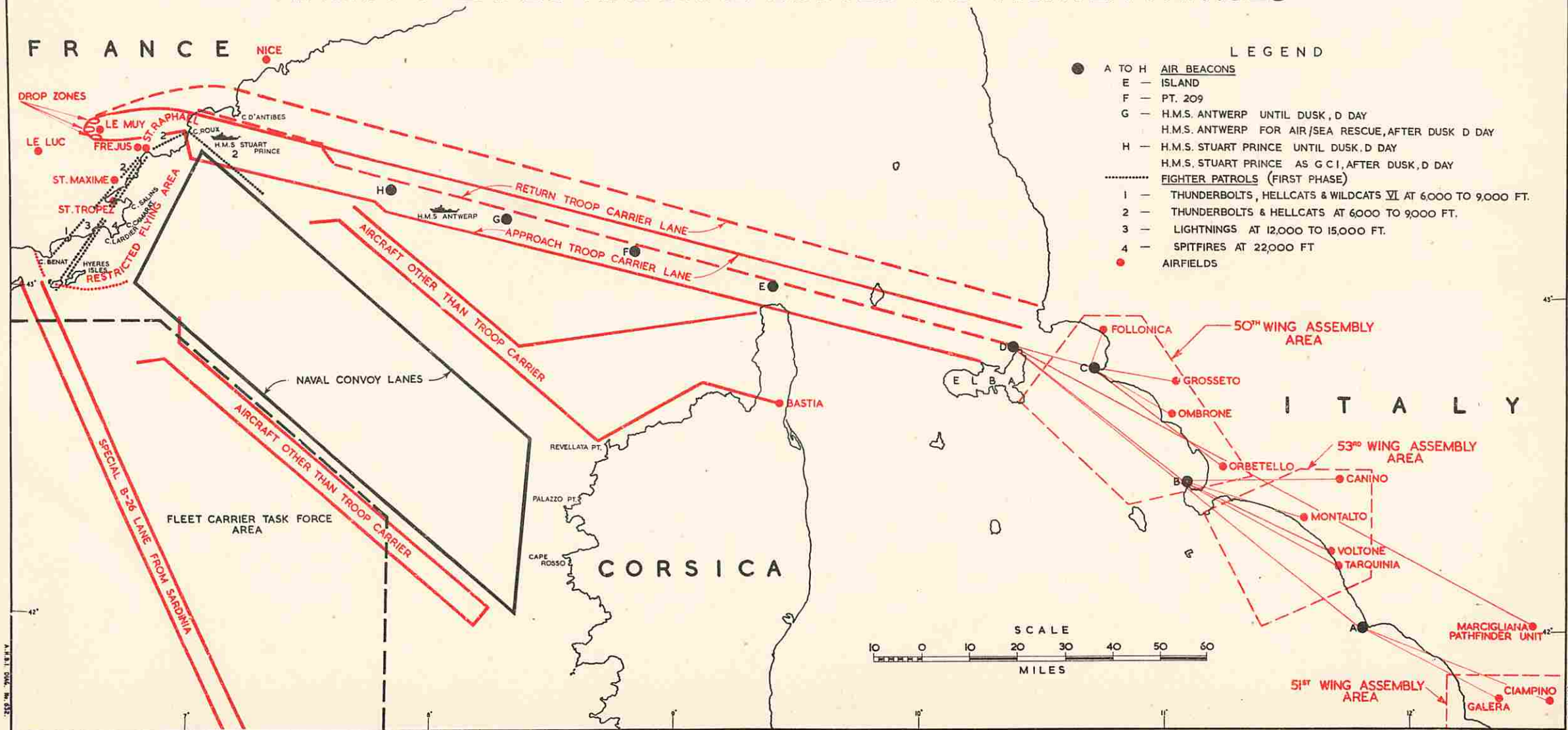
Report of N.C.
Western Task
Force
15 Nov. 44

All convoys arrived as scheduled, protected on their journey by the air cover system described. The force of eight hundred and eighty ships and craft and one thousand, three hundred and seventy ship-borne landing craft was an assembly of mixed Allied nationality.⁽²⁾ Small enemy craft found in the vicinity of the beaches were engaged and sunk. The first land forces to be engaged were the Sitka Force. It was believed that the hint they would certainly give of Allied intentions would be outweighed by the advantages arising and be offset to some extent by the various diversionary operations by air and naval units.

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- (1) Refer to Map 5.
 - (2) There were 515 U.S., 283 British, 12 French and 7 Greek ships and craft, and 63 merchant vessels of various nationalities.

OPERATION ANVIL - DRAGOON

AIRCRAFT LANES AIRBORNE ROUTES AND FIGHTER PATROLS



Execution

Sitka Force(1) had been especially created to eliminate the threat to the assault forces from enemy coastal defence batteries on Levant, notable among which figured an apparent one of three 164 mm. guns on the east end. These guns were so located that capture by hand was the only certain way of neutralising them. It was being realised in Air Force circles, especially after experience of the heavy bombing of coastal batteries in Normandy, that there was probably no other reliable way with deep-sited heavily casemated guns. This point had been put by the Allied Air Forces during the planning stages for Dragoon and the factor of tactical surprise of the whole Dragoon operation prejudiced by the mounting and execution of the Sitka project. Ironically enough, the battery of three heavy guns on Levant, the nucleus round which the whole scheme revolved, proved to be skilfully constructed dummies, which Allied Intelligence had failed to define as such. There were, however, other tasks involved, one of which was to cut the one coastal highway at each end of the projected beachhead area, a road bisected at Fréjus by the road leading inland to Le Muy.

The Naval Support Force(2) first established the Romeo Force of French commandos ashore, withholding naval fire to aid the stealth of their approach. The haze hindered signalling and they landed on the wrong beach. They were bombed once, later in the morning, by our own aircraft and fired on by the enemy without much effect. They beat off an enemy counter-attack and by 1000 hours had gained their objective.

The main Sitka Force was put ashore on the islands of Levant and Port Cros in conditions of almost complete surprise. After finding the heavy guns on Levant to be dummies, they cleaned up the island by 2330 hours. Resistance on Port Cros lasted until 1300 hours on 17 August. The whole operation enjoyed favourable weather conditions.

Kodak Force(3)Alpha, Delta and Camel Force Landings

Ibid

When the Alpha assault troops - U.S. 3rd Infantry Division - went in to Red beach in the Baie de Cavalaire and Yellow beach in the Baie de Pampelonne, they found the air bombing, naval artillery fire and devices for clearing underwater obstacles had prepared the ground well with creating obstacles seriously hindering traffic. Without waiting for news of the Special Force on Levant to report, they took the silence of the big guns as a good omen and landed.

45th U.S. Infantry Division - Delta Force - landed 7 miles to the south of Fréjus on Red, Green, Yellow and Blue beaches. They found all major guns damaged by air bombing and artillery bombardment. Most of the defence crews had deserted their posts, been killed or were in hiding. Mines put seven of the first twelve tanks seen out of action.

36th U.S. Infantry Division - Camel Force - was established ashore in good time, again against opposition which would have been formidable but for the air and naval attacks preceding the landing. The beach mines here held up the

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- (1) Refer to Map 4.
 - (2) Task Force 86.
 - (3) Refer to Map 4.

SECRET

62

advance and prevented the opening of one beach until the evening of D plus 2 Day. This relatively easy landing, with few losses, made possible a rapid advance overland and up the Argens Valley to join the Airborne Force.

Meanwhile the air operation Ducrot opened and was maintained all day. The combined effect of it and the naval gunfire was to emphasise the initial shock and disrupt communications progressively for a while, until the Germans began to rally, a process which in their case was never lengthy.

Air Operations on D Day

Operation Ducrot

Report on
Dragoon
M.A.T.A.F.

The initial objectives of Ducrot were, it will be recalled, coastal guns and installations bearing on the beach areas and thereafter enemy movement, close support and naval support; in addition, the attempted isolation of the battlefield by cutting the road and rail bridges over the Rhone, Isère and Durance rivers, armed reconnaissance, railway cuts and counter air force operations. In this task, Strategic and Tactical Air Forces achieved a record effort.⁽¹⁾

XII Tactical Air Command Operations D Day

Ibid

All through the day, Lightnings and Thunderbolts⁽²⁾ attacked gun positions and then patrolled the beaches. Fighter-bombers, from 0815 to 2000 hours, attacked strong points and road bridges west of Nice and east of Hyères: They followed with armed reconnaissance in the Toulon - Brignoles area, north to the Verdon River, east along this river to Rougon, Grasse and Cannes, attacking troop concentrations and transport on the road. The area northwards as far as the road bridges over the Durance river was attacked from 1230 to 1545 by fighter-bombers.

The medium bombers of 42nd and 57th Wing turned from Operation Yokum to communications. The 42nd made successful attacks on road and rail bridges at Sisteron, Arles and Aramon; the 57th did considerable damage to bridges at Avignon, Tarascon, Pont St. Esprit and Montfaucon.

Tactical Air Control

Ibid

All these operations could not be controlled in detail by the Air Force Task Commander on board the amphibious flagship, U.S.S. Catocin. To reduce the load on signals, control of aircraft in close support of the assault was spread over five centres. Air defence control was handled by a Fighter Director Ship: A.A. control also by a Fighter Director Ship: night fighter control by GCI/Landing Ship Troops: detailed dispatching and scheduling by 87th Fighter Wing in Corsica; offensive air control of fighters, fighter-bombers and tactical reconnaissance by U.S.S. Catocin through the Fighter Direction Tender 13.

-
- (1) On 15 August M.A.A.F. put out 4,249 effective sorties, of which 3,936 were in support of Dragoon; this represented a record to that date for the theatre.
 - (2) Lightning sorties: 139. Thunderbolt: U.S. 312. French 140.

There was one factor in the system of close support which proved unwieldy, until the fault was remedied. XII Tactical Air Command was well-seasoned in the technique of close support; Seventh Army was a new aggregation of officers who insisted at the outset that all relations between ground and air be handled at Army level. Unforeseen conditions soon revealed this procedure as unworkable. To begin with, while the beachhead situation was being stabilised, it functioned well enough, and it was still believed that this plan of control, centralised in a fighter direction ship allocated for that purpose alone, was the best system conceivable.

From D Day, the Allied advance gathered momentum and Operation Ducrot merged into the two general operational ground movements - one northward towards Savoy and the other westwards to the investment and capture of Toulon and Marseilles. The general sequence of tactical air operations will therefore be dealt with as parts of those movements.

Strategic Air Force Operations on D Day

Ibid

Alpha beaches were bombed by eighty-three Fortresses (as well as by one hundred and thirty-eight Marauders), but the plan for bombing in the Delta area and the southern section of Camel area was denied completion by the cloudy weather.⁽¹⁾ The northern section of Camel Beaches was bombed by one hundred and sixty-two Mitchells with good coverage. At 1215 hours Camel Red beach was attacked by ninety-three Liberators who dropped one hundred and eighty-seven tons of bombs. The same handicaps in the difficult morning weather had been suffered by the medium bombers. For example, two hundred and twenty Mitchells and one hundred and ninety-one Marauders were scheduled to bomb gun positions between Cap Benat and Antheor; of these only one hundred and thirty-six Mitchells and one hundred and fifty-two Marauders bombed in the target area.

General Results of Air Operations up to the Close of D Day

Ibid
Report by
N.C.W.T.F.

The cumulative effect of the pre - and post - H Hour bombing of coastal defences and beaches was reasonably successful, in spite of a period of overcast and poor visibility. In any assessment of its results, it must never be overlooked that heavy naval shelling played an important part, too, in the reduction of enemy resistance and it was not always possible to distinguish the results of the two methods or to say without hesitation what were the exact results of each.

Mediterranean Allied Air Forces considered that its operations against coastal gun positions were successful. The report of Admiral Hewitt, in command of naval operations, confirms this. The only naval losses were as a result of air attack on mines. Both Navy and Air sources thought the air attacks on the beaches fairly, but not entirely, in line with hopes expressed before the event. The Tactical and Strategic Air Forces differed in their opinions as to what was the most effective type of bomb, and the Ordnance Branch of the Air Forces stated that the bombing of the beaches, carried out with light calibre bombs, failed to detonate the majority of mines, which were deeply laid, but was successful in clearing the wire defences. It was principally a matter of insufficient weight and concentration in the right place.

(1) Only 75 Fortresses attacked out of 183 dispatched.

Report by
15th A.F.
on Dragoon

From a tactical point of view the missions undertaken prior to H Hour in Operation Yokum were the most difficult. The early hour necessitated night take-off and assembly for the heavy bombers of the Fifteenth Air Force - the first manoeuvre of its kind for them in combat. In spite of extensive pre-D Day training, six bombers were thus lost by accidents. The situation over the target was dangerous, for not only were the invasion craft waiting close off shore but at most of the targets visibility was zero. The bombing was done with radio aids but only (at Army request) when some visual reference points were available. Hence the non-effective figure of nearly 50 per cent of the heavy bomber sorties and a high percentage of the medium bomber sorties. Losses in Yokum, apart from accidents, were only two heavy bombers, three medium bombers and one fighter-bomber. The bad visibility hindered precision to the extent that on only two of the five beaches bombed was any heavy concentration of the 100 lb. bombs found. The Army was not displeased with the general effect and commented favourably on the clearance afforded and the fact that the beaches were not cratered to the extent of creating obstacles which impeded the advance of our troops.

The Air Forces dropped some one thousand, eight hundred tons of bombs on coastal batteries in the assault area. The Navy expended about 2,000 tons of missiles on D Day, not all on coastal defences (both figures include the attack on Toulon). It is hard, and will perhaps remain impossible to say without qualification which was the more effective. Inspection was inconclusive. Some guns received direct hits, others did not function because, although they were still serviceable, the crews had been blasted or frightened away by the weight of the barrage of air and naval fire.(1)

Letter from
Lt. Gen. Patch
To Gen. Eaker quoted
in The History of
M.A.A.F. H.Q. M.A.A.F.

The evidence of the German admiral commanding the coastal defences of Southern France is worth recording, although by itself inconclusive. He told Lt. Gen. Patch, and General de Lattre without hesitation that he considered the air attacks had had a greater effect on his personnel and material than the naval bombardments.

Carrier Aircraft Operations

Area of Operations

Carrier Aircraft
Operations
Report of N.C.W.T.F.
Section 4.8.
Admiralty Battle
Summary (Draft)

Report on Proceedings
of Task Force 88 by
N.C.C.T.F.

The Carrier Force, supplemented by three flight-deck L.S.Ts, began operating soon after H hour from a point about 30 miles off shore. At the end of D Day it retired southward. As the days passed, it took up positions progressively further westwards as the emphasis of the fighting in the coastal sectors moved towards the resistance centres of Toulon and Marseilles. It was based, by day, for two days on the first point option, the third day on the second, (south of the Hyeres Islands), and from D plus 3 to D plus 14 on a point roughly S.W. of Marseilles.

Variety and Scope of Operations

The brief of the Carrier Force was to provide its own fighter protection and to furnish all remaining available aircraft to a pool available to the Air Commander for missions deemed priority tasks. Initially the emphasis was on spotting for naval gunfire. The need for this spotting was intensified in the Toulon - Marseilles area, but the progress of the armies up the Rhone banks enabled the carrier force to

(1) Comment by A.AF/MTO Evaluation Board.

send its fighter-bombers and armed reconnaissance aircraft as far as the area north of Lyons and west of Toulouse.(1) This situation presented initial difficulties in the case of the U.S. Navy carriers, the training of whose pilots had been concentrated on fighter tactics, anti-submarine screening and gunfire spotting, but their operations were very successful in the event.

Task Force 88 - the Carrier Force - added Hellcats and Seafires to the force of aircraft detailed for spotting for naval artillery.(2) The 2nd Group was assigned Alpha and Sitka areas on D Day as part of an elaborate plan calling for simultaneous spotting for four gunfire support groups on four beaches and a complex communications system.(3) The spotting operations carried out in the forenoon on D Day were handicapped by ground haze, but not valueless. With the clearing of the weather and the move of the French First Army westwards they had more success, the Carrier Force taking over control of all spotting in the Marseilles - Toulon area. Targets were sometimes visible at 6,000 feet, but, when necessary, pilots dived through intense and accurate flak as low as a few hundred feet altitude. The Army used field artillery and aircraft in addition, whose pilots, after D Day, communicated direct with the firing ship. There were also a few obsolescent cruiser - and battleship-based spotting aircraft which did good work, although useless in the face of flak defences.

The two Areas of Operations

History of the
Seventh Army
(Cabinet
Archives)
Histoire de La
1re Armée
Francaise.
Gen. de Lattre.

When, after two days fighting, the assault forces had reached at most points the Blue Line marking their first objective, the Seventh Army divided according to plan. The bulk of the American forces fanned out to northwards, north-eastwards and northwestwards. The French Army, progressively reinforced, turned to the urgent and imposing task of the reduction of Toulon and then of Marseilles. Once these ports were in Allied hands, the French Army crossed the Rhone and marched on more or less parallel lines to the Americans up country to Lyon, Dijon and Autun, to contact the forces of General Patton on one flank and pass on at the flanks of the Americans to the battles of the Vosges, the Belfort Gap and Alsace, to the crossing of the Rhine and the Danube. The early phases of these movements, directly following the assault, form the pattern against which air operations in general, and at this point the aircraft carrier operations in particular, must be viewed.

Preliminary and Final
Reports on T.F.88
Operations by Rear
Adml. Troubridge

Admiralty
Battle Summary (Draft)

Carrier Movements 15 to 29 August

from 15 to 19 August, carrier operations consisted of spotting for artillery, patrolling beaches, attacks on small coastal craft and, as soon as the Army broke out of the beaches and into the crust of the ground defence line, attacks on the lines of enemy supply and transportation.

- (1) Until XII T.A.C. aircraft operated from French bases it provided the only close support on short call.
- (2) This force included III Tac/R Sqn., II/33, and 225 Tac/R Sqn. of XII T.A.C.
- (3) Mediterranean Bombardment Code (M.B.C.) was used and proved its worth. It set forth, in fashion similar to that used by the U.S. Navy, a standard procedure for air and naval forces involved.

The aircraft carriers began operating from an area about 30 miles off the beaches. The last aircraft usually deck-landed at about 2030 hours; the Force then steamed southwards for the night, returning the next day to its new datum point in time for the first aircraft to take off at 0610 hours. The three flight deck L.S.T's (equipped with G.C.I.)⁽¹⁾ launched their first aircraft at 0930 hours on D Day, assisting by day as Fighter Control Ships and controlling night fighters at night. A Fighter Defence Tender⁽²⁾ controlled A.A. fire and gave air raid warnings. Group 2 of the carriers, all American except two British escort carriers, found difficulties in keeping close formation owing to the fact that the U.S. carriers' speed exceeded that of the British carriers by two knots. The range of the British Seafires was less than that of the U.S. Hellcats and Wildcats. On 18 August, therefore, taking advantage of the absence of Luftwaffe opposition, the Force was moved further inshore and to westwards.

The smaller force at Salerno had found three and one-half days the maximum stay. The planners of Dragoon thought five days might prove the maximum. The Force, as a force, operated in the event from 15 to 29 August. This was accomplished by operating the two groups in relays. At dusk on 19 August, Group 1 sailed for Maddalena to rest and refuel. It returned to operate at dawn on 21 August; at dusk on 23 August it was joined by H.M.S. Hunter and Stalker from Group 2 and sailed again for Maddalena. On 27 August the British carriers were released and sailed for Alexandria. Task Group 88.2 proceeded to Maddalena on the evening of 21 August, rested there two days and returned on station at dawn on 24 August. They left the area on 29 August for the Far East.

Operations 15 - 19 August

Ibid

Operations fall for comparison into two main periods - 15 to 19 August, the phase of assault and consolidation, and 20 to 29 August, which saw the French investiture of Toulon and Marseilles, the rapid U.S. advance inland and the encounter with the 11th German Panzer Division.

Operations opened at 0610 hours on D Day,⁽³⁾ when the first aircraft was airborne. Concentrating on the support of the two assault divisions landing to westward, fighter-bombers attacked enemy concentration and installations and proceeded to beach patrols. No enemy fighters intervened, flak was unimpressive and casualties low. Group 1 alone put up one hundred and seventy sorties.⁽⁴⁾ Later in the day, the Hellcats and Wildcats reported for operations. The rocket projectile Hellcats of C.V.E's Tulagi and Kasaan Bay were at once evident as especially effective in the destruction of motor transport and cutting railway lines in the Sisteron - Pertuis, Aix, Avignon, Arles - Miramis and Meyrarques - Draguignan areas.

The special difficulties attending carrier operations showed up early. Two pilots of H.M.S. Pursuer ran short of

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- (1) Ground Control Interception.
 - (2) F.D.T.
 - (3) For Flying Programme D Day refer to Appendix 7.
 - (4) Statistics for T.F.88.2 are not available. Figures given in Admiral Hewitt's report are drawn on where they apply, but do not allocate the effort to groups, or in every case give the total sorties for all categories.

fuel. Unable to locate the Carrier Force in the poor visibility, they landed in the sea, were picked up by a Catalina and landed at Ajaccio. Next day they flew on to their ships from Casabianda airfield in two spare aircraft. Flares fell near the force at night, but no air attack followed.

During the following four days, the emphasis passed from spotting for naval artillery to army close support. The spotting, reported on as invaluable, opened with requests from the gunfire support commanders of the Sitka, Alpha and Delta forces. 16 August saw an effort of nearly one hundred fighter-bombers and thirty-two fighter sorties against railway trucks and locomotives. The combined effort on the following day dropped in reflection of accidents and declining service-ability to ninety-two fighter and fighter-bomber sorties against land targets. Eight Seafires were directed on to a corvette S.W. of Cap Sicie, but one was lost to flak in a vain attack.

The enemy garrison on Port Cros Island was still resisting Sitka Force in the N.W. tip on 17 August. Our naval units could not bombard some of the enemy mortar positions owing to the intervention of a high ridge of land. The carrier-borne air forces decided the issue. At 1000 hours on 17 August sixteen aircraft from H.M.S. Emperor and H.M.S. Khedive attacked the German fort, while naval warships bombarded other positions: the garrison surrendered at 1300 hours. On 18 and 19 August, the carrier effort against enemy supply and transport continued unremittingly, the rockets of the Hellcats taking a heavy toll of cars and locomotives. On the 19th, a flight from H.M.S. Emperor destroyed an E-boat. A pilot from H.M.S. Pursuer, shot down between Orange and Avignon, joined up with the maquis and reported on 28 August to La Maddalena.

Operations 20 - 29 August

Ibid

With Group 1 refuelling, Group 2 maintained the fighter-bomber and spotting effort. The peak spotting effort was flown in forty sorties on 20 August, and the peak fighter-bomber effort of one hundred and forty-eight sorties on 21 August. Operations must at this point be viewed against the capture of Toulon (20 - 27 August) and of Marseilles (20 - 28 August).

On 20 August, a heavy naval bombardment of Toulon was staged by U.S. and French cruisers. Carrier aircraft, harrying groups of small enemy coastal craft still active, damaged four F-lighters and compelled the beaching of six others. The following day this score was increased by eight more F-lighters, a steamer and a minelayer sunk. Casualties of the intense flak concentration were mounting, a Wildcat, two Seafires and a Hellcat falling to this arm of defence.

Every day saw a proportion of the Hellcats and Wildcats of the carrier forces drawn further into the land battle; trucks, locomotives, bridges, troop concentrations and armoured fighting vehicles were attacked continuously. Marseilles flak was reported as very dense. After 24 August, the day the seven British carriers withdrew, U.S.S. Tulagi and Kasaan Bay added tactical reconnaissance along the western banks of the Rhone to their close support and artillery spotting effort. They took their heaviest toll on the roads. Sorties began to diminish on 27 August; the two last fighter-bomber missions were flown on 29 August. Reconnaissance as

far as Lyons reported no enemy road movement. On 30 August all U.S. Navy carrier aircraft were withdrawn from operations.(1)

C.T.F.88 -
Operations -
Admiral
Troubridge's
Preliminary
Report
(Admiralty)

Conclusions

The Admiral commanding the Carrier Task Force, while doing justice to the combined effort,(2) has left certain comments which deserve study in view of the perennial Anglo-American interest in the potentialities of carrier-borne operations.

The detailed air plans were completed, he complained, without the Rear Admiral Escort Carriers being represented, and they arrived too late for adequate study. Too little allowance was made therein for the limitations of both carriers and naval aircraft. He thought the squadrons not sufficiently well trained for the variety of duties. He may not have been aware of the long and varied training which No. 4 Wing (British) had undergone, which has already been referred to.(3) The training of the U.S. naval pilots had, said Vice-Admiral Hewitt, U.S.N. in his report on naval operations, devoted little or no time to tactical and armed reconnaissance and the accurate reporting of enemy movements and concentrations. Be that as it may, the Air Commander signalled the Commander of the Carrier Force that in his opinion the relationship and cooperation of that force was a model of perfection (at the time) and a severe standard for subsequent operations. He had in one day counted two hundred and two enemy vehicles destroyed by carrier-borne aircraft from 4 miles W. of St. Maximin to 2 miles E. of St. Luc.(4)

Both Seafires and Hellcats proved their worth. The rocket projectile was superior in daylight road attacks, the

- (1) For flying statistics of the 7 British escort carriers refer to AHB. II. S.1/35.
- (2) British carriers - total sorties 1627 including some 300 on recce, spotting and P/R.

U.S. " - Total sorties not available

Casualties

British - 13 aircraft lost over enemy territory
12 forced landings, all but 1 in sea
40 deck landing accidents (many aircraft were repaired)

U.S. - no statistics available.

No aircraft were damaged in air combat.
1 enemy aircraft (a Ju.52) destroyed.

Note. The report on Dragoon by N.C.W.T.F. quotes sortie figures for each day but these figures are incomplete and do not allocate the effort as between carriers and groups. They are therefore not used here.

- (3) He had taken over command from Rear Adml. A. W. La T. Bisset, whose sudden illness just prior to D Day deprived him of the chance of seeing the force he had raised and trained, in action.
- (4) Carrier-based Tac/R missions called in the targets and carrier-based Hellcats just reporting into the area were directed at once on to the road convoys. Targets were given by XII T.A.G. in clear, for due to the speed of operations, security did not demand incoding.

bomb superior against enclosed batteries. The cruiser H.M.S. Royalist was unsuitable as an H.Q. - a light fleet carrier would have been more practicable.

Air Force Commander quoted by Admiral Commanding Carrier Task Force

Ibid

Admiral Troubridge stated that Brig. Gen. Saville, the Air Force Commander, under whose orders the carrier force operated, had had no previous experience of carrier-borne aircraft. 'He found', wrote the Admiral, 'to his gratification and surprise, that he had at his disposal not only an unexpectedly powerful and efficient air support force, but, what was of greater moment, one that was capable of answering any call at the shortest notice. As originally planned, the principal tasks were tactical reconnaissance, bombardment spotting and beach cover. The number of aircraft available, however, after these commitments had been satisfied allowed for a heavy programme of fighter bombing and ground strafing, and of this full advantage was taken. The amount of destruction wrought on the enemy's communications by Naval aircraft was impressive, and on the testimony of the Air Force Commander, proved a not unimportant factor in the rapid advance of the army from the beachhead. General Saville's keen appreciation of, and eloquent tributes to, the Naval Air Support Force, were,' he wrote, 'a constant incentive'.

Naval Points in Favour of Aircraft Carrier Operations

Ibid

Firstly, the Force provided its own cover, reducing it when the German Air Force shewed signs of withdrawing from offensive operations. Secondly, it carried out to the satisfaction of the navy the policy of supporting all naval operations with naval aircraft. The Naval Commander, Western Task Force reported that, under the given conditions of little enemy fighter opposition, the spotting aircraft proved most valuable. The heavier types were of great assistance in the bombardment of the gun installations at Toulon and Marseilles. The lighter aircraft flown from cruisers and battleships were, when they avoided flak areas, of service too.

Thirdly, the point is made by Admiral Hewitt, the carrier aircraft were available for offensive missions in enemy territory somewhat beyond the range of fighters and fighter bombers based in Corsica. The Seafires, (although by that time considered too frail for carrier operations) for short-range missions, and Hellcats and Wildcats for longer range missions were particularly useful in destruction of enemy motor transport, troop concentrations, road bridges, railway nets and equipment. In support of this claim, the evidence of the Air Force Task Commander on his count of destroyed transport between St. Maximin and St. Luc may be referred to. The question, however, cannot be dismissed without an examination of the question of airfields. In view of the rapid advance, it would be correct to say that the further the front line progressed northwards, the less time could Corsica-based aircraft spend in the actual battle area. If no bases in Southern France could be made available in time, the point would arise when land-based close support from Corsica became impracticable.

Range

The actual airfield position bearing on this question of range is as follows. The schedule of movement of support forces into France provided for the move of A parties of the

27th and 324th Groups of Thunderbolts on D plus 5 and their B parties on D plus 12. The combat units themselves were due to land at D plus 9. The combat units of 57th and 79th Fighter Groups of Thunderbolts were due to land on D plus 20, and 86th and 4th Fighter Groups of Thunderbolts on D plus 24. Although the airfield construction programme was late starting, Ramatuelle was operational on D plus 5 (20 August) and housed one Thunderbolt Group.(1) Le Luc was operational on D plus 10 (25 August) and was occupied by two groups of Thunderbolts, who were soon thereafter moved into the Salon - Istres area.

Two tactical reconnaissance squadrons began operating from Ramateulle on 21 August. The two Spitfire Wings embarked on their vain attempt to catch up with the front. By 3 September the airfields at Fréjus, St. Raphael, Le Luc and Ramatuelle were abandoned, leaving only No. 251 R.A.F. Spitfire Wing at Cuers for daylight fighter cover. The Thunderbolts and Lightnings, in the event, did not record having ever been out of range of the fronts. But for ten days carrier-borne aircraft had provided all the close support on short call.

Fighter Cover and Airfields

Fluctuations in the Pattern of Fighter Cover

It has been indicated at several points that the plan in Operation Dragoon was pessimistic and how, in the event, owing to the success of air bombing and artillery bombardment in neutralising the defences, to the success of our deception measures and the rapid exploitation of the situation by Seventh Army, progress outstripped the plan.

This situation bore on the fighter and fighter-bomber programmes for the end of D Day onwards and called forth a succession of rapid changes in schedules, missions, areas of operations and employment of aircraft. These changes flowed into and overlapped one another, and, with a situation characterised throughout by surprising and rapid development, it is not always possible or indeed to the point to pinpoint the actual moments of change. The fighter cover programme evolved on the following lines and the escort carrier contribution must be seen as therein merged into a whole with the Thunderbolt and Spitfire sorties. When comparing the defensive fighter cover record with parallel operations at Salerno nearly a year before, it must never be lost sight of that the ratio of our air superiority over the enemy was much higher in Dragoon and the very term 'defensive patrol' in Dragoon did not adequately fit the function. It is more correct to describe the majority of these patrols as 'defensive - offensive'. Even tactical reconnaissance no longer conformed to its traditional meaning.(2)

-
- (1) Presumably on or shortly after D plus 9. In the absence of the O.R.B's of the U.S. Groups, XII T.A.C. and 63rd Fighter Wing, recourse has to be made for reference to the Report on XII A.F. Service Command in Operation Dragoon, issued by H.Q. XII A.F. on 15 May, 1945.
 - (2) H.M.S. Hunter and Stalker provided aircraft for two types of Tac/R, viz. 'with bombs' and 'plus straffing'.

M.A.T.A.F. Report on
Dragoon

251, 322 and 324 R.A.F.
Spitfire Wings O.R.Bs.

64th Fighter Wing
Report on Dragoon

Fighter patrols were controlled in practice by F.D.T.13⁽¹⁾ until 22 August. Cover was augmented from D to D Plus 4 by carrier-borne aircraft. Only the D Day flying programme was adhered to. Until D plus 2 Day, the majority of low-cover patrols, and many of the medium cover patrols, came into the area half an hour before patrol time loaded with bombs and were directed by controllers either to their briefed targets or a new assignment. The rapid advance soon put targets beyond range of many of these combined fighter patrol/fighter bomber missions.⁽²⁾

With the rapid advance of the Americans, patrol lines were moved inland on 19 August. Aircraft from the two British carriers in Task Group 88.2 carried out no beach cover operations, after 18 August and the five British carriers in Group 1 carried out none after 19 August.⁽³⁾ The Spitfire Wings continued patrolling, escorting and sweeping, but did not participate in the altered patrol as intended to any great extent owing to questions of range. All three Spitfire wings, however, continued to function in various roles, including reduced coastal cover, until either disbanded or transferred.

Fighter Cover on D Day

Ibid

Fighter aircraft of XII Tactical Air Command began reporting to F.D.T.13 for air defence of the area at 0550 hours. The first patrol consisted of twelve Lightnings and eight Spitfires, followed at 0615 by sixteen Thunderbolts. Later in the day Hellcats and Wildcats from the Carrier Force reported⁽⁴⁾ for patrols. The Thunderbolts and Lightnings carried bombs and attacked previously assigned targets before beginning patrols. Over five hundred sorties were flown on day fighter cover over the beaches.⁽⁵⁾

- (1) A British-manned, converted LST with mixed U.S. and British equipment. FDT = Fighter Direction Tender. Its period of control lasted, with a few minor exceptions, from 0550 hours on D Day until 1200 hours on D plus 7, when control of fighter patrols was turned over to the 64th Fighter Wing SOR, and U.S.S. Catoctin, whose equipment was undamaged by the air attack, ceased to be a stand-by.
- (2) It will be seen in Chapter 6 how often and how speedily Spitfire Wings 322 and 324 found themselves out of battle area range.
- (3) Beach cover statistics for Task Group 88.1 were

Aug. 15	32 sorties	40 hours.	
" 16	30 "	40 "	
" 17	30 "	40 "	
" 18	16 "	21 "	
" 19	8 "	12 "	
<u>For H.M.S. Hunter</u>			
Aug. 16	16 sorties		
" 17	24 "		
" 18	8 "		
<u>For H.M.S. Stalker</u>			
Aug. 17	6 sorties		
" 18	8 "		

Statistics for U.S. carriers not available.
- (4) Refer to D Day Flying Programme - Appendix No. 7.
- (5) Refer to Map 3.

Air Control after D Day

Ibid

On 16 August, the Forward Fighter Control of XII Tactical Air Command, which was dropped into France with the First Airborne Task Force, reported itself operational. On 19 August, it set up offensive control of fighter bomber and tactical reconnaissance operations at the H.Q. of XII Tactical Air Command. On 22 August, air raid warning control was assumed by Sector Operations Room of 64th Fighter Wing near St. Tropez. 64th Fighter Wing controlled day and night fighter defence but could delegate control of certain patrols to G.C.I. installations at both ship and shore stations. With this transfer of responsibility ashore and a definite termination of the assault phase, the All Clear (condition White) was made standard in the beachhead area, replacing Yellow Alert (enemy air attacks may be expected) which had been in force to that point. There were now four night fighters on continuous patrol.

By 24 August, the normal beachhead cover was by four aircraft, with four more aircraft on call during daylight hours, with eight aircraft airborne for first and last light patrols. By 28 August, beach area cover had reached its minimum, with the surrender of Toulon and Marseilles a fact. The only fighter patrols were those by No. 251 R.A.F. Wing at Cuers. F.D.T.13 moved along towards Port Bouc to control aircraft in the Marseilles area on 28 August and was released on 1 September. On this date it could be stated that all seaborne air controls had been released and there were full facilities ashore for day and night fighter direction.

Airfields in S. FranceFirst Airfields operational

XII Air Force Service
Command in Dragoon
H.Q. XII A.F.
M.A.T.A.F. O.R.B.
Appx. D/SASO/13

Report on Dragoon
M.A.T.A.F.

After a day's delay in landing on Alpha and Delta beaches, two companies of engineers⁽¹⁾ began work on Ramatuelle. The first emergency aircraft landed on 18 August; the airfield was operational on 19 August and was occupied the next day,⁽²⁾ aircraft operating from the compacted surface of what had been a flourishing vineyard. On 21 August, the reconnaissance effort inland acquired greater range when No. 225 (R.A.F.) and II/33 (French Air Force) Squadrons moved on to this airfield. The delay at Camel beach was one of two days. At Fréjus, a crash strip was completed on 18 August and the airfield was operational by 22 August.⁽³⁾ It was 19 August before work began on St. Raphael and 27 August before it was operational. (A crash strip was, however, functioning on 18 August). On 22 August, the Sector Operations of 64th Fighter Wing was set up near St. Tropez to control air raid warnings. By then, ten coastal radar stations were operating. The assault phase ended.

Airfield Construction after the Assault Phase

Ibid

The unexpectedly rapid advance of the Army both helped and handicapped the airfield engineers. Reconnaissance of many of the airfields already discussed as possibilities proved disappointing; none of these fields were suitable for all-weather construction. Engineers, following the Seventh

-
- (1) 809th Engineer Aviation Battalion.
 - (2) By No. 324 Spitfire Wing (R.A.F.), cub spotting and mine-spotting aircraft.
 - (3) No. 322 Spitfire (R.A.F.) Wing moved to Fréjus on 23 August.

Army, went by makeshift methods, short of petrol, transport and food, north to Sisteron, where an old enemy airfield was improved for fighters and by 24 August was housing No. 324 (R.A.F.) Wing. The same units moved westward towards Valence, awaiting its capture to begin rehabilitation of La Trésorerie airfield. Others followed the French towards Marseilles, thence northward along the Rhone Valley.

The first airfields built - those at Ramatuelle, St. Raphael and Fréjus-were new; those that followed were old enemy fields adapted to our requirements. In quick succession, from 25 August onwards, Le Luc, Cuers, Istres/Le Tube, Salon, La Jasse and Le Vallon were completed. By D plus 15, there were seven dry weather airfields and three semi-all weather fields ready. From 15 August to 5 September, considerable Allied units moved into S. France, including elements of the British formations named in the footnote.(1)

German Air Force Reactions to the Assault

Weak opposition

M.A.A.F. O.R.B.

MATAF Report on Dragoon

N.A.A.F. Air Intelligence Summaries
Report on Dragoon by N.C.W.T.F.

The Allied assumptions of weak air opposition proved well-founded. The German Air Force fought in desultory, unco-ordinated fashion for four days, then dispersed, leaving its forces sealed up in Toulon and Marseilles to their fate, the Nineteenth Army without close support, abandoning or destroying great quantities of fuel and equipment for lack of transport.

The Allies neglected no precautions to render what offensive operations were adjudged possible non-effective. Attacks on Bergamo on 9 August had crippled the Ju.88 reconnaissance force, leaving the Ju.188s to carry out most of this work. Nevertheless, on 12 August, a F.W.190 by day and Ju.'88 equipped with A.S.V. at night flew over Ajaccio and were believed to have taken photographs of our shipping.

From D Day to D plus 3 Day, German fighter opposition remained feeble. The long range bomber force, strengthened by tired crews and almost unserviceable aircraft from the forces fighting over Normandy, planned to cripple our seaborne forces, but most of them never reached their objectives. They were forestalled in their moves back by the pre-invasion raids on their bases already reported. On D Day, the Eighth Air Force from England attacked Dijon, Lyons and Dole airfields and rendered them temporarily unserviceable. Other subsequent raids increased the mounting confusion.

Enemy Fighter and Bomber Operations on D Day

Ibid

On the night before the landings a single aircraft made as if to attack our shipping, but broke off. During D Day, a maximum of thirty fighters were airborne. Only four F.W.190s were seen, but no contact was made. Our fighters ran into a formation of seventeen Me.109s from Aix/Les Milles and Avignon/Chateau Blanc, engaged them and destroyed three without loss.

(1) Army Air Formation Signals, Stores, Maintenance, Radar Stations, Air/Sea Rescue, Embarkation, Field Intelligence, 202 Group H.Q., Field Hospital, Transit Centres, R.A.F. Regiment (2788 Field Squadron), Police, 12 Fighter Squadrons and 1 Squadron Detachment, 5 Wing H.Qs., Repair and Salvage, and Signals.

At dusk on D Day, a few Ju.88s attacked our shipping without achieving anything. A small force of Do.217s had more luck. At 2043 hours they approached the Camel beach area and dropped glider-bombs near U.S.S. Bayfield. One hit and destroyed an L.S.T. (1) The German control aircraft skilfully operated over the land, thus keeping the L.S.T. between it and our jamming ships and compelling them to attempt taking over control of a glider bomb approaching head on - the most difficult angle for control. This new German technique foiled no less than twenty-two of our jamming ships: this was the first occasion of its kind recorded - an important point to remember in view of the fact that to some extent we had written off the glider bomb as not a really serious menace.

Enemy Fighter and Bomber Operations D plus 1 to D plus 3

Ibid

With the arrival at Orange on 16 August of the thirty Me.109s from N. Italy, the fighter effort was stepped up to thirty-eight sorties. A greater effort might have been made but for a small attack by our own fighters on Orange. Bomber operations began at dusk, involving nineteen Ju.88s and seven Do.217s. Thirteen reconnaissance aircraft were operating. At dusk a glider-bomb near-missed U.S.S. C. F. Hughes. At 2050 hours, five Ju.88s escorted by four Me.109s approached St. Tropez port. Their bombs were accurately placed in our concentrations, killing fourteen and wounding thirty-six. Two Do.217s were shot down.

On the 17th the effort was maintained in spite of losses and fatigue, lack of flare-dropping, fuel shortages and cut communications. About thirty Me.109s were active during the day. At 1900 hours two Me.109s reconnoitred Alpha area, losing one to A.A. Bomb operations opened at dusk. Another glider bomb near-missed U.S.S. C. F. Hughes. At 2040 hours six Ju.88s bombed the stretch of ground between St. Raphael and St. Maxime without inflicting damage. At 2138 a Ju.88 flying low over our ships was shot down by the A.A. fire of U.S.S. Champlin. The same day Allied aircraft bombed Valence airfield, destroying according to photographs, several Ju.88s.

18 August was the last day but one of the futile air opposition. The handful of fighters left no impression on the general position. In the dusk period the bombers made their last serious effort. Ten/fifteen torpedo Ju.88s, ten bomber Ju.88s and five Do.217s were airborne, but only a few of them reached their targets, with some success. The first formation of some five Ju.88s flew over Camel 264 beach and the Delta beaches. One straddled the Fighter Director Ship U.S.S. Catoctin with anti-personnel bombs, killing six and wounding forty-two. It was fortunate that at this point U.S.S. Catoctin was completing the handing over of control by its Joint Operations Room of fighter-bomber and tactical reconnaissance aircraft to a XII Tactical Air Command unit ashore. Another Ju.88 fired a torpedo at a fighter director craft (2) in the Delta area, which exploded 250 yards short. The following night U.S.S. Brooklyn tracked two groups of low-flying aircraft searching the area for about an hour, but at no time did these come within ten miles range of our night fighters. Just before this a single aircraft dropped a string of bombs, without effect, in the inner ship screen.

(1) No. 282.
(2) F.D.T. 13.

There was a feeble effort the next night, when the retreat northwards was already gathering momentum.

The Order to Retreat

OKL Operations
Staff to GHQ
Luftflotte 2
18 Aug. 44
Translation of
Captured German
document
AHB.6/VII/82

The Germans were quick to see the danger of Allied advances in both the North and the South. To avoid losing the greater part of Nineteenth Army, the High Command of the Armed Forces - OKW - decided on a planned withdrawal. First orders went out at 0940 hours on 17 August. All troops and units in Army Group G's area who were west of a line Orleans - Clermont Ferrand - Montpellier not involved in the defence of fortresses, with the exception of Nineteenth Army's fighting troops, were to proceed at once to positions behind a line Seine - Yonne - Bourgogne. The same evening Hitler amplified this order in the form of directives to his commanders and ordered an intermediate line Sens - Dijon - Swiss frontier. General destruction of everything which could not be transported was ordered: 11th Panzer Division was to stay in the Rhone Valley to protect the area against airborne forces and later to act as rearguard to Nineteenth Army; a division in Marseilles and one in Toulon were to hold those fortresses to the last man and the navy would support them until action was no longer possible.

Luftwaffe Role in the Retreat

Ibid

On 18 August Luftflotte 2 received the following version of the directive.

Report on
Dragoon
N.C.W.T.F.

M.A.A.F.
Intelligence
Summaries

'With the exception of those forces remaining in Toulon and Marseilles, Army Group G will break off contact with the enemy and link up with the southern flank of Army Group B following the line Sens - Dijon - Swiss border. Units (LXII Reserve Army Corps) will fall back on the Italian-French Alpine position and will be subordinate to C. in C. South-West, who will immediately take over the defence of the French-Italian Alpine position from the Swiss border as far as the Liguria Sea. When withdrawing, all material which will assist the enemy in his pursuit must be destroyed. Not a single locomotive, bridge, power station or repair shop must fall into enemy hands undamaged. Strong points and defence areas on the southern and western coasts of France will hold out to the last man.'

Luftflotte 3's orders were to support the Army in defence of strong points. All flying units and ground services were to be withdrawn north, leaving Fliegerdivision 2 to its own problems. All Luftwaffe installations were to be destroyed. Anti-aircraft forces in Toulon and Marseilles were to be left there with ample supplies. The rest of the flak forces were to support the Army in its retreat. Both would be closely committed to the ground fighting. Those in the fortresses, in addition to maintaining air defence, were to fight as infantry if necessary. Those retiring were to concentrate everything they had on protecting points of passage. Their main task was to protect the withdrawing forces from Allied air attack. What was left of Fliegerdivision 2 (including H.Q. Flight and II/J.G.77) was to pass back to control of Luftflotte 2, who was to fly them and their guns back to Italy - later. As for the Jagdfuehrer (Fighter Controller) S. France with Fighter Group 200, he was transferred to Metz. Fliegerdivision 2 and the bomber Geschwader K.G.26 moved to Lyons.

The same day the Army settled the fate of those G.A.F. units not actually flying. They were formed into defence

companies. Their motor transport was taken from them, unloaded and handed over to the flak units. Great quantities of stores were abandoned and destroyed. The Army helped itself to all the fuel it could handle from the deserted air force stations. The flying units took all they could carry. The rest was set on fire.

On 20 August, final steps were taken. The three last reconnaissance units were withdrawn from S.W. France, leaving U-boat co-operation in the Bay of Biscay uncovered. The single-engined fighters prepared to move N. and E. of Paris behind the Somme - Marne - Saone line. The long range bombers were ordered to Germany to refit; thereafter it was hoped to send them back to N. Italy. The long-range and tactical reconnaissance forces, who could only muster a solitary se serviceable aircraft apiece, were drafted to N. Italy. Once at Metz, O.C. Fighters S. France with Fighter Geschwader 200 was to come under command of Jagdkorps II, a move indicating the fusion in the mind of the High Command of the Southern and Northern France fronts. By 23 August, the evacuation was virtually complete. Nothing remained of the Luftwaffe in the Dragoon area but fifteen fighters and ten tactical reconnaissance aircraft occasionally observed north of Lyons. The few ground units left in the South barely escaped with their lives. The tension in that area can be judged from a captured order issued on 28 August by the Platz Kommandant of Avignon/East airfield:-

"The coming days - possibly only hours - require that every last man exert himself to the limit. All orders must be executed as quickly as possible. All friction must be avoided.

..... In case of evacuation only the most indispensable personal luggage will be carried. Men will be allowed one knapsack; officers one knapsack and one case.

..... If anyone leaves items of issue behind in order to take along his private property, he will be punished."

The human note in the next paragraph is worth recording. It is a fact that Luftwaffe messes were usually supplied with a generous cellar and although they might have felt natural compunction in igniting precious petrol it would have broken their hearts to leave behind for enemy consumption full bottles of good wine and liqueurs. Hence the clause:-

"Urgent attention is called to the fact that drunkenness not only injures the Luftwaffe's reputation but also, at the present time, endangers our undertaking. If extra liquor rations are now issued, strict moderation is your duty. Drunken personnel may expect the strictest punishment."

CHAPTER 5.

THE CAPTURE OF TOULON AND MARSEILLESAir, Land and Sea Attack on ToulonDefence to the last Cartridge

Histoire de la
1^{re} Armée Française
Gen. de Lattre

Their coastal defences, warning systems and power of tactical command neutralised or broken by the combined weight and shrewdly-timed blows of the three Allied services, the Germans began to recover from the initial shock. The order for general retreat explains the tactical withdrawal of the land and air forces to safer areas, avoiding tactics to prevent encirclement. There were two exceptions - Toulon and Marseilles. The German commander of the forces defending the 'French Riviera' - Vice Admiral Ruhfus, - issued an order to his troops on 12 August calling on them to hold on at any cost whatever happened. On 21 August, he conveyed to them the imperative ruling of the Fuhrer - 'Defend Toulon and Marseilles to the last cartridge'. That order was faithfully carried out by infantry, sappers, pioneers, headquarters secretaries, stores personnel, Todt workers and Hitler Youth. The struggle for Toulon was carried through on terms of the utmost ferocity; three French divisions, a heavy concentration of naval ships and two groups of medium bombers were needed to reduce it.

The Three Phases of the Assault on Toulon

Ibid.

General de Lattre de Tassigny, in his record of the campaign, divides the assault into three phases, namely:

- 20 - 21 August - investment
- 22 - 23 " - dismantling
- 24 - 27 " - definitive reduction

The air forces came into play from 13 to 20 August, concentrating on guns and the big ships lying off St. Mandrier. Thereafter the fighting developed at closer quarters and gains were consolidated by the infantry in the town, fighting often hand-to-hand.

Air Attacks on Toulon Defences

Report on Dragoon
MATAF and Reports by
57th and 42nd Wings

Report by N.C.W.T.F.

Medium Bomber
Operations
H.Q. XII A.F.
15 February, 1945
(A.H.B. II. J. 11/12)

All approaches to Toulon were heavily defended. The Air Forces were concerned with the coastal batteries on St. Mandrier peninsula (which almost encloses the Bay), and the heavy ships. Naval forces bombarded defence points both on the coast and inland on the routes of advance. During the pre-H Hour D Day bombing, medium bombers of 47th and 52nd Wings carried out their share of Operations Nutmeg and Yokum by attacking guns round St. Mandrier on 13 and 14 August. On 13 August, supported by some twenty fighter-bombers, they dropped eighty-five tons of bombs on their primary objectives. Heavy bombers also dropped fifty-six tons on 14 August. The peninsula, which harboured guns of all calibres up to 340 mm, remained an active menace, defying approach from any direction.

From 16 through 20 August, 42nd Wing concentrated on gun positions, (1) flying twenty-three missions. On 18 and 20 August, the total bombing effort of the wing was involved and a considerable proportion of it on other days. In all

(1) Total sorties in these 5 days were 881, with 971 tons of bombs dropped, on gun positions alone.

the sorties⁽¹⁾ on these two days nothing but 1,000 lb and 2,000 lb bombs were dropped. The 57th Wing turned from its interdiction programme to fly two missions⁽²⁾ against guns on 19 August: on 18 August, the 321st Bombardment Group flew a mission of thirty-six sorties, of great interest, against a battleship, a cruiser and a destroyer stationary at their moorings.

Report on
Dragoon by
H.Q. 42nd
Bomb Wing
16 Oct. 44.

Analysis of Air Attacks on Guns at Toulon

Twenty-eight attacks in all were made on coastal defence positions in Toulon harbour by the Marauders of 42nd Wing. Of these, only five were successful in the destruction or damage of guns. Some of the rest were indirectly effective in reducing battery serviceability. Just as in Italy lack of aircraft had led to a concentration on, and advances in flak technique, so here in Southern France the bombers had to face the fire of up to seventy-six heavy A.A. guns within firing range. Their intense and accurate shooting rendered operations highly dangerous and greatly affected the bombing accuracy⁽³⁾ on such pinpoint targets as gun emplacements. Of three hundred attacking aircraft, eight were lost and one hundred and twenty-five damaged by flak. The best method of attack was found to be for two or more groups to join in a co-ordinated attack, so as to split the defences.

The main air targets were three batteries of 340 mm guns in battleship type turrets and a number of medium guns comparable to the American six-pounder. The attacks on the heavy guns were in the nature of things a very serious problem. Failure might involve unpredictable difficulties for the Allied forces. Two plans of attack were implemented. The first, involving the use of 2,000 pound bombs,⁽⁴⁾ was intended to penetrate deep alongside the casemates, rupturing the casemate and then jamming the turret base so as to lock it and put it out of action. This plan failed in its execution. The second plan was to drop 1,000 lb bombs with instantaneous fusing, which were to knock out the guns by blast pressure or fragmentation. It was successful. Ten missions were flown⁽⁵⁾ between 13 to 20 August. The decisive attacks seem to have been the last. Ground inspection by ordnance units after their capture revealed that two of the three had been put out of action, one by blast pressure following a direct hit, the other by fragmentation from a near miss. The 1,000 lb bombs were also successful in putting out smaller guns in the vicinity.

Surprise was registered at the extent of the sites - veritable fortresses - dug to a depth of two hundred feet below each gun, with well reinforced passages and rooms. There were living quarters under each gun for four hundred men, with very large stores of shells, powder, power generators, conveying and hoisting mechanisms and so forth.

-
- (1) 243 sorties: 478.5 tons of bombs dropped.
 - (2) 25 sorties: 81.5 " " " "
 - (3) The wing estimate of accuracy was 26.40 per cent.
 - (4) With delay fusing.
 - (5) By 133 aircraft carrying 155 G.P. bombs.

The French Battleship Strasbourg⁽¹⁾ and the Cruiser
La Galissonière

Reports by
M.A.T.A.F.
and
N.C.W.T.F.

The battleship Strasbourg was commissioned in the French Navy in 1936 and remained in service until scuttled in Toulon harbour in November 1942. During the summer of 1944, the ship was repaired sufficiently to float and towed to Saint Mandrier, in Toulon harbour. She was a 26,500 ton ship. Lying close to the Strasbourg was La Galissonière, a 9,120 ton cruiser.⁽²⁾

The Navy represented to the Air Forces that the guns of these ships were being used in support of the shore batteries and as anti-aircraft defences and asked for air attacks on them. Investigations after the event appear to point to the fact that they were not active. In the Ordnance section of Tactical Air Force's Report on Dragoon, it is stated that the Strasbourg was not manned and French officers are quoted as saying that the ship had been repaired only to a point sufficient to enable it to be floated from one part of the harbour to another.

The Air Attacks on the Ships

Report by
57th Bombard-
ment Wing
16 Sept. 44.

On 18 August, two waves of eighteen Mitchells each⁽³⁾ attacked in trail in the face of heavy, intense and accurate flak. Eight direct hits were scored on the Strasbourg; it was left listing and eventually sank. The cruiser La Galissonière and a submarine were sunk to such an extent that bomb evaluation was impossible.

None of the direct hits on the Strasbourg caused the sinking. The apparent cause was a near miss opening the hull near the water line. Above-water damage was serious enough, if the ship had been at sea, to have put her out of commission for extensive repairs and inflicted heavy personnel casualties. It was decided after study of the target that both types of 1,000 pound bomb could do serious non-sinking damage if they hit a ship of this class. If it were hoped to sink it with a direct hit and put its main guns out of action, nothing less than a 1,600 lb A.P. bomb would suffice. A close near miss by a 1,000 lb bomb was more likely to sink it than a direct hit by one of the same calibre.

- (1) Janes' Fighting Ships (1942 edition) gives the following details:-

Overall length	- 702 feet.	Beam	- 101 $\frac{3}{4}$ feet
Draught	- 28 feet	Complement	- 1,431 men.
Guns	8 13 inch		
	16 5.1 inch		
	4 47 mm		
	8 37 mm		
	32 13 mm		

Armour protection included 14 inch turrets and was 9 - 11 inches at the water line: protective decks were 5 inch upper and 2 inch lower.

- (2) Built in 1935. Length - 580 feet Beam - 57 feet
Draught - 17 $\frac{1}{2}$ feet (max)
Guns: 9 - 6 inch, 8 - 3.5 A.A. 8 - 12 mm A.A.
- (3) They dropped 50% 1,000 lb G.P. bombs fused one-tenth second nose delay and .01 second delay tail fusing, and 50% 1,000 lb S.A.P. bombs fused for .01 second delay.

The French Attack on Toulon

Histoire de la
1^{re} Armée Française.
Gen. de Lattre

Reports by
N.C.W.T.F. and
M.A.T.A.F.

A brief account of the French ground operations leading to the capture of Toulon must be sketched in to provide the background of events against which the air operations played their belated, but in a way valuable role. The air plan had not provided for the reduction of the defences of Toulon and Marseilles prior to D Day; even after D Day, these tasks, among the most formidable in the campaign, were left in the main to infantry, artillery and the heavy ships.

The main French forces landed on 16 August. Speaking of the strange assembly and the emotion animating them all, General de Lattre says:-

"The Free French on S.S. Sobieski were reaching the goal of which they had dreamed since 1940. Around the survivors from Norway and the marine fusiliers from London were all those who had joined them from all the quarters of the globe - negroes from French Africa, Somalis, Caledonians, Tahitians, Antillais, Indo-Chinese, Pondicherians, Syrians and Lebanese, Algerians, Moors, Tunisians, Legionaries, veterans of Massowa, Bir-Hakeim, El Alamein and Zaghuan, soldiers of Koenig, Legentilhomme, Cazaux, Larminat, come to add new glories to those of the Garigliano, the Liri and Lake Bolsena - all regarding the horizon with the same eagerness for a sight of that France for love of whom they had borne under so many skies the cross of Lorraine."

They sang the 'Marseillaise' more poignantly than it had ever been sung before. Then they landed in St. Tropez Bay. Very early on, several enemy aircraft pierced the A.A. screen and bombed the troops, killing and wounding eighty men of the 3rd Division of Algerian Infantry. The General Commanding joined up with General Patch, commanding Seventh Army, and dispositions were taken for the advance towards Toulon.

General de Lattre made the audacious decision, although outnumbered by roughly two to one, to launch his forces at once against the dense and heavy German defences, relying on the élan of his troops and an assured build-up behind him to profit by the confusion of the hour. The plan he executed was, in his words, 'to seize the enemy by the throat at the perimeter and, while the abscess grew at this point, attack him at the weakest spot in his flank, at the same time encircling him.'

They took in succession Hyères, (the advance bastion), the observation post of Coudon to the east, Faron to the north and all perimeter defences. The investment, the reduction of these defences lasted over 20/21 August and merged into the phase of reducing piecemeal the outer forts of the city, among which figured the Poudrière. As the fighting for this great stronghold intensified, German coastal batteries played fire on the attackers. By the time it was reduced, the scene of carnage and destruction was reminiscent of the tragic scenes at the Verdun forts of Douaumont and Thiaumont in the First World War. The task continued for two days of violent fighting. The final phase of street fighting lasted until 2345 hours on 27 August, when Admiral Ruffus, treated by the defenders as a fugitive after surrendering La Valette to

French tank units and Senegalese, capitulated.(1)

Reduction and Rehabilitation of Marseilles

The Reduction of Marseilles

Ibid

While the battle for Toulon was at its height, French armoured forces(2) encircled Marseilles and infantry(3) fanned out westwards, reducing piecemeal, as in the case of Toulon, the fanatically defended points of resistance on the perimeter and at the approaches. A general insurrection inside the city aided its gradual reduction. After several days of fighting within the suburbs and the heart of the city, the Germans were driven towards the sea, leaving units to the N.E. defending the massive casemates to the end against Sherman tanks, tank destroyers and heavy artillery. The chief of the German Kommandatur was captured on 25 August at St. Loup.

The Air Forces attacked, day after day, the heavy batteries still functioning on the islands of Pomègues and Ratonneau. Following the co-ordinated attacks of aircraft and ships' guns, the island batteries were silenced, although resistance continued. Minesweepers still waited the opportunity of clearing the approaches and the harbour of Marseilles. The Germans proceeded systematically to demolish cranes, quays and installations and sank ships in the harbour. On 28 August, the German Commander in Marseilles capitulated. The garrisons of Pomègues and Ratonneau refused to surrender to the French; the affair was only closed when American officers were brought into the negotiations.

Medium Bomber Attacks on the Island Batteries of Pomègues and Ratonneau

Medium Bomber
Operations

1 Jan - 28 Aug. 44
H.Q. XII A.F.

Ten separate air attacks were made by Marauders(4) on Ratonneau Island batteries and one on Pomègues batteries. There were six medium coastal defence batteries and some anti-aircraft artillery on Ratonneau, dangerous to ships and aircraft alike. The air operations expounded the growing belief in the efficacy of the near-miss, only a few days before so clearly demonstrated against heavy guns and big ships. Lighter flak defences made greater accuracy possible. The medium-sized 1,000 pound bombs were placed in the immediate vicinity of the positions, so as to blow out or dislodge the guns and its foundation; four out of the six positions were thus destroyed.(5)

Marseilles as an Allied Port

German demolitions and Allied air and artillery bombardment reduced the serviceability of both Toulon and Marseilles to a very low point, of Toulon in particular. The use of

- (1) French casualties in Toulon operations were:-
2,700 killed and wounded. 17,000 enemy prisoners were taken. The booty was very considerable.
- (2) Under command of General du Vigier - 1st Armd Div. (Fr.)
- (3) Under command of General de Monsabert.
- (4) Of 42nd Bombardment Wing.
- (5) Operations

24 Aug.	24 sorties	46.00 tons	Ratonneau
25 "	36 "	72.00 tons	"
27 "	18 "	36.00 "	Pomègues
27 "	60 "	115.00 "	Ratonneau

Address by Gen. Denvers
Gen. Denvers before
a Mtg. of U.S. Mil.
Intell. in Washington
27 May 46.
reported in
'Military Affairs'

Marseilles had been put forward as one of the main objects of Operation Dragoon. With Cherbourg the only port on the Atlantic Coast and English Channel available for build-up, it was clear that work must begin forthwith on clearance, salvage and rehabilitation. The north end of the port of Marseilles was completely blocked by sunken ships. The south end anchorage could be speedily restored for light landing. The inner harbour was sown with mines and large quantities of explosives buried in the port area. Jetties, quays, berth spaces and cranes had all been blasted, then mined and booby-trapped. Of the peace-time 85,000 feet of quays, little was undamaged.

Progress was undoubtedly made, although it is doubtful whether it proved up to expectations. Port de Bouc, a minor port captured with the aid of the maquis, was brought into commission and heavy efforts were put in on Toulon. By D plus 40 statistics could be pointed to in support of the claim that real progress had been made and that substantial quantities of supplies and numbers of personnel were being funnelled through the area to feed the main offensive against Germany. (1)

(1) By 25 Sept. unloadings were:-

At Marseilles	50,569 personnel 6,711 vehicles 99,171 tons dry cargo 10,000 barrels wet cargo
At Toulon	5,085 personnel 2,628 vehicles 24,252 tons dry cargo 76,130 barrels wet cargo
At Port Bouc	30,795 tons dry cargo 239,600 barrels wet cargo

By 23 September, over beaches and through ports, the following were the totals passed into France:-

324,069 personnel
68,419 vehicles
490,237 tons dry cargo
325,730 barrels wet cargo

CHAPTER 6

POST-ASSAULT AIR AND GROUND OPERATIONSOperations of the British Spitfire Wings in S. France

No.135 Air Stores
Park O.R.B's
Aug./Oct.44

No.202 Admin. Gp.
'Activities of 202 Gp.
and R.A.F., units in
S. France.
8 Nov.44 (A.H.B.II
J1/319/1/1)

Nos.322 and 324
R.A.F. Spitfire
Wings O.R.B's
Aug./Oct.44.

Organisation

It will be recalled that at a late stage in planning it was decided to set up a special administrative group - No.202 - to cover the needs of the three R.A.F. Spitfire wings - Nos.251, 322 and 324 - participating in Dragoon, as well as of some U.S. Beaufighter and other units.

No.324 Wing had no time to refit. Their M/T was in very poor condition. Nos.251 and 322 Wings were in better shape, as they had been built up with new transport and equipment in Italy and the Middle East. All three wings had been operating heavily and many of their aircraft were ageing. The Spitfire itself was becoming obsolescent. The formation of a reserve aircraft pool was left too late. There were not enough reinforcement aircraft for the task. Even at that late date some of the British had not grasped the elementary truth that an air force flies on its administration. Further proof of this was soon forthcoming.

Once in France, the operations of the wings became subject to some influences already inherent in the situation and to new ones arising out of unforeseen developments in the battle. Their movements became erratic and they were unable to achieve all that had been hoped. Their operations up to the time of their withdrawal will be shortly recorded; thereafter, air support in the battle of Montelimar will be described.

No.202 Group was established rather late and insufficient speed applied in building it up to strength. It did not actually form until the battle was on and it was ashore in France. For a long period, its H.Q. had to operate with about one-third of its essential personnel. Supplies came the hard, slow way, by L.S.T. sea service.

The indecision regarding Anvil, the late decision to launch it and above all the omission from Allied plans of any guidance on the action to be taken if the pre-assault operations, the strategic deception and the impetus of the landing all led to a rapid Allied advance, all these tended to create such a situation as confronted the Spitfire wings and their administrative group.

Pre-Assault R.A.F. Spitfire Operations from Corsica

Ibid

No.251 Wing began operations from a satisfactory strip at Calvi, Nos.322 and 324 from poor strips at Calenzana and St. Catherine. During the greater part of the first half of August, their activities were mostly divided between defensive sweeps off Corsica and offensive reconnaissance along the coast of France. From 10 to 13 August, all three squadrons were mobilised in the attack on enemy radar stations. This work, carried out at great risk, with small losses and satisfactory results, left only small forces available for escort and weather reconnaissance.(1)

- (1) From D plus 1 through D plus 5, fighters of all types flew 2,995 sorties on escort, patrol, photographic, tactical and weather reconnaissance; they reached a peak for the operation on D plus 2 with a total of 673 sorties.

Ibid

Post-Assault Operations

During the first three days of the assault, the average daily sorties for each wing were round the one hundred mark and their beach patrols gave the kind of reassurance to the troops landing so precious at such times. Operations were conducted at high pressure, but all calls for sweeps by 87th Fighter Wing were met, except on two occasions, when there were only six to seven aircraft per squadron serviceable.

Within a few days after the assault, the three wings flew to new bases in S. France - No.322 to Fréjus, No.324 to Ramatuelle and No.251 to Cuers. No.251 was to transfer to Coastal Air Force. It stayed at Cuers, carrying out limited shipping duties for a few days, but as the transfer was slow evolving, and the other two wings moved progressively northwards to keep within range of the front, the administrative machine was strained almost to breaking point. There were few landlines and radio was bad. There was no despatch rider section, so R.A.F. Police were used in this role to improve on the 'personal visit by officers' system, the only communications possible to that point.

Gradually the two remaining wings extended their efforts away from the beaches and towards the front. On 19 August, No.322 Wing dispatched fourteen Spitfires as escort to bombers in the battle area. No.324 Wing took over an ex-French airfield at Thèze, seven miles N. of Sisteron. Both were soon out of range of the front.

The move of No.324 Wing to Thèze coincided with urgent appeals from Seventh Army for close support; it carried out a series of armed reconnaissances and offensive sweeps behind the enemy lines. On 1 and 2 September, results were meagre. The next day heavy rain storms rendered their strip unserviceable. On 4 September, following a sighting by No.72 Squadron of enemy M/T concentrations, all squadrons co-operated to destroy or damage some eighty vehicles between Macon and Chalons. On 7 September, aircraft moved up to a strip just repaired at Lyon/Bron by U.S. air force engineers and for the first time since the wing left Ramatuelle, direct telephonic communication with XII Tactical Air Command was laid on. They were joined by No.339 Wing of the French Air Force. In spite of the elaborate succeeding adjustments, all squadrons continued their attacks on enemy transport and many vehicles were hit. Further reconnaissance northwards indicated Besançon as the next base, but rain bogged the field; plans were being made to move to Luxeuil when the wing was stood down and recalled to Lyon. By 8 October, the entire wing was back in Florence.

By the time No.322 Wing reached Montelimar, the Army was out of range. In any case, these aircraft were grounded 'on account of difficulty in fuel supplies'. On 14 September they learnt from the Deputy Air C.-in-C. that they were to be disbanded. By 6 November this process was completed, the end to a very distinguished record.

Meeting of Air Group Commanders

Ibid

The ground situation in which the Spitfire wings might, if circumstances had proved favourable, have co-operated was explained by the Commanding General of XII Tactical Air Command to a meeting of Group Commanders. The enemy was doing his utmost to withdraw his forces through the Belfort Gap. The Seventh Army's plan was to prevent this by surrounding him in

sections. If only the Air Forces could be kept forward and in contact with the enemy, they could stop his movements as well as prevent him holding the Seventh Army in check before the frontier was reached. It will be seen in the following few pages how serious an influence the intervention of the 11th Panzer Division was having on the previously smooth American advance. The Army needed all its transport. Within 48 hours of General Saville's appeal, three hundred and forty load-carrying vehicles of the R.A.F. were hauling supplies for the Air Corps as a whole. The order for withdrawal of all three wings thus nipped a promising process of build-up in the bud. With great difficulty they withdrew, in spite of Seventh Army protests and incessantly spurred on by calls from remote H.Q.s. in Italy, out of touch with the situation in which the two wings were so deeply involved. Without spares or repair facilities, all units concerned were brought south and transported with all equipment that could be salvaged in the limited shipping lifts put at their disposal.

Allied Air Supply and the Breakdown of the Road Transport Plan

General Road Transport Crisis Origins

MATAF ORD
App. D/SASO/13
XII A.F.S.C.

MATAF Report on
Dragoon
(Administration)

Narrative of the
Activities of
202 Group and R.A.F.
Units in S. France.
(AHB.II.J.1/146/14)

The narrative of Operation Dragoon has been intentionally selective, concentrating on those features wherein it emerged from the common phases of routine and omitting irrelevant points wherefrom no lessons are to be learned. The whole record of the air force operations until XII Tactical Air Command was absorbed into the forces on the Western Front cannot possibly be given here even in condensed form, but mention must be made of the outstanding achievements of the air forces in overcoming a breakdown in the road supply system unforeseen in the plans.

The difficulties which beset the administration group feeding the three R.A.F. Spitfire Wing have been touched on. Their problems were only part of a much more extensive crisis affecting the Seventh Army, XII Tactical Air Command and the Navy. In general, the major cause of this was that although the planning of phases, the details of loading, priorities, movements and other administrative work were a model as a staff exercise, although the specific physical tasks involved were carried out with prompt and normal efficiency and although the air units involved exercised great ingenuity and considerable qualities of endurance, the outline plan was too rigid and pessimistic, it did not match up to the event; in other words it was not flexible, it did not allow for the situation which must be thrown up by a rapid success, and sundry material ingredients were on that account missing.

Not all the planners lacked foresight, however, and note must be taken, before proceeding to the record of how the air services overcame the road problem, of a proposal in the planning phase for the early landing of a truck battalion. This was put forward by XII Air Force Service Command, but was turned down.

Opening of Transport Crisis on the Beaches

Ibid

The Beach Control units⁽¹⁾ were late in getting off-loaded and it was four days before they were sufficiently established ashore to handle their task. This delay, due to

(1) Air Force representative Major C. H. C. Ramsey.

faulty on-loading, led to a great deal of confusion in clearing units and in locating Air Force supplies on the beaches. Some 100 octane petrol and several hundred thousand rounds of .50 ammunition were wrongly directed⁽¹⁾ to Army dumps and much of the ammunition lost to the Air Forces. This caused a minor crisis, only relieved by air supply. There were not enough trucks to move supplies quickly enough to forward air strips and fields to build up the units in time or to maintain them in range of the advancing front. To counter this, critically needed 80 octane was flown in. Organisational vehicles of all units, British, French and U.S., were pooled. Light bombardment aircraft were withheld from operations and used to transfer supplies urgently needed by fighter-bombers.

Major Responsibilities assumed by XII Air Force Service Command on the Beaches

Ibid

Army transport had been scheduled to co-operate in the clearance of beaches. Shortages prevented this and the situation was mostly handled by air force transport. D.U.K.W.S. delivered some petrol direct to St. Raphael airfield. Owing to the rapid advance, the Army ate into the beach petrol dumps and some of the Air Force supply was 'lost'. Air supply from Italy brought in 53,000 gallons in the next few days to fill the gap partially.

When it was known on 24 August that Thèze (or Sisteron No.1) airfield was available for a Spitfire Wing, trucks from the beaches and Dakota aircraft from Italy laid down the initial stocks of fuel. Air evacuation aircraft on their forward flights brought in critical and maintenance items.⁽²⁾

When Seventh Army broke through to the Rhone Valley, the main Luftwaffe bases in the Istres and Salon area were captured. Air Base Areas were established, effective from 25 August. Supplies were trucked out of beach dumps to rail heads and airfields, thence moved on by rail and air. Truck convoys operated 24 hours a day. Port Bouc was opened and used extensively for Air Force supplies.

The Opening of Port Bouc

Ibid

XII Air Force Service Command claimed that the opening of Port Bouc and the unloading and handling of cargoes was an Air Force project in its entirety. It stated⁽³⁾ that it made arrangements for the Navy to use Port Bouc, that the Navy assisted in every way and cleared it of mines. The number of ships directed there was based on the weight of cargo carried and which could be handled by Air Service Command. The Army, reported XII Service Command, was aware of its own responsibility, but was unable, because of its commitments to the rapid advance, to render any assistance or furnish any equipment. The Air Forces unloaded certain common usage items such as rations, as well as items peculiar to themselves.

The Naval Commander Western Task Force gave a slightly

-
- (1) Partly owing to identical air/army packing.
 - (2) Over 19 - 27 August the airfields at Fréjus, St. Raphael and Le Luc were stocked with over 300,000 gallons of 100 octane fuel plus 35,000 gallons at Sisteron and 36,000 gallons at Cuers/Pierre. 10,000 rations were issued. About 70,000 gallons of 80 octane fuel were handled.
 - (3) In the XII A.F.S.C. Report on Operation Dragoon.

different version. It was he, he stated, who coordinated the affair with the Commanding General Seventh Army, and on 23 August decided to open the Golfe de Fos, in order to provide entry into Port de Bouc and Etang de Berre. He stated that a company of 335th Engineers, U.S. Army assisted in the opening of the port. The Army, according to him, was reluctant to divert trucks to Port de Bouc when it only had enough to handle cargoes landed at Marseilles.

The Advance North creating acuter Transport Problems

Ibid

The advance of the Army enabled the opening of new airfields at Valence and Montelimar. On 1 September, Air Base Areas were re-defined and the Valence area became Group H.Q. Although Service Command was coping with its problems, all was by no means well. The Allied Air Forces had destroyed too many roads, bridges and road and rolling stock. The air bombing policy was, as has been already noticed, changed to support of the tactical battle and what transport was convertible and salvageable was absorbed. The Army aim was to destroy the German formations before they could withdraw. To do this they needed fighter bombers. These aircraft had, firstly, to be moved on to forward airfields; secondly, those airfields had to be stocked. Vehicles were found to move the combat units in. To achieve the second object, air transport had to be called in to supplement the quite inadequate road transport. It was at this point that the Spitfire Wings pooled their road transport with the XII Air Force Service Command and the combined road force operated from a Base Supply Area just south of Salon; but this was not enough.

Ibid

Heavy and Light Bombers and Transport Aircraft diverted to ease Road Problems

Arrangements were at once made to fly supplies from this Base Supply Area to the forward fields. On D plus 20 (4 September), 64th Troop Carrier Group was moved to France and stationed at Istres. Its Dakotas began to operate forthwith. The number of Air Force units in France increased rapidly; new airfields were brought into commission. When all available transport aircraft were in use, it was decided to divert heavy bombers from their normal tasks to transport duties.

451st, 461st and 484th Bombardment Groups of 49th Bombardment Wing of Fifteenth Air Force, were used to transport supplies from their bases at Foggia to Lyons/Bron airfield. This service lasted until 22 September, when 484th Group was transferred to Istres, thus effecting notable economies.⁽¹⁾ Further, from 10 September, the 47th Bombardment Group of Tactical Bostons was diverted from its light bomber duties, and from its base at La Jasse transported supplies to forward fields. Not only did the Air Forces carry all their own supplies, but assisted the Army⁽²⁾ by the rapid movement to forward areas of badly needed items such as .30 ammunition and mortar shells. By 4 October, reliable railway service was

-
- (1) In the following 10 days this Group transported almost as much as the entire three Groups during the previous 12-day period.
 - (2) Seventh Army and Continental Base Section.

was established and supply of the airfields by air virtually ceased on that date.(1)

The claim of the Air Force supply system was an outstanding one. During the entire period from D Day to D plus 45, every item of supply, including all common usage items required and used by the Air Forces, was received, stored and distributed by Air Force bodies responsible, using air force equipment and personnel only.(2) The only exception was the procurement of a limited quantity of V-80 petrol from the Army dump at Ambérieu.

Close support Operations by XII Tactical Air Command(3) and End of Campaign

Close Support Problems

Report on Dragoon
M.A.T.A.F.

The two medium bomber wings finished their attacks on guns on 27 August and their attacks on communications in France on 28 August. Thereafter, in accordance with the

- (1) The first trains did not leave the Provence Base Supply Area until 20 Sept. 1944. On arrival at destination on 1 October they were unloaded by units of XII A.F.S.C.
- (2) Schedule of types and quantities, in tons, of supplies shipped by air:-

From Italy and Corsica to Southern France

Type		V-80	100 Oct.	Bombs			
<u>Aircraft</u>	<u>Rations</u>	<u>Petrol</u>	<u>Petrol</u>	<u>and</u>	<u>Ammo.</u>	<u>Misc.</u>	<u>Total</u>
B - 24	-	-	1270.5	579.5	269	2119	
C - 47	53	92.5	347.5	98.5	157	748.5	
	53	92.5	1618	678	426	2867.5	

From Base Supply Area in S. France to advance air base areas

Type		V-80	100 Oct.	Bombs	QM. Cl. II		
<u>Aircraft</u>	<u>Rations</u>	<u>Petrol</u>	<u>Petrol</u>	<u>and</u>	<u>(Cloth-</u>	<u>Misc.</u>	<u>Total</u>
A - 20	35	55.5	240.5	-	-	150	481
B - 24	-	-	1246.8	1017.5	-	114.2	2378.5
C - 47	824	497	3087	419.5	186.6	420.5	5434.6
	859	552.5	4574.3	1437	186.6	684.7	8294.1

Total tonnage of supplies transported by air.

Rations	912
V-80 petrol	645
QM Class II (clothing)	186.6
100 Octane petrol	6192.3
Bombs and ammunition	2115
Miscellaneous	1110.7
Total tonnage	11,161.6

In addition, truck transportation conveyed from the beachhead dumps, Port de Bouc and Base Supply Area to the advanced airfields a total tonnage of 18,126 tons.

- (3) O.R.Bs of U.S. and French units not being available, consolidated reports have been drawn on for details and statistics.

History of
M.A.A.F.

plan, operations in the Dragoon area were left exclusively to XII Tactical Air Command.

Comment by
Seventh Army
in mid-November

The Army had insisted in the planning stage on close support being handled at army level. The swift advance soon called for other courses of action. Liaison between Seventh Army and XII Tactical Air Command was inadequate in the initial phase because of distances separating command posts. Neither telephone nor radio communications were sufficient to bridge the gap. The Air Command had to be as near as possible to its bases. The bases became almost hourly out of touch with the Army. The insertion of a wing into the chain of command corrected the situation by allowing XII Tactical Air Command Command Post to follow the Army H.Q. and locate itself adjacent to it.

Task Force Butler⁽¹⁾ and 11th Panzer Division

The 7th U.S. Army
Report of Operations
Vol. I. (2) (printed
in Germany) (Cabinet
Archives)

Address by Gen.
Devers to U.S. Mil.
Intell. 27 May 46
(published by
'Military Affairs'
Vol.X. No.2
Washington - Summer
46.)

General Truscott - commanding U.S. VI Corps - organised Task Force Butler before leaving Italy. It was assembled at Le Muy after the landings and ordered to cross the Durance River near St. Paul or thereabouts, hold the bridges and then drive N. to Grenoble or W. to Montelimar, whichever proved more expedient. Led by the F.F.I., Butler moved up the Durance Valley. Then Truscott took a vital decision and a great risk. He ordered Butler to swing his force westward, seize the high ground N.E. of Montelimar and block the enemy escape route up the Rhone Valley. Two-thirds of the way to Grenoble, Butler blocked all roads leading from N. and E., and turned the rest of his force W. on Montelimar. There he ran full tilt into the 11th Panzer Division. He seized the high ground dominating the eastern section of the Rhone Valley and was thereupon engaged by superior forces. He formed a rough battle square, covered the valley with his artillery and proceeded, with Air Force aid, to fight it out. General Patch sent in reinforcements piecemeal,⁽³⁾ as soon as he realised that a general retreat was under way.

11th Panzer Division left Bordeaux on 15 August with orders to move through the Toulouse - Carcassonne - Narbonne corridor so as to appear in the South of France order of battle. On 15 August, Allied reconnaissance aircraft sighted the division moving eastwards in thirty-three trains. Tactical bombing stranded their movement, compelled detraining and transfer to the Rhone Delta by road transport. They were at once given two missions, first to hold the E. side of the Rhone Delta along Highway 7 against the U.S. 3rd Division; and possible airborne landings; then to escort and cover the retreating German units.

Air Participation in the Battle of Montelimar

Ibid

It is not clear to whom the credit of the original plan to create road blocks is due, but when carried out it called forth the comment from Air Intelligence that it was brilliantly conceived and executed and produced one of the finest air targets ever offered the tactical units of the

- (1) A force comprising 1 Inf. Battalion motorised - 1 cavalry recon sqn, 1 armoured field artillery battalion, 1 tank destroyer company, 2 tank companies and 1 engineer company.
- (2) Published by Aloys Graf, Heidelberg, May 1946 and printed by the Heidelberg Gutenberg Printing Company.
- (3) The British Parachute Brigade had been withdrawn.

command. Air support became a complex affair during the battle of Montelimar, which raged backwards and forwards for several days.

Direct Air Support Problems in a fluid Battle

Ibid

Direct air support as such involved attacks on individual groups of enemy personnel and equipment, bridges, roads and gun positions. Bomb lines, periodically shifted, were overrun by both sides. On 25 August at Bonlieu, German forces suddenly penetrated the American lines. No air support could be called for with friend and foe inextricably mixed. The Commanding General of 36th Division requested an air attack on a column and trucks on the Montelimar road: the reply was that air could not attack the point inside the safety bomb line and if attacks were still wanted, a more permanent bomb line would have to be laid down. The worst problems were concentrated along the stretch of road on Highway 7 between Montelimar and Livron. On one occasion U.S. troops were attempting to erect a road block in and around the village of La Coucourde. Close by, sections of the same road were jammed with enemy troops and transport. The Army called for air support to clear the road of the enemy, but had to be told there was insufficient means of identifying friendly from enemy troops.

The strategic bombing of communications was abandoned. It created too many subsequent obstacles and delays. All forces were directed on to close support and an area was selected for air concentration to avoid a stalemate. The main emphasis was from this point placed on the west bank of the Rhone and the north bank of the Drome. This area was on the west and north sides of the Battle Square. Few U.S. troops were operating here, so the tactical units, supported by carrier-based aircraft, proceeded to bomb the enemy columns on Highway 7 both N. and S. of Montelimar. These attacks and the static resistance of the road blocks led quite naturally to congestion, of which our air crews took full advantage, returning again and again reporting all ammunition spent.

There was a railway running parallel to Highway 7 and a road and railway along the west bank of the Rhone, which were also attacked. So successful was the overall air offensive that it was reported that between 21 and 28 August the number of M/T destroyed or damaged reached a total of one thousand, four hundred and two, and the number of railway cars and locomotives hit reached two hundred and sixty-three and thirty respectively. All this was accomplished under conditions highly adverse to air support. The bomb line restrictions, with elements of Task Force Butler pressing close to Highway 7 north of Montelimar, operated against close support until the battle was decided, but the attack on the enemy was unabated. On 29 August, a very successful fighter-bomber attack was made on a concentration of two hundred and twenty-seven motor transports on the Montelimar - Valence road. All day-to-day air operations were intimately governed by the immediate ground situation, and so purely ad hoc. The battle of Montelimar⁽¹⁾ ended in a disaster for the Germans, whose

(1) Allied casualties to this period from the landings were approximately:

French	Killed, prisoners and missing	1,146
U.S.	" " "	3,000
French	Wounded	4,346
U.S.	"	4,419

retreat regathered its momentum. They left behind them for some twenty miles south of Montelimar along both sides of Highway 7 a chaos of destroyed guns, trucks, motor transport, armoured fighting vehicles, dead men and horses.

End of Dragoon Operations and Junction with Third Army

Ibid

On 3 September, the French entered Lyons and II Corps drove north to contact the right flank of General Patton's Third Army then advancing eastwards. VI Corps swung N.E. in an attempt to close the Belfort Gap and cut off the Germans. On 10 September the French were in Dijon, the Americans of VI Corps in Besançon. Behind Truscott's right wing the French tried to press through towards Belfort and the Swiss border. On 12 September, elements made light contact at several points near Autun and Dijon with Patton's troops; by 14 September, firm contact was established at Chaumont, a junction which sealed the fate of many thousands of German troops thus cut off with their equipment. The main enemy forces, however, escaped the trap. On 14 September, 6th Army Group took over command of the Seventh U.S. Army and French Army B and, shortly after, 6th Army Group was subordinated to S.H.A.E.F. for tactical operations.

The Campaign from the Viewpoint of the German Armed Forces Operations Staff

Evidence from German Sources

Von Schramm's
treatise based
on WEST Reports
and War Diaries
(Cabinet Office
Document
No.M.1.14/831
P5.1793 A.H.B.6
Translation)

To grasp the full import of the operations in depth it is essential to study operations as viewed by the enemy. It is now possible to do this as a result of the work of Von Schramm, the official historian of the Tenth Army, who had access to the reports and war diary of the Armed Forces Operations Staff(1). Extracts from his treatise on this phase will be given in literal translation, so as to preserve the 'cachet' of the original viewpoint.

"The main enemy effort was near St. Tropez. An attempt was made "(by the Germans)" to bring in forces from Marseilles and the west; enemy air superiority, however, delayed these movements, and the fact that the Rhone had to be crossed by ferry slowed things down still more.

On the second day, (16 August) it became clear that an attack was being made from Cannes to Hyères. It is true that the enemy did not succeed in linking up the various beachheads with the paratroops dropped behind the lines; he was, however, able to do this in the course of further fighting. On the other hand, we were able to beat off attacks west of Toulon.(2) At the same time, we were running the risk that the enemy might make an assault in the Gulf of Lyons, still only protected by defence units. As a result of the rapidly deteriorating situation, the Armed Forces Operations Staff submitted proposals for the withdrawal of Nineteenth Army.

On 17 August, the Maures Mountains were already in enemy hands. Since it was to be expected that the enemy would now attempt to force his way into the fortress of Toulon from the landward side, the front there was placed

- (1) Wehrmachtfuehrungsstab.
- (2) In the event none were made.

in a state of defence. The 11th Panzer Division was brought in to hold up the enemy. This unfavourable development was one of the reasons leading to the decision to evacuate Southwestern and Southern France.

On 16 August, (1) the Fuehrer amplified his order of the same date to the effect that Army Group G, except for the forces remaining in Toulon and Marseilles, was to disengage from the enemy and make contact with the southern wing of Army Group B. By fighting on fixed lines of resistance, the withdrawal of all troops in Southwestern France was to be systematically carried out. H.Q. Staff of LXII Corps, with the 148th and 157th Reserve Divisions, under pressure by the enemy, was to fall back to a line in the Franco-Italian Alps. For this movement it was placed under Commander-in-Chief S.W., who was to immediately take over defence of the Alpine positions. The fortresses and defence zones on the west and south coasts were to be held to the last man, Marseilles and Toulon being each garrisoned by one division. The Navy was charged with support of the defence; when this was no longer possible, crews and arms were to be sent in to support the land front.

"On 18 August, orders were amended to the effect that the line Cote d'Or - Lyon - Aix-les-Bains was to be held as long as possible, so that Switzerland remained cut off for the time being. Bordeaux was not to be given up until enemy pressure became too strong, since we were depending on it to prepare more U-boats. Resistance on the southern front was then discontinued and the retreat began.

On 19 August, Toulon was already surrounded and to eastwards there was only one defence line and this was already threatened. According to reports on 20 August, an enemy group was already advancing on Grenoble and two others towards Avignon and Aix-en-Provence. The Maqui movement was growing stronger on the Swiss frontier. The Commander-in-Chief Southwest was therefore directed to keep the mountain passes over the Alps open as far westwards as possible. At the same time the Commander-in-Chief West received orders for the Nineteenth Army that all its units capable of fighting were to be pushed forward towards Dijon, so as to join up with the southern wing of Army Group B. Demolitions were to be carried out to prevent an enemy thrust on the flank through the mountains into Provence and the Dauphiné.

The Commander-in-Chief, Southwest tried, therefore, to reinforce the troops holding the Alpine passes and to secure the roads between them and Grenoble, where a regimental group of the 157th Reserve Division was left. One of the positions in the Aix-les-Bains - Briancon line (Annecy - St. Bernard) proved untenable owing to lack of forces and supply. C.-in-C. Southwest therefore reported, early on 22 August, that if the enemy should thrust through towards the Swiss frontier, he would be unable to prevent him. The next object attempted was to build a barrier across the lower Rhone area, behind which troops still on the coast were to be withdrawn. The 11th Panzer Division was put in to oppose the enemy, who

(1) An error on Von Schramm's part - it was 17 August.

OPERATION ANVIL - DRAGOON

ARMY PROGRESS 28 AUG.-15 SEPT. AND THE JUNCTION OF THIRD AND SEVENTH ARMIES 12 SEPT. 1944

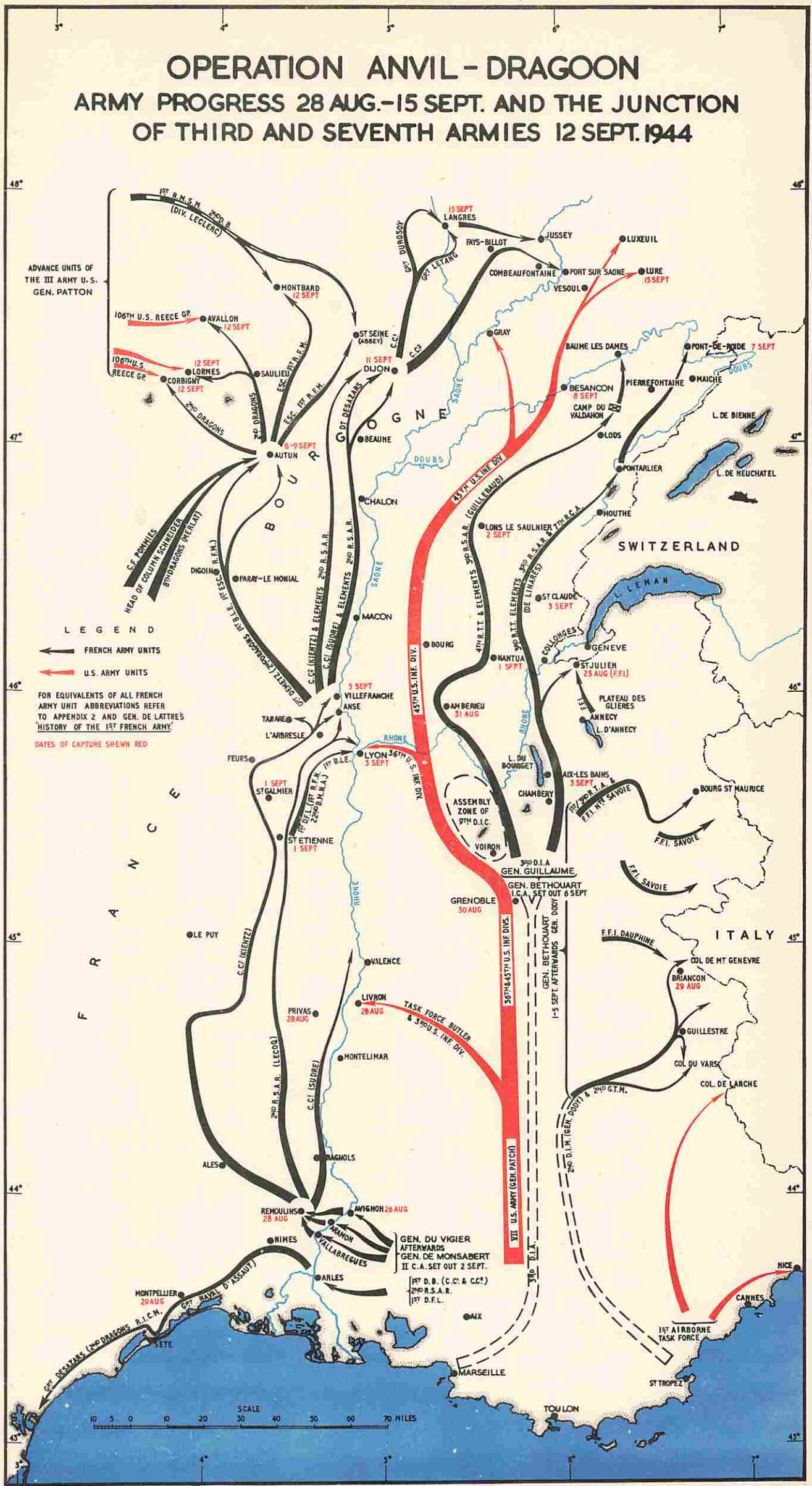
LEGEND

- ← FRENCH ARMY UNITS
- ← U.S. ARMY UNITS

FOR EQUIVALENTS OF ALL FRENCH ARMY UNIT ABBREVIATIONS REFER TO APPENDIX 2 AND GEN. DE LATTRE'S 'HISTORY OF THE 1ST FRENCH ARMY'

DATES OF CAPTURE SHOWN RED

SCALE 0 10 20 30 40 50 60 70 MILES

[illegible]

was threatening to being about a collapse of this barrier by an encircling thrust through the mountains.

On 23 August, Valence was in enemy hands, Grenoble in the hands of the terrorists, against whom a barricade was manned north east of the town. No reports had been received from a regimental group of the 157th Reserve Division engaged south of Grenoble, so air reconnaissance was dispatched. This revealed that the group had been pushed eastwards and cut off from the main body. The road to Grenoble, therefore, lay open, as did the road in the Isère Valley. A combat group of the 90th Panzer Grenadier Division was sent in. It also went into action at the St. Bernard (Pass); the road over Mont Cenis was cleared and the road over Mont Genevre occupied. Another combat group operating from Cuneo cleared the Maddalena Pass.

On 24 August, the 148th Reserve Division, deployed in the Cannes area, withdrew to the River Loup sector. Its further withdrawal to the Alpine position was completed without major difficulty. It stood on 1 September west of Monaco, then took over the southern sector of the Alpine front. On the other hand the 157th Reserve Division had yet to overcome many difficulties, which were mastered by means of further thrusts from the Italian side. We therefore succeeded in completing this movement as planned. Since soon after the taking-up of the Alpine positions a fall of snow made large-scale operations impossible, this part of the retreat of Nineteenth Army was then successfully concluded.

The retreat of the main body of Nineteenth Army was threatened less from in front than from the rear. As the terrorists held the road along the eastern bank of the Rhone under fire, the retreat was made along roads west of the river. The spearhead of the IV Luftwaffe Field Corps, which was to keep the road open, reached Valence on 25 August; enemy tanks were already making their appearance there and south of Lyon. The blocking line held by the 332nd Infantry Division could be moved back.

While the movement of Nineteenth Army was being held up, the situation on the left wing of Army Group B was getting worse and worse. The Armed Forces Staff and the Commander in Chief West repeatedly urged greater haste, but there were definite limits to all their efforts. On 26 August, the garrison of Lyon was hemmed in by the insurgents. However, the head of the IV Luftwaffe Field Corps reached the area to the south of the town on 30 August. The advance "(i.e. retreat)" of the main body was held up because the enemy were covering the Drome crossing with harassing fire at pointblank range. The 11th Panzer Division succeeded in freeing this point. On 30 August, the bulk of the Army had crossed the river. On 4 September, the vanguard entered Army Group G's area. The 338th Infantry Division, who formed the rearguard, were still holding on near Macon. (cf. Battle Report of Army Group G of 19 September, sent in by C.B. West on 21 September, arriving 25 September).

On 22 September, Army Group G reported that 209,000 men had been withdrawn from Southern and South-western France, and that 130,000 men were still there. The missing comprise casualties and the detached units (145th and 157th Reserve Divisions)."

SEXTANT and EUREKA CONFERENCES

November - December 1943

SUMMARY OF CONCLUSIONS REACHED ON BASIC STRATEGY AND POLICIES

I - OVER-ALL OBJECTIVE.

II - OVER-ALL STRATEGIC CONCEPT FOR THE PROSECUTION OF THE WAR.

III - BASIC UNDERTAKINGS IN SUPPORT OF OVER-ALL STRATEGIC CONCEPT.

I - OVER-ALL OBJECTIVE

In conjunction with Russia and other Allies to bring about at the earliest possible date the unconditional surrender of the Axis Powers.

II - OVER-ALL STRATEGIC CONCEPT FOR THE PROSECUTION OF THE WAR

2. In co-operation with Russia and other Allies to bring about at the earliest possible date the unconditional surrender of the Axis in Europe.

3. Simultaneously, in co-operation with other Pacific powers concerned to maintain and extend unrelenting pressure against Japan with the purpose of continually reducing her military power and attaining positions from which her ultimate surrender can be forced. The effect of any such extension on the over-all objective to be given consideration by the Combined Chiefs of Staff before action is taken.

4. Upon the defeat of the Axis in Europe, in co-operation with other Pacific powers and, if possible, with Russia, to direct the full resources of the United States and Great Britain to bring about at the earliest possible date the unconditional surrender of Japan.

III - BASIC UNDERTAKINGS IN SUPPORT OF OVER-ALL STRATEGIC CONCEPT

5. Whatever operations are decided on in support of the over-all strategic concept, the following established undertakings will be a first charge against our resources, subject to review by the Combined Chiefs of Staff in keeping with the changing situation:-

(a) Maintain the security and war-making capacity of the Western Hemisphere and the British Isles.

(b) Support the war-making capacity of our forces in all areas.

(c) Maintain vital overseas lines of communication, with particular emphasis on the defeat of the U-boat menace.

(d) Continue the disruption of Axis sea communications.

(e) Intensify the air offensive against the Axis powers in Europe.

APPENDIX 1 (Contd.)

- (f) Concentrate maximum resources in a selected area as early as practicable for the purpose of conducting a decisive invasion of the Axis citadel.
- (g) Undertake such measures as may be necessary and practicable to aid the war effort of Russia, including the co-ordinated action of our forces.
- (h) Undertake such measures as may be necessary and practicable in order to aid the war effort of China as an effective ally and as a base for operations against Japan.
- (i) Undertake such action to exploit the entry of Turkey into the war as is considered most likely to facilitate or accelerate the attainment of the over-all objective.
- (j) Continue assistance to the French and Italian forces to enable them to fulfil an active role in the war against the Axis powers.
- (k) Prepare to reorient forces from the European theatre to the Pacific and Far East as soon as the German situation allows.

(C.C.S.426/1)

Narrator's Note

In the book "Operation Cicero", published by Wingate in 1950, London and New York, the author, L. C. Moyzisch, a member of the Reich Security Department stationed in Ankara in 1943 and 1944, states (and it is confirmed by Von Papen, then German Ambassador to Turkey, in a postscript) that shortly after these meetings, the complete minutes of the entire conferences at Cairo and Teheran had been photographed by the Albanian valet to the British Ambassador to Turkey, the negatives handed to him, developed and sent to Berlin. Comment is reserved for the time being, but the following admission by the Foreign Secretary on 18 October, 1950 in the House of Commons is of interest (Refer Hansard).

"Inquiry into the occurrences to which Mr. Shepherd" (M.P.) "refers revealed that the Ambassador's valet succeeded in photographing a number of highly secret documents in the Embassy and selling the films to the Germans. He would not have been able to do this if the Ambassador had conformed to regulations governing the custody of secret documents."

OPERATION DRAGOON
OUTLINE OF ARMY ASSAULT PLAN

1. MISSION

- (a) To establish a beachhead East of Toulon as a base for the assault and capture of Toulon.
- (b) Thereafter to capture Marseilles and exploit towards Lyon and Vichy.

2. SCHEME OF MANOEUVRE

- (a) To land the Special Service Force immediately after dark on the night of D minus 1 on the islands of Port Cros and Levant, with the object of neutralising the enemy defences on these islands in order that shipping may enter the Bay of Cavalaire.
- (b) On the evening of D minus 1 an airborne force will drop in the Argens Valley between Le Muy and Carnoules, with the mission of blocking the movement of enemy reserves into the assault area from the northwest, and securing the high ground northwest of the Le Muy - Carnoules Corridor.
- (c) To make a simultaneous daylight assault on D Day on beaches from Cap Cavalaire to Agay, using three U.S. divisions reinforced with a group of French Commandos landing near Cap Nègre. Assault to be preceded by maximum available air and naval bombardment.
- (d) To advance rapidly inland and secure the beachhead on the (Blue) line: Real Martin River - Carnoules - Flassars - Le Thoronet - Trans-en-Provence - Bagnols-en-Forêt - Théoule-sur-Mer.
- (e) To advance westwards and capture Toulon.
- (f) To land a follow-up of certain U.S. and French pre-loaded units.
- (g) To land the remainder of the forces.
- (h) After the capture of Toulon to capture Marseilles and exploit northward towards Lyon and Vichy.

3. PLAN

A. RUGBY FORCE:

(1) Troops:

Airborne Task Force H.Q.
2nd Independent Parachute Brigade (British)
509th Parachute Battalion (U.S.)
517th Parachute Regimental Combat Team (U.S.)
1st Battn., 551st Parachute Regiment (U.S.)
550th Glider Infantry Battalion (U.S.)

(2) Missions:

- (a) Prior to H hour parachute forces will drop in the following areas: Le Muy, Le Luc,

APPENDIX 2 (Contd.)

Carnoules. To block all roads in the above areas, preventing enemy reinforcements from moving into the assault area. To hold the high ground northwest of the Le Muy-Carnoules Corridor until passed through by the element of the VI (U.S.) Corps.

(b) Glider borne units to reinforce these forces as directed by the Airborne Force Commander.

(c) Rugby Force to come under VI (U.S.) Corps control when contacted, and to revert to Army reserves on Army order.

B. SITKA FORCE

(1) Troops:

Approximately 1200 amphibious trained personnel of the Special Service Force, transported in four A.P.D's, using rubber or plastic boats.

(2) Missions:

To land on the Islands of Port Cros and Levant on the night of D minus 1.

To neutralise all enemy defences on the Islands prior to H Hour. To be prepared to withdraw to the mainland, and subsequently to capture the Island of Porquerolles.

C. KODAK FORCE

(1) Troops:

H.Q. VI (U.S.) Corps
3rd U.S. Infantry Division
45th U.S. " "
36th U.S. " "
Armoured Combat Command (1st French Armoured Division)

French Groupe de Commandos

Supporting Troops:

Rugby (Airborne) Force to come under Corps control when contacted.

(2) Missions:

(a) To protect the left flank of the assault by a French Commando landing near Cap Nègre.

(b) To land the following at H Hour:

Camel Force; One Inf. Div.
(reinforced):

To land in the Golfe de Fréjus area.

Delta Force; One Inf. Div.
(reinforced):

To land in the St. Tropez-St. Maxime area.

Alpha Force: One Inf. Div.
(reinforced):

To land in the Cavalaire Bay area.

- (c) To seize Le Muy with a mobile striking force on D Day.
- (d) To advance rapidly inland, contacting the Rugby (Airborne) force in the Le Muy - Le Luc-Carnoules area.
- (e) To land the Armoured Combat Command (1st French Armoured Div.) in the Fréjus area, starting as soon as beaches are cleared.
- (f) To extend the beachhead and outpost the high ground north of St. Raphael and Fréjus with sufficient forces to secure the airfield sites in the Argens Valley, between Fréjus and Le Muy, and protect the right flank of the assault.
- (g) Thereafter to advance to the northwest maintaining contact with II French Corps on the left after the latter is established ashore, and during its subsequent attack on Toulon.
- (h) To release the French Commando Group, the Armoured Combat Command, and all airborne forces to Army control and Army order.

D. GARBO FORCE

(1) Troops:

H.Q. II French Corps
1st (Fr.) Inf. Div. (D.M.I.)
3rd Algerian Inf. Div. (D.I.A.)
9th Colonial Inf. Div. (DIC)
1st (Fr.) Armoured Div. (D.B.) (less 1 Combat Command)
Supporting Troops

(2) Missions:

- (a) To land the following over beaches in the St. Tropez-Cavalaire area on their arrival in the transport area on D plus 2.

1st (Fr.) Inf. Div. (D.M.I.)
3rd Algerian Inf. Div. (D.I.A.)

- (b) To pass these divisions through the left of the VI (U.S.) Corps in the La Londe - Carnoules area. To attack Toulon from the East and North, in conjunction with VI (U.S.) Corps on the right.

- (c) To land the 9th Colonial Inf. Div. (Fr.) in the Le Lavandou and/or Hyères area by D plus 9; one-half on D plus 5, one-half on D plus 9. Exact landing beaches will depend on progress of assault forces westwards, and on opening of new beaches.

APPENDIX 2 (Contd.)

(d) To land the 1st (Fr.) Armoured Div. (D.B.)
(less 1 Combat Command) by D plus 25.

(e) Upon the capture of Toulon, to extend the beachhead towards Marseilles and the northwest, maintaining contact with the VI (U.S.) Corps on the right.

E. I FRENCH CORPS

(1) Troops:

H.Q. I French Corps
2nd (Fr.) Moroccan Inf. Div. (D.I.M.)
4th (Fr.) Mountain Div. (D.M.M.)
5th (Fr.) Armoured Div. (D.B.)

To be prepared to load on ships and on craft and move to the assault area on the following tentative schedule:

2nd (Fr.) Moroccan Inf. Div. by D plus 15
4th (Fr.) Mountain Div. by D plus 30
5th (Fr.) Armoured Div. by D plus 40

F. ARMY RESERVE

(1) Armoured Combat Command, 1st Fr. Armoured Div., to revert to Army control on Army order.

(2) The following units will revert to Army reserve, upon Army order, after the Blue line is secured:

(a) Rugby (Airborne) Force.

(b) All Commando type units.

(3) Sitka Force to operate under Army control.

OPERATION DRAGON

ORDER OF BATTLE - M.A.T.A.F. TACTICAL UNITS

C.G. M.A.T.A.F.	XII T.A.C.	324 Wing (Br.)	4 Sqns.	Spits	
		322 Wing (Br.)	4 "	"	
		251 Wing (Br.)	3 "	"	
		57 Group	3 "	P-47	
		79 Group	3 "	P-47	
		324 Group	3 "	P-47/P-40	
		86 Group	3 "	P-47	
		27 Group	3 "	P-47	
		47 Group	4 "	A-20	
		415 Squadron	1 "	Beaufighters	
		111 Squadron	1 "	P-51 (Tac/R)	
		225 Sqn. (Br.)	1 "	Spits (Tac/R)	
		11/33 Sqn. (Fr.)	1 "	Spits (Tac/R)	
		52 Group	3 "	P-51) On loan)	D-3 to D + 5
		31 Group	3 "	P-51) from) 15 A.F.)	
		4 Group	2/3 "	P-47 (Fr.)	
	C.G. 42nd Wing	17 Group	4 Sqns.	B-26	
		319 Group	4 "	B-26	
		320 Group	4 "	B-26	
		31 Group (Fr.)	3 "	B-25	
	C.G. 57th Wing	321 Group	4 Sqns.	B-25	
		340 Group	4 "	B-25	
		310 Group	4 "	B-25	
	3 Photo Group	23 P.R. Sqn.	1 "	P-38	
		5 (U.S.) Sqn.	1 "	P-38 (P.R.U.)	
		682 11/33 Detach (Fr.)		Spits	
	A.O.C. D.A.F.	239 Wing	4 Sqns.	Kittyhawks	
		1 "	1 "	Mustangs	
		7 (S.A.A.F.) Wing	4 "	Spits	
		244 Wing	4 "	Spits	
		232 Wing	2 "	Bostons	
		3 (S.A.A.F.) Wing	(3 "	B-26	
			(1 "	Baltimores	
		285 Wing	(40 Sqn.	Spits (Tac/R)	
			(241 Sqn.	Spits	
			(683 Sqn.	(P.R.)	
			(208 Sqn.	Spits (Tac/R)	
			(318 Sqn.	Spits (Tac/R)	
			(600 Sqn.	Beaufighters	

OPERATION DRAGON

LOCATION OF TACTICAL AIR UNITS
(excluding Transport Carrier Command)CORSICA

Airfield	Capacity	Unit
Calvi	84 aircraft	324 Wing (Spits) 225 Sqn. (Spits)
Calenzana	64 "	322 Wing (Spits)
St. Catherine	140 "	251 Wing (Spits) 324 Group (P-40)
Borgo	80 "	111 Sqn. (P-51) II/33 Sqn. (Spits) (Fr.) 23 Sqn. (P-38) 5 Sqn. (P-38)
Bavinco	50 "	Communication Flights Visiting aircraft
Serragia	180 "	27 Group (P-47) 79 Group (P-47)
Poretta	210 "	47 Group (A-20) 86 Group (P-47)
Alto	180 "	57 Group (P-47) 4 Group (P-47) (Fr.)
Aghione	180 "	31 Group (P-51) M.A.S.A.F. 52 Group (P-51) M.A.S.A.F.
Ghisonaccia	120 "	310 Group (B-25) 347 Sqn. (P-39) C.A.F. 328 Sqn. (Spit) C.A.F.
Ajaccio	75 "	326 Sqn. (Spit) C.A.F. 327 Sqn. (Spit) C.A.F.
Alesan	100 "	340 Group (B-25)
Solenzara	140 "	321 Group (B-25) 415 Sqn. (Beau) 417 Sqn. (Beau) C.A.F.

SARDINIA

Villacidro	100 "	17 Group (B-26)
Decimomannu	300 "	319 Group (B-26) 320 Group (B-26) 31 Group (B-26) (Fr.)

OPERATION ANVIL later DRAGOONENEMY GROUND FORCESIN SOUTHERN FRANCE AND LIGURIAThe Nineteenth German Army

Histoire de la
1re Armée
Française by
Gen. de Lattre
Paris ..
Plon 1949.

Operation Dragoon was an assault of three divisions, building up to ten combat divisions. Likely to oppose the Allies were ten German divisions. Only nine of these operated. To grasp the weight of opposition - which was not, as some have declared, negligible - the trend of events and movements at the time must be borne in mind. The fourteen German divisions based south of the general line Bordeaux - Lyon in May 1944 had been reduced by five to meet the Overlord threat in June, and by a second Panzer division in the opening days of August. Reinforced by a division from Normandy and another from Russia, the forces aligned in mid-August 1944 consisted of nine divisions of the Nineteenth Army(1) under command of General Wiese in the sector between the Italian frontier and the meridian of Toulouse. A tenth division, under command of the First German Army and charged with the defence of the Loire - Bidassoa sector on the Atlantic coast, was considered likely to intervene, but did not do so. As reserves, Wiese commanded, in addition to the nine divisions, twenty battalions of the Ost Legion(2), two brigades of the Kriegsmarine(3), a regiment of assault artillery, several regiments of coastal artillery, a large A.A. complement, an assortment of territorial formations(4) and three Regiments of Luftwaffe personnel fighting as infantry.

German Ground Order of Battle in Southern France

Ibid

Wiese divided his territory into three zones - west, centre, east. The western zone - the Languedoc coast - was controlled from Montpellier; the central zone of the Lower Rhone from Taillade near Avignon; and the eastern zone - the Provençal coast - from Draguignan. Seven divisions covered the littoral: the eighth was deeply involved in the struggle with the maquis of Savoy and the Isère. The 11th Panzer Division (Armoured) was in process of transfer at the time of the landings from First to Nineteenth Army and was involved in the fighting as it made its way from the Albi - Castres - Carcassonne area to the focal area of the Lower Rhone. The manpower available to General Wiese is estimated by General de Lattre as not less than a quarter of a million troops. The dense and powerful coast defences allowed their commander to leave the beaches only lightly covered, holding his main forces in reserve for switch to points of pressure.

Von Schramm's
Treatise on German
preparations for the
Invasion of France.
(Cabinet Office
Document Ref:
No. M.I.14/831)
P.5 - 1793)

An authoritative order of battle for 15 August has been found in a treatise based on the Armed Forces Operations Staff reports and war diary. This gives on the right German flank IV Luftwaffe Field Corps, with 716th, 198th and 189th Infantry Divisions under command: in the Rhone Valley,

- (1) H.Q. - Avignon.
- (2) Mediocre, and mixed as regards nationality.
- (3) Coastal defence units - good class troops.
- (4) Security regiments, S.S. police regiments, country rifle brigades, pioneers, Field Gendarmerie, signallers etc.

APPENDIX 5 (Contd.)

LXXXVI Corps, with the 338th Infantry Division under command; in the Marseilles area the 244th Infantry Division; then, progressing eastwards, the 242nd Infantry Division, and the 148th Reserve Division as far as the Italian frontier. Behind these, as reserve, the 11th Panzer Division; further back in the Grenoble area the 157th Reserve Division; and north of Lyon a Garrison Division of foreign volunteers.

A review of the situation issued by the Armed Forces Operations Staff(1) on 27 July anticipated a landing operation in the near future, with the chances of location calculated at the ratio of 4 : 5: 1 against the French coast, Liguria and the Adriatic. Although it was necessary to reinforce both the first two areas, no aid was forthcoming. Although the Italian theatre command, as well as Hitler himself, inclined to a belief that Liguria was the most likely objective, the High Command made dispositions favouring the Southern France theory. On 3 August, an order was issued on the defence of the Franco-Italian frontier. The break-through in Normandy, it was thought, suggested a landing in Southern France, not in Italy. The appearance of French troops in the reserve group on Corsica, the increase of landing craft in that island's harbours, (reported by air reconnaissance), systematic air raids on radar stations and gun positions east of Marseilles, added to the heavy Allied air raids on roads and railways in the Rhone Valley and on the ports of Marseilles, Toulon and St. Raphael, strengthened the conclusions of the High Command that a landing in Southern France was highly probable.

Material for improving defences was in short supply and work begun could not be continued while the north-western front held priority. Troops were given up to the major front in June, leaving a gap between Montpellier and the Spanish frontier undefended. Three exhausted divisions(2) were moved in there during July and on 15 July the 11th Panzer Division was ordered into the Narbonne - Carcassonne - Montauban area to hold the partisans in check. On 27 July, the 9th Panzer Division was ordered to Normandy. On 21 July, the German Navy's insistence resulted in an order to suspend all demolitions in Toulon and Marseilles. The Germans needed the ports themselves.

Report by Army
Group G to O.B.
West.
0130 hrs.
13 August 44.

The German High Command was quick to pin-point the pattern of Allied air attacks. It was reported on 13 August that the first phase of Allied preparations had just concluded with the destruction of the Rhone and Var bridges. Army Group G thereupon supposed there would be a landing between the Rhone and the Var in the next few days: convoys had sailed from North African ports and landing craft were in sufficient strength at Ajaccio to lift one division(3). The second state of alarm was ordered for the Nineteenth Army. The 11th Panzer Division was ordered to move speedily into the Nimes - Arles - Ollioules area. Should there be firmer signs of a landing between the Rhone and Var, the 198th Infantry Division was to move in behind this sector. Rumours indicated 15 August as the invasion date and the Commander-in-Chief West's appreciation of the situation led to the same conclusion. The Allies did land on 15 August. The only reserve remaining to Nineteenth Army was the 11th Panzer Division. On 13 August, the task of Army Group G was clearly

- (1) Wehrmachtführungsstab.
- (2) 716th, 198th and 353rd Infantry Divisions.
- (3) They lifted three divisions.

defined as the defence of the southern coast of France against invasion.

As many of the Germans considered a landing even more probable on the Ligurian coast than in the South of France, any consideration later of the question of surprise will be impossible unless the order of battle in Liguria is now given; for both sectors were, to the Germans, alternative danger points on one invasion belt.

German Ground Order of Battle in Liguria

O.K.W.F.St.
records of the
Italian Theatre
Pt.11.3 Cabinet
Document (German).

An important parallel existed at the time, unknown to the opposing commands. The Mediterranean Allied Command has been seen as practically unanimously in favour of continuance of the war in Italy, with probably amphibious landings in Liguria or the Adriatic and progress through to Germany by way of the Hungarian plain. It thought Dragoon to be an unreasonable diversion, but, compelled by higher authority to incline, it conceived its plan, massive and pessimistic, and used its knowledge of German susceptibilities of a landing in Liguria to good advantage. The Mediterranean forces could not now land in Liguria, but they could at any rate persuade the Germans that that was their intention.

On the German side, examination of their records shows a parallel difference of opinion. The Italian theatre command looked at things from an Italian viewpoint and related all things to the land battle. How could the Allies fail to seize the opportunity their strength and reserves afforded them of landing behind the Italian front, thus cutting off the entire Army Group C? If military and political factors were of any importance, then the chances of victory a landing in Liguria afforded were too great to be ignored. The High Command more correctly adjudged the tactical signs of a landing in the South of France. They were only partially taken in by the elaborate air/naval deception operations. Their intelligence served them well.

The following will show the course of local reactions to the threat against the Ligurian coast, initiated by Hitler and supported by local fears, but, curiously, not shared to the same extent by the generals of the High Command.

Many, including Hitler, had long anticipated a large-scale landing in the Genoa - Leghorn area. These apprehensions increased anew in June, when unmistakable signs of enemy preparations for a landing in the Western Mediterranean became apparent. On 11 June, Hitler ordered accelerated strengthening of the defence works in this area and troop reinforcements. He ordered a division⁽¹⁾ to strengthen Upper Italy in such fashion that they were prepared for a landing either side of Genoa. Another division⁽²⁾ was to be stationed in the Genoa - Leghorn area. On 17 June, Fourteenth Army took over the West coast of Italy, with LXXV Army Corps under command. On 25 June, elaborate measures, taken to guard against a landing and to protect his right flank in Italy, were announced by Kesselring.

The Ligurian coast defences were then strengthened by four new Italian Republican Fascist divisions. The commander

- (1) 715th Infantry Division.
- (2) 34th Infantry Division.

APPENDIX 5 (Contd.)

of Army Liguria was announced on 3 August as Marshal Graziani - the Republican War Minister - He was determined to use his authority so as to bring about the fullest possible active collaboration of his forces in the fighting and decided these new divisions were to be used in Liguria. Army Group Von Zangen was absorbed by Graziani and its commander relegated to a minor post.

By the beginning of August, two Italian divisions had arrived on the Ligurian coast. As reserves, behind the coast, there were the Luftwaffe Storm Regiment, at La Spezia, and the 34th Infantry Division. Information came through on 10 August that it was believed the Allies planned an attack west of the Ligurian port of Savona, in the rear areas of which he would find ample scope for tank warfare. The defences of this coast were regarded as deficient. Kesselring declared, on 10 August, that forces must be so disposed in the interior areas as to be available, if need arose, for throwing out to the Adriatic. Towards the middle of August, three more battalions were drafted to the threatened coast. The Franco - Italian border was explored against the possibility of a landing in Southern France. Two regiments of 90th Panzer Grenadier Division were drafted to Genoa(1). On 13 August a circular from Hitler's H.Q. considered occupying the Green (or Gothic) Line in good time and pressing on with the works there: this would release troops for defence against a landing. The General H.Q. of LXXV Army Corps took over command of the 4th Italian and 42nd Infantry Divisions on the Ligurian coast. On 14 August, troops moved into the area of the Franco-Italian frontier(2).

-
- (1) Order of Battle, Army Liguria 10 Aug. 44
LXXV Corps
Battle Group Meinhold (135 Fortress Brigade and
 (Italian coastal units.
Monte Rosa Mountain Division
San Marco Infantry Division
42 Jaeger Rifle Division (Genoa)
34 Infantry Division
- (2) It is important to note the consistency of Kesselring's attitude. He regarded the landings as directed to turn his own front rather than to assist the Allied battle in Northern France and took energetic measures to meet a possible attack through the Alps on his western boundary. LXXV Corps was given the command in this area after D Day, with under it two infantry divisions (148th and 157th Reserve.) out off in France from their parent formation 19th Army, and the 90th Panzer Grenadier Division. The first two fell back without much contact: the last cleared the Alpine passes of partisans.

OPERATION ANVIL - later DRAGOONTHE FRENCH RESISTANCE MOVEMENTMediterranean Air Supply to the F.F.I. (1)

History of
Special Opera-
tions (Air) in
the
Mediterranean
theatre.

The supply of the French Resistance movement in Southern France with arms, equipment and instructors had been a growing commitment of the Mediterranean Air Forces since the first landings in Italy. After a winter of costly experiment and bad weather, the effort was progressively stepped up to such an extent that, just prior to Operation Dragoon, four squadrons⁽²⁾ and one flight were more or less permanently engaged on this work. An indication of the volume of the effort is the fact that the two most active squadrons made one thousand six hundred and sixty one sorties between them, of which one thousand and ninety four were successful.⁽³⁾

Allied High Command's Appreciation of Military Role of F.F.I. in Dragoon

Quite apart from the desirability of enhancing the effectiveness of the French contribution to Allied arms as a whole, it was clear that, on the eve of Operations Overlord and Dragoon, the large number of compact, disciplined and sometimes well-armed units in the interior could, if correctly exploited, assist the progress of our forces by the seizing of tactical positions, sabotage, target indicating and the harassing of enemy lines of communications.

S.C.A.F.53
23 June 44

S.55130
1 July 44

Meeting SAC(44)
(Special) (2)
17 June 44

Minutes of
Meeting SAC/44
16 June 44

P/179 (Final)
A.F.H.Q.
25 June 44.

This showed up in Allied deliberations on the highest level. General Eisenhower reported favourably on assistance by the F.F.I. in the early phases of Overlord and considered their assistance in the South of France would, by virtue of their strength - long maintained intact in mountainous areas, - be more effective than anywhere else. He undertook to furnish all practicable supplies⁽⁴⁾ (in addition to aid from the Mediterranean) so as to develop the Resistance to maximum. General Marshall⁽⁵⁾ said the success of the French Resistance had so far exceeded expectations that, combined with the German fear of other landings in N.W. Europe it was considered to have stretched enemy resources to a point at which it was impossible for him to move any substantial reserves to the Overlord area. Air Marshal Slessor considered it 'of the first importance' to expand the scale of support to the F.F.I. and pointed out the need for more aircraft for the task. In its plan for airborne operations, Force 163 kept two French para-battalions and a Bataillon de Choc for dropping into resistance group areas in the later stages of operation Dragoon.

-
- (1) French Forces of the Interior.
 - (2) No.624 Squadron (Br.) Halifaxes/Liberators/Stirlings.
No.885 Squadron (U.S.) Liberators.
No. 36 Squadron (Br.) Wellingtons.
No.267 Squadron (U.S.) Dakotas.
Lysander Flight (Br.)
 - (3) They dropped a gross tonnage of 1956 tons and 578 personnel.
 - (4) He planned to arm an additional 53,000 men by 1 August with material borne in 200-300 U.S.S.T.A.F. aircraft from the U.K.
 - (5) Of the Combined Chiefs of Staff Committee.

APPENDIX 6 (Contd.)

Facts about the French Resistance Movement

Histoire de la
1re Armée
Française
Gen. de Lattre
Plon. Paris
1949

So much fiction has been written and spoken about the French Resistance Movement that a few lines on the actual situation are necessary to support the statement that it was a military reality at the time and that air action was carried out to maintain and develop it. Speaking numerically, the closest approximation to the actual number of men and women engaged in the various elements at that time may be gauged from the figures quoted by General de Lattre de Tassigny in his 'History of the First French Army'.⁽¹⁾ Altogether 137,000 men were, he states, enrolled in the First French Army after the landings. A large number remained as civilians.

There were several separate large formations⁽²⁾ in the Resistance under the central internal controlling influence of the Comité National de la Résistance. The B.R.C.A. (see footnote) had divided French territory into military 'regions', designated by the letter R.⁽³⁾ south of the old occupation line of demarcation. North of that line, other letters were used.⁽⁴⁾ Of the two elements mainly affected by air supply from the Mediterranean, the Alpine elements contained a hard core of trained army survivors of 1940 - the South-west elements were heterogeneous, but no less militant.

Air Support Organisation

Minutes of Meeting
in Office of C.-in-
C., MAAF on
Assistance to
Resistance 14 Jly 44
(AHB.II.J.1/90/29B).

M.A.A.F. to C.G.
M.A.T.A.F.
ACP/S.482/Ops.
14 Jly 44.

Until the ground forces made contact with the Maquis, the provision of supplies and equipment to them was the responsibility of Mediterranean Allied Air Forces. Thereafter, it was to be handed over to Mediterranean Tactical Air Force. An officer was assigned for liaison between this latter formation and General Cochet, head of the Resistance Groups. Requests from these Groups were to be dealt with on lines resembling normal Army requests whenever practicable, although no separate force to deal with such requests was formed. The boundary between General Cochet in the South of France and General Koenig in the North was to be the same as that between A.F.H.Q. and S.H.A.E.F.

P/188 (Final)
A.F.H.Q. Med.
Joint Planning
Staff
18 July 44

Relations with General de Division (Air) Cochet were regularised. There was to be direct liaison and consultation between him and Force 163. The primary task of the F.F.I. became the support of Anvil-Dragon. There were discussions of a plan⁽⁵⁾ put forward by the French for an early airborne drop in the Vaucluse area: this was shelved

-
- (1) Paris Plon 1949 A lively, first-class narrative.
 - (2) A.S.: Armée Secrète.
F.T.P.F.: Franc-Tireurs et Partisans Français.
O.R.A.: Organisation de Résistance de l'Armée.
O.C.M.: Organisation Civile et Militaire.
B.R.C.A.: Bureau Centrale de Renseignements et d'Action.
C.O.M.A.C.: Comité Militaire de l'Armée Clandestine.
C.N.R.: Comité National de la Résistance.
 - (3) R.1. - Lyon: R.2. - Marseille: R.3. - Languedoc, La Lozère et l'Aveyron, Pyrénées Orientales: R.4. - Toulouse: R.5. - Limousin: R.6. Centre: etc.
 - (4) A. - North: B - La Vendée et le Bordelais: D - East France: M - Bretagne et Normandie: P - Bassin Parisien.
 - (5) Operation Caiman, intended to aid a Maquis rising.

as impracticable.(1) On 27 July 44, General Cochet's command was enlarged to include certain airborne elements of the Special Operations Executive and the Office of Strategical Services(2) and elements of the French army (although he did not control aircraft, supplies or communications.) Open combat on a large scale being out of the question, activities, based on the closest possible co-ordination with air operations, were to be confined to sabotage and guerilla warfare.

Effect of Intelligence from F.F.I. on Seventh Army Plans

Gen. de Lattre

Colonel Zeller,(3) chief of the F.F.I. Alpine sector, paid two clandestine visits to General Patch's H.Q. at Naples. He gave details of the efficacious work of the organised maquis in the Savoy and Dauphine areas and of how they had reduced the German defence system in those areas to such a state of weakness that they were incapable of putting up any serious resistance to an attack in force. It would be quite feasible, he submitted, for the Seventh Army to bring off a successful coup in the Grenoble - Lyon - Bellegarde triangle.

The army plan was modified in conformity, but as the whole temper of the time estimates was pessimistic, insufficient weight was allocated to a move which might otherwise have proved decisive. The very fact, however, that such a state of affairs was available for exploitation at a critical moment does much to justify the long months of what often seemed fruitless work by the air organisation. Time and again aircrews had reported mission failures owing to the apparent failure of the maquis to show the pre-arranged light signals. Maquis records on the other hand confirm that lights were lit but not seen by aircrews. But by the use of powerful Krypton lamps and other improved devices the service was, with the help of better weather, brought to a far more desirable pitch of efficiency.

-
- (1) In the event the rate of progress far exceeded expectations. Such a plan was unnecessary. Another plan, to land troops from heavy bombers in the Avignon area was also dropped.
 - (2) A detachment known as S.P.O.C. (Special Projects Operation Centre).
 - (3) Alias 'Joseph'.

SECRET

1

APPENDIX 7

OPERATION ANVIL later DRAGOON

AIRCRAFT CARRIER TASK FORCE 88

FLYING PROGRAMMES

These were divided into 4 parts.

1. Task Group 88.1
2. Task Group 88.2
3. Spotting Missions.
4. Support Missions.

In the Aircraft Carrier Force Operations Orders, flying programmes were given for several days.

In the event, only the programme for D Day (given here) was adhered to, owing to unforeseen developments in the course of the battle, but succeeding programmes were related to the programme for D Day.

Part 3 - Spotting missions - has been omitted from these notes as of minor interest.

N.B.

Fighter patrol patterns for D Day and thereafter are given in the Narrative.

On days subsequent to D Day, mission directions were not usually received until about 0300 hours on the day to which they applied. Detailed programmes to meet the directions were passed out to carriers at 0500 hours daily on VHF Inter F.D.O. This took 15 minutes to pass to all five carriers in Group 1.

Reference A.H.B. II S.1/35.

FLYING PROGRAMME D DAY PART 1 TASK GROUP 88.1

APPENDIX 7 (Contd.)

SECRET
2

Serial Time	Attacker	Khedive	Emperor	Pursuer	Searcher
1 0545					
2 0600	Off 4 F/B		(a) Off 4 F/B (b) Off 4 Force Cover	(a) Off 4 F/B (b) Off 4 Spot	(a) Off 4 F/B (b) Off 2 Spot
3 0610					
4 0625		Off 4 F/B			
5 0640	Off 4 F/B				
6 0655			Off 4 F/B		
7 0715	On Serial 2		On Serial 2 (a)	On Serial 2 (a)	Off 2 Spot On Serial 2 (a)
8 0740	Off 4 F/B	Off 4 F/B On Serial 4	Off 4 Force Cover		
9 0755	On Serial 5 2 Tac/R on call		On Serial 2 (b)		On Serial 1
10 0810	Off 4 F/B	Off 4 F/B	On Serial 6	Off 4 Spot	Off 2 Spot
11 0835	On Serial 8	Off 4 F/B On Serial 8	Off 4 F/B	On Serial 2 (b)	On Serial 2 (b)
12 0900	Off 4 F/B		Off 4 F/B		
13 0925	On Serial 10 Off 4 F/B	Off 4 F/B On Serial 10	Off 4 Force Cover		On Serial 7

DS 59741/1 (128)

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FLYING PROGRAMME D DAY PART 1 (Contd.) TASK GROUP 88.1

Serial	Time	Attacker	Khedive	Emperor	Pursuer	Searcher
14	0950		On Serial 11	On Serial 8 and 11		
15	1015	On Serial 12		On Serial 12	Off 4 Spot	Off 2 Spot
16	1040	On Serial 13	On Serial 13		On Serial 10	On Serial 10
17	1105					
18	1130		Off 4 Force Cover			
19	1155			On Serial 13		
20	1220				2 Spot on call	(a) Off 2 Spot (b) Off 4 Force Cover
21	1245		On Serial 18		On Serial 15	On Serial 15
22	1310			Off 8 Beach Cover		
23	1335					
24	1400					
25	1425	4 F/B on call			Off 2 spot	(a) Off 4 Force Cover (b) 2 Spot on call.
26	1450			On Serial 22		On Serial 20 (a) and (b).
27	1515				Off 8 Beach Cover	

DS 5974/1(129)

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SECRET

3

APPENDIX 7 (Contd.)

FLYING PROGRAMME PART 1 (Contd.) TASK GROUP 88.1

Serial	Time	Attacker	Khedive	Emperor	Pursuer	Searcher
28	1540					
29	1605					
30	1630				Off 2 Spot	(a) Off 4 Force Cover (b) 2 Spot on call
31	1655			Off 8 Beach Cover	On Serial 25	On Serial 25 (a)
32	1720				On Serial 27	
33	1745	Off 4 F/B	Off 4 F/B			
34	1810					
35	1835		Off 4 Force Cover	On Serial 31	Off 8 Beach Cover	(a) Off 2 Spot (b) 2 Spot on call
36	1900	Off 4 F/B On Serial 33	Off 4 F/B On Serial 33		On Serial 30	On Serial 30 (a)
37	1925		Off 4 Force Cover			
38	1950		On Serial 35			
39	2015	Off 4 Force Cover On Serial 36	On Serial 36	Off 4 Force Cover		
40	2040		On Serial 37		On Serial 35	
41	2105	On Serial 39		On Serial 39		On Serial 35 (a)

FLYING PROGRAMME D DAY - PART 2 - TASK GROUP 88.2

Serial	Time	Tulagi (USN)	Kasaan Bay (USN)	Hunter (RN)	Stalker (RN)
1	0545	Off 4 F/B			
2	0600		Off 4 F/B	Off 2 Spot Off 4 Force Cover	Off 4 Spot
3	0610		Off 4 F/B		
4	0625				
5	0640	Off 4 F/B			
6	0655	On Serial 1	Off 4 F/B	Off 4 Spot	Off 2 Spot Off 4 Force Cover
7	0715		On Serials 2 and 3	On Serial 2	On Serial 2
8	0740				
9	0755	On Serial 5	On Serial 6	(a) Off 2 spot (b) 2 Tac/R on call	(a) Off 4 Spot (b) Off 4 Force Cover
10	0810			On Serial 6	On Serial 6
11	0835	Off 6 Spot		Off 4 Force Cover	
12	0900			On Serial 9 (a)	On Serials 9(a) and (b)
13	0925				Off 4 Force Cover
14	0950			On Serial 11	

APPENDIX 7 (Contd.)

FLYING PROGRAMME D DAY - PART 2 (Contd.) - TASK GROUP 88.2

Serial	Time	Tulagi (USN)	Kasaan Bay (USN)	Hunter (RN)	Stalker (RN)
15	1015			Off 4 Force Cover	
16	1040			Off 4 Spot	Off 2 Spot On Serial 13
17	1105	On Serial 11			Off 4 Force Cover
18	1130	(a) Off 2 Spot (b) 2 Spot on call	Off 8 R/P	On Serial 15	
19	1150			On Serial 16	Off 4 Force Cover
20	1220				On Serial 17
21	1245		Off 8 R/P On Serial 18		Off 4 Force Cover
22	1310	Off 8 Beach Cover			On Serial 19
23	1335			2 Spot on call	Off 2 Spot
24	1400	Off 4 R/P On Serial 18 (a)	Off 4 R/P	Off 4 Force Cover	On Serial 21
25	1425	(a) Off 2 Spot (b) 2 Spot in call	On Serial 21		
26	1450	On Serial 22		Off 4 Force Cover	On Serial 23
27	1515	Off 8 Beach Cover On Serial 24	Off 8 R/P On Serial 24	On Serial 24	

FLYING PROGRAMME D DAY - PART 2 (Contd.) - TASK GROUP 88.2

Serial	Time	Tulagi (USN)	Kasaan Bay (USN)	Hunter (RN)	Stalker (RN)
28	1540			Off 4 Force Cover	
29	1605			On Serial 26	
30	1630	(a) Off 2 Spot (b) 2 Spot on call			Off 4 Force Cover
31	1655	On Serials 25 and 27	Off 8 Beach Cover	On Serial 28	
32	1720	Off 4 R/P	Off 4 R/P On Serial 27		Off 4 Force Cover
33	1745				On Serial 30
34	1810	Off 8 R/P	Off 8 Beach Cover		Off 4 Force Cover
35	1835	(a) Off 2 Spot (b) 2 Spot on call	On Serial 31		On Serial 32
36	1900	On Serials 30 and 32	On Serial 32	Off 4 Force Cover	
37	1925	On Serial 34	Off 8 R/P		On Serial 34
38	1950			Off 4 Force Cover	
39	2015		On Serial 34	On Serial 36	
40	2040		On Serial 37		
41	2105	On Serial 35a		On Serial 38	

DS 59741/1(133)

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7

APPENDIX 7 (Contd.)

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8

APPENDIX 7 (Contd.)

FLYING PROGRAMMES D DAY PART 4

ARMY SUPPORT - TASK GROUPS 88.1 and 88.2

SHIP	AIR-CRAFT	OFF	TOT OR PATROL TIME	ON	BOMBS	
Searcher	4	0600	0620	0715	2 - 250	Coast defences and special targets
Pursuer	4	0600	0640	0715	2 - 250	Coast defences and special targets
Tulagi	4	0545	0610	0655	2 - 250	Coast defences and special targets
Emperor	4	0600	0625	0715	1 - 250	Coast defences and special targets
Kasaan Bay	4	0610	0640	0715	2 - 250	Coast defences and special targets
Tulagi	4	0640	0700	0755	2 - 250	Coast defences and special targets
Kasaan Bay	4	0655	0715	0755	2 - 250	Coast defences and special targets
" "	4	0600	0620	0715	1 - 1000	Coast defences and special targets
Attacker	4	0600	0635	0715	1 - 500	Coast defences and special targets
Khedive	4	0625	0650	0740	1 - 500	Coast defences and special targets
Attacker	4	0640	0705	0755	1 - 500	Coast defences and special targets
Emperor	4	0655	0720	0810	1 - 500	Coast defences and special targets
Attacker	4	0740	0800	0835	1 - 500	Coast defences and special targets
Khedive	4	0740	0800	0835	1 - 500	Coast defences and special targets
Attacker	4	0810	0830	0925	1 - 500	Coast defences and special targets
Khedive	4	0810	0830	0925	1 - 500	Coast defences and special targets
Emperor	4	0835	0900	0950	1 - 500	Coast defences and special targets
Khedive	4	0835	0900	0950	1 - 500	Coast defences and special targets
Attacker	4	0900	0930	1015	1 - 500	Coast defences and special targets
Emperor	4	0900	0930	1015	1 - 500	Coast defences and special targets
Attacker	4	0925	1000	1040	1 - 500	Coast defences and special targets
Khedive	4	0925	1000	1040	1 - 500	Coast defences and special targets
Kasaan Bay	8	1130	1200	1245	R/P	Sisteron railcuts to Pertuis
" "	8	1245	1330	1425	R/P	Sisteron railcuts to Pertuis
Tulagi	4	1400	1430	1515	R/P	Pertuis railcuts to Aix
Kasaan Bay	4					
Kasaan Bay	8	1515	1600	1720	R/P	Aix area railcuts
Tulagi	4	1720	1800	1900	R/P	" " "
Kasaan Bay	4					

RESTRICTED

~~SECRET~~

9

APPENDIX 7 (Contd.)

FLYING PROGRAMMES D DAY PART 4 (Contd.)

ARMY SUPPORT - TASK GROUPS 88.1 and 88.2

SHIP	AIR-CRAFT	OFF	TOT OR PATROL TIME	ON	BOMBS	
Attacker } Khedive } Tulagi }	4 4 8	1745 1810	1830 1900	1900 1925	1 - 50 R/P	Avignon railcuts to Miramis Arles railcuts to Miramis
Attacker } Khedive } Kasaan Bay }	4 4 8	1900 1925	1930 2000	2015 2040	1 - 500 R/P	Meyrarques railcuts to Draguignan Meyrarques railcuts to Draguignan
Emperor	8	1310	1330/ 1415	1450		Patrol C.Benat to St. Maxime 6-9000 ft 6-9000 ft.
Pursuer	8	1515	1545/ 1630	1720		Patrol C.Benat to St. Maxime 6-9000 ft.
Emperor	8	1655	1730/ 1815	1835		Patrol C.Benat to St. Maxime 6-9000 ft.
Pursuer	8	1835	1915/ 2000	2040		Patrol C.Benat to St. Maxime 6-900 ft.
Tulagi	8	1310	1330/ 1415	1450		Patrol St. Maxime to Cap Roux. 6-9000 ft.
Tulagi	8	1515	1545/ 1630	1655		Patrol St. Maxime to Cap Roux 6-900 ft.
Kasaan Bay	8	1655	1730/ 1815	1900		Patrol St. Maxime to Cap Roux. 6-9000 ft.
Kasaan Bay	8	1310	1915/ 2000	2040		Patrol St. Maxime to Cap Roux. 6-9000 ft.

RESTRICTED