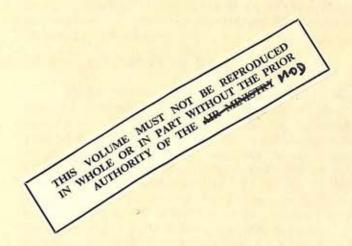


R.A.F. NARRATIVE (FIRST DRAFT)

# THE LIBERATION OF NORTH WEST EUROPE

VOLUME V

FROM THE RHINE TO THE BALTIC I OCTOBER 1944 - 8 MAY 1945



DECLASSIFIED



AIR HISTORICAL BRANCH (1)

AIR MINISTRY



## VOLUME V

## FROM THE RHINE TO THE BALTIC

1 October 1944 - 8 May 1945

## CONTENTS

Page

## CHAPTER 1. THE BATTLE FOR THE APPROACHES TO ANTWERP

Strategy in October 1944 - Clearance of the south bank of the Scheldt - The decision to abandon the thrust to the Ruhr - The isolation and capture of South Beveland - Reorganization of the Air Command - The assault on Walcheren - Preliminary air operations - The plan for the assault - The decision to abandon the heavy bomber attack on Flushing - The landings at Flushing - The landings at West Kapelle - Conclusion.

## CHAPTER 2. CONSOLIDATION ON THE RIVER MAAS AND THE PIERCING OF THE WESTERN WALL

...29

Air Support to Second Army during October - Plans for a November offensive - Revision of the directive to the Strategic Air Forces - Operations of 2nd T.A.F. 1 to 18 November - Operations by Second Army and 2nd T.A.F. in late November and early December - Operation Cloak and Dagger in Holland - Continued attacks on communications by the Tactical Air Forces - The resurgence of the G.A.F. - Operations south of the Ardennes - The capture of Metz - General Bradley's first attempt to reach the Rhine - Bomber Command's attempt to breach the Roer Dams - Movement of the enemy's armoured reserves west of the Rhine - The Saar offensive - Proposals to defeat the enemy west of the Rhine in early December.

## CHAPTER 3. THE BATTLE OF THE ARDENNES

65

Hitler's last attack in the west - Allied Intelligence and the German counter-attack - First moves on the ground and in the air - Reorganization of Command - The bad weather period - Stemming of the German attack - Air Operations 23 to 24 December - Turning of the tide: Air Operations 25 to 27 December - Reconnaissance work 16 to 27 December - Summary of air operations: 17 to 27 December - Stalemate: Operations 28 December to 3 January - Attacks on rail traffic north of the Ruhr - The threat from North West Holland - Air Operations in the Ardennes 28 December to 3 January - The New Years Day Raid 1945 - The German diversionary attack in Alsace-Lorraine - The elimination of the Salient: Air Operations 3 to 16 January.

## CHAPTER 4. STRATEGY FOR THE SPRING CAMPAIGN 1945 AND OPERATIONS PRECEDING IT

100

The Supreme Commander's plan for the Spring Campaign - Conferences held by the Combined Chiefs of Staff and Heads of Allied Governments - Build up of ground and air forces on the western front - Revision of the directive to the Strategic Air Forces - Strategic air operations 17 January to 8 February - Effects of the Russian winter offensive on the campaign in the west - Support by the Strategic Air Forces to the Russian offensive - Plan for the bombing of the Rhine bridges - Plan for the isolation of the Ruhr - Air support for Operation Blackcock - Night bombing by No.38 Group - Operations by 2nd T.A.F. west and east of the Rhine after the Ardennes Battle - Operations by the



Page

IXth Air Force against the enemy withdrawal from the Ardennes salient - Operations against the rocket sites and special targets in Holland 14 January to 28 March - Attacks on naval targets by 2nd T.A.F.

## CHAPTER 5. THE ALLIED ADVANCE TO THE RHINE

The Supreme Commander's plan - The first phase of the advance to the Rhine - Ground and air plans for Operation Veritable - Ground and air plan for Operation Grenade -Assembly of ground forces and deception plan for Operation Veritable - Dispositions of 2nd T.A.F. for Operation Veritable - State of the G.A.F. in the west in February 1945 Preparatory air operations to Veritable 2 to 7 February Operation Veritable 8 to 26 February - Operation Grenade
23 February to 10 March - Final phase of Operations Veritable - Grenade - Summary - Strategic air operations during first phase of Allied advance to the Rhine - Operation Clarion - Operation Bugle - The second phase of the Allied advance to the Rhine - Operation Lumberjack - The Remagen bridgehead - The third phase of the Allied advance to the Rhine - Operation Undertone - Crossing of the Rhine by Third U.S. Army - Conclusion.

## OPERATION PLUNDER - THE NORTHERN CROSSING OF THE CHAPTER 6. RHINE

Change in Supreme Commander's Plan - Plan of Twenty-First Army Group - plans for offensive air operations - The airborne plan - Preparatory operations. Army and Naval operations - The isolation of the Ruhr 19 February to 24 March - Attacks on the Dortmund-Ems and Mitteland Canals - Attacks on the enemy communication system, 10 to 20 March - Air attacks in the immediate vicinity of the future bridgehead, 21 to 23 March - Defensive air operations over the battle area by night - Reconnaissance by 2nd T.A.F., 21 to 23 March - Operation Plunder: Land operations 23/24 March - Air Operations 23/24 March - The airborne operation 24 March - Land operations 24 March -Air Operations in support of Plunder and Varsity - Diversionary air operations - Summary of Air Operations, 24 March - Ground air operations 25 to 31 March.

## THE ADVANCE TO THE ELBE AND THE CAPTURE OF BREMEN 213 CHAPTER 7.

Strategy for the final phase - The effect of the rapid advance east of the Rhine on heavy bomber operations - Liaison with the Russians - Dispositions of 2nd T.A.F. - Enemy forces east of the Rhine - Air operations in support of Second British Army - Night operations by 2nd T.A.F. - Operations by the VIIIth Air Force in North Germany 13 to 20 April -The assault over the Rivers Ijssel and Ems by First Canadian Army - Airborne operations - The advance to the Grebbe Line -Army - Airborne operations - The advance to the Greebe Line - Air Support in the German Coastal belt - Heavy bomber attacks on Heligoland and Wangerooge - The assault on Bremen: operations by 2nd T.A.F. and R.A.F. Bomber Command - Night operations by No. 2 Group and R.A.F. Bomber Command - Defensive air operations - Summary.

## FINAL OPERATIONS IN NORTH WEST EUROPE 239 CHAPTER 8.

The crossing of the Elbe - Operation Enterprise - The drive to the Baltic - Operation Red Admiral - Last air operations - The debacle of the G.A.F. - The relief of the Dutch in Western Holland - Evacuation of Allied Prisoners

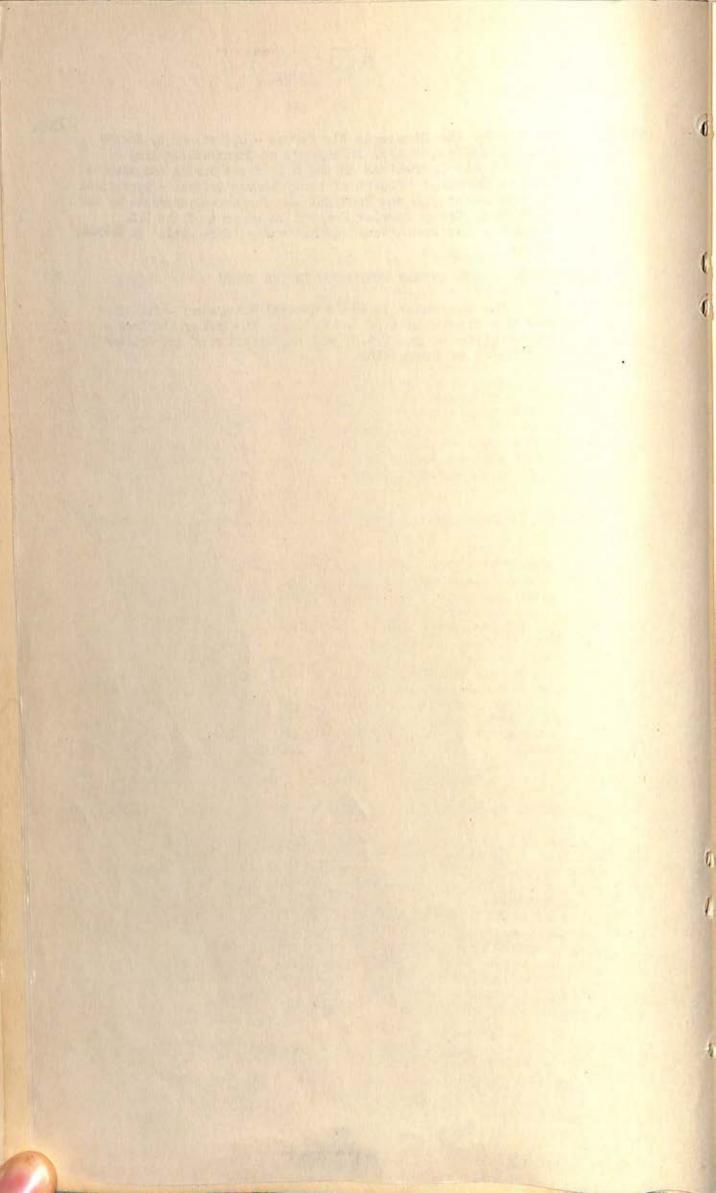
Page

of War by the Strategic Air Forces - Operations by Nos.38 and 46 Groups, R.A.F. in support of Twenty-First Army Group - Air Operations on the U.S. front during the advance across Germany: object of heavy bomber attacks - Operations by the Strategic and Tactical Air Forces - Operations by the IXth U.S. Troop Carrier Command in support of the U.S. Armies - Air Operations against enemy 'fortresses' in France, 1945.

## CHAPTER 9. THE GERMAN SURRENDER IN THE NORTH

261

The surrender to Field Marshal Montgomery - Procedure for the disarmament of the G.A.F. - The end of the task - Dissolution of 2nd T.A.F. and the creation of the British Air Force of Occupation.





v

## APPENDICES

- 1. Allied Orders of Battle on 20 October 1944, 2 February 1945, 4 May 1945.
  - 2. Strength of Allied Air Force on 1 October 1944 and 30 April 1945.
  - 3. R.A.F. Monograph. The History of Airborne Forces, Chapter 10.
  - 4. Photograph. The destruction of the Bielefeld Viaduct by R. A. F. Bomber Command.
- Photograph. Destruction of key points by 2nd T.A.F. during Operation Veritable, 1945.
  - 6. Photograph. Attacks on Shipping in the Baltic by 2nd T.A.F., May 1945.
- 7. Photograph. Rail Interdiction by 2nd T.A.F.

	MAPS AND DIAGRAMS	Facing Pag
1.	The Battle for the approaches to Antwerp.	4
2.	Chain of Command: Allied Air Forces.	12
3.	Pre-arranged air attacks on Walcheren,	14
4.	Air-ground operations along the River Maas 12 October to 3 December 1944.	30
5.	The situation on the western front: Autumn 1944.	32
6.	The Rhine Bridges.	36
7.	Railway Interdiction by 2nd T.A.F., Autumn 1944.	38
8.	Air Operations in enemy occupied Holland.	44
9.	Operation Queen, 16 November 1944.	54
10.	The Roer Dams.	57
11.	The German counter-attack in the Ardennes, 16 December 1944.	66
12.	Allied heavy, medium and light bomber attacks on communications 17 to 27 December 1944.	70
13	Operations of 2nd T.A.F. 24 to 25 December 1944.	78
14.	Allied Air effort and the German rate of advance.	89
15.	Allied heavy bomber attack on German airfields, 24 December 1944 and the G.A.F. attack on Allied airfields, 1 January 1945.	100
16.	The Allied offensive in the Ardennes 3 to 16 January 1945.	106
17.	Operation Blackcock 15 to 26 January 1945.	1 24

## SECRET

vi

		Facing Page
18.	Interdiction of railways by 2nd T.A.F. during the advance to the Rhine.	126
19.	The Allied advance to the Rhine 8 February to 1 April 1945.	138
20.	Operation Veritable: Air Support.	146
21.	Operation Veritable - Grenade: Ground movement.	148
22.	Dispositions of the G.A.F.: 6 February 1945.	152
23.	Operation Clarion 22 February 1945.	166
24.	Isolation of the Ruhr, 19 February to 24 March 1945	184
25.	Preparatory air tasks for Operation Plunder.	186
26.	Air Support for Operations Varsity - Plunder, 24 March 1945.	196
27.	The advance into Germany.	216
28.	Advance by 2nd T.A.F. into Germany; dispositions on 12 April 1945.	22 <b>2</b>
29.	Targets attacked by R.A.F. Bomber Command and 2nd T.A.F. from the Rhine to the Baltic, April - May 1945.	224
30.	Targets attacked by the VIIIth Air Force 3 to 20 April 1945.	22 <b>8</b>
31.	Dispositions of Nos.83 and 84 Groups for the assault on Bremen.	234
32.	Dispositions of 2nd T.A.F. for the thrust on Lubeck	240
33.	Final operations of 2nd T.A.F.	244
34.	Targets attacked by the U.S.A.A.F. and R.A.F. on the U.S. Front. 1 April to 8 May 1945.	254
35.	Air Operations against Enemy Fortresses in Liberated France: September 1944 - May 1945.	258
36,	Operations by the Tactical Air Forces May 1944 to April 1945. Effective sorties and bomb tonnages.	262
37.	Operations by the Tactical Air Forces May 1944 to April 1945. Casualties and claims.	26 <b>2</b> .



## PREFACE

In this volume, the final one dealing with the campaign in Northwest Europe 1944 - 1945, the narrative opens with the stalemate on the western front which ensued after the battle of Arnhem. It describes the period of consolidation and the limited offensive operations during the late autumn to break through the Western Wall. Meanwhile the enemy had prepared a counter offensive timed for December which he hoped would divide the Allied Armies and win him the great prizes of Antwerp, Liege and Brussels. This operation failed and, after a brief period of re-organisation, the Allied Armies, with a well organised communication system behind them began, in the New Year, a series of methodically planned advances which gained them the entire left bank of the Rhine.

It had been the intention of the Supreme Allied Commander to concentrate the bulk of his forces in the north when he crossed the Rhine but by the time that elaborate operation was due to be launched American forces had already secured two bridgeheads on the east bank of the Rhine. There then followed a period of rapid thrusts into the heart of Germany which resembled in dash the Battle of France during the previous summer. By the middle of April U.S. troops had linked up with the Red Army which, since early January, had steadily pushed back the German Armies on the eastern front. His essential industries and communications crippled by ceaseless air attack, his Armies and Air Forces drastically weakened by the offensives on the western and eastern fronts, the enemy found it no longer possible to The first signs of collapse came from Italy where hostilities ceased on 2 May 1945. On the 5th, the German forces opposing Field Marshal Montgomery surrendered to him. The final capitulation of the Wehrmacht took place three days later, eleven months after the landings in Normandy.

The participation of the Air Forces throughout the phases of the battle east and west of the Rhine was decisive. The combined efforts of the Strategic and Tactical Air Forces were largely responsible for the German failure in the Ardennes and that action, too, showed how closely the strategic air offensive against the enemy's oil production was related to the land battle. In March, with the arrival of better weather, the Air Forces insured the smooth running of the operation to cross the Rhine in the north with well timed attacks against airfields, communication centres and defended localities. The importance of seizing the Ruhr made strategic and tactical air operations in the latter phases of the campaign almost indivisible and by mid March the Reich was no longer able to draw upon the coal and other industrial products of this area as the Air Forces had blocked all the approaches to it.

The Tactical Air Forces, overcoming the difficulties of congested airfields behind the front and the poor weather conditions during the autumn and winter, maintained air superiority at all times. The German Air Force remained defiant until the end, although it could only operate on a small scale after the raid on Allied airfields on 1 January 1945. It was therefore necessary, particularly when the Rhine had been crossed, to attack constantly the enemy's airfields and engage his fighter forces well behind the German front. The unspectacular but essential operations of rail cutting and attacks on transportation were well rewarded as the enemy found it increasingly difficult to move

## SECRET

supplies to the front. These operations exacted a high toll of pilots and aircraft. It must also be noted that the rapid advance into Germany would not have been possible without the fleet of transport aircraft carrying essential supplies to the forward troops. The final act in the air war was that the Strategic Air Forces, having completed their tasks of destroying the enemy's industries and transport, brought relief to the starving Dutch in western Holland.

In preparing this narrative the files and other documents belonging to the Deputy Supreme Commander, now Marshal of the Royal Air Force, Lord Tedder have been invaluable, the diary of the Historical Officer at Air Staff, SHAEF and the notes of important conferences held during the Ardennes Battle written by the Deputy Chief of Staff (Air), Air Marshal Robb have provided the atmosphere and the varying points of view at the highest level of command. On the German side the amount of documentary material available diminishes as the war draws to its close. Nevertheless fairly detailed situation reports of German air operations have provided a useful balance in describing Allied air operations.



## CHAPTER 1

## THE BATTLE FOR THE APPROACHES TO ANTWERP

Allied Strategy in October 1944 and the Importance of Antwerp

The problem which overhung the conduct of operations in north-west Europe in October 1944 was the critical shortage of reinforcements and supplies, particularly of artillery The only solution was to open a port close to ammunition. the front line. It was for this reason that General Eisenhower declared that Antwerp port must be put into operation as rapidly as possible.

S.C.A.F. 93 29 Sept. 1944

Europe Vol. IV, Chap. 6

It is necessary to remind the reader of the great and sudden strain on communications which arose during the breakout from Normandy and the race across northern France during the late summer. Owing to the enemy's stubborn defence of the Brittany ports and the equal determination of the Supreme Commander to throw all resources into the pursuit of the See Lib. of N.W. enemy eastwards, the original scheme for their employment had The enemy had also determined to hold out to be abandoned. in the channel ports of Le Havre, Calais, Boulogne and Dunkirk. At Le Havre the port was badly damaged when finally captured and the garrison of Calais did not lay down its arms until 30 September. Meanwhile it was decided merely to invest Dunkirk with a holding force.

> Thus, when the Allied spearheads had reached the German frontier they were still drawing supplies from the Mulberry Harbour at Caen, Arromanches, Cherbourg and Le Havre. British also had the use of the nearer, though minor, ports of Ostend and Dieppe. (1) The fighting troops had to rely on the magnificent improvision of the transport services. essential supplies such as food, ammunition and petrol. were brought forward by the "Red Ball Express". The "Red Ball Highway" was a circular one-way traffic route, prohibited to civilian and local military transport, along which supply convoys raced at high speed by day and by night from port or beachhead to the forward positions.

> Railways were also pressed into service, but all the Allied air attacks on the French and Belgium railway networks had been so effective that Army engineers had to cope with repairs on a large scale to bridges, tracks and marshalling yards, and they also had to remove debris and clear away wrecked trains from the lines.

> The great distances covered by the ground forces also Pipe lines made a continuous supply of petrol necessary. were laid as the armies advanced, and, by early October, this system was delivering 4,500 tons of petrol per day from the

> (1) Some idea of the capacity of these ports may be shown by the average daily landings during the week 19 - 25 (File DSC/TS. 108/9 Pt. 1). October.

British Ports	Tonnage	U.S. Ports	Tonnage
Ostend Dieppe	2083 4636	Arromanches Cherbourg	4097 9842
Caen	1977	Le Havre	3362

main distributing point near Paris. Later in the autumn a pipe line (Pluto) was laid under the channel between Dungeness and Boulogne, but by 17 November this was only delivering 360 tons of petrol per day.(1)

04

Another reason for the drain on supplies was the great increase of the Allied forces in north-west Europe. In the north, a new U.S. Army (the Ninth) was already disembarking in northern French ports. In the south U.S. and French troops were debouching through Marseilles to reinforce the newly formed Sixth Army Group in the southern sector of the front.(2)

The opening of Antwerp, the third largest port in the world, and within easy access of the front, was, therefore, the key to the problem. There was ample room for berthing large sized vessels and good facilities for unloading spares and equipment. The Chief Administrative Officer at S.H.A.E.F. estimated that, when it became available for use, an average of 25,000 tons could be unloaded there every day. In fact, when Antwerp first came into operation, the average daily landings during the week 6 - 12 December for British forces was 3,690 tons and for U.S. forces 14,175 tons - a total of 17,865 tons. During the following months this tonnage steadily increased in the face of attacks by flying bombs and rockets and despite being interrupted by dockers' strikes, until 14 February, 26,000 tons a day were being unloaded at the port.

At the same time General Eisenhower was determined not to slacken with offensive operations to reach the Rhine.

Two major tasks, the clearing of the port of Antwerp and the offensive west of the Rhine, had to be undertaken by inadequate forces with inadequate means. Twenty-First Army Group had insufficient troops for this dual task, while in the central sector, General Bradley's forces, not yet reinforced by the Ninth U.S. Army, were not strong enough to break through the Western Wall.

Field Marshal Montgomery made his plans in accordance with the Supreme Commander's intentions.(3) He envisaged a battle which would compel the enemy to fight in strength west of the Rhine, after which a swift advance would take place across Germany in the same way that the operations south of Caen had led to the dash across Northern France during the summer. General Dempsey's troops were to execute a movement north of the Maas which would envelop the awkward obstacle of the Reichwald Forest. The left wing of the British would then close to the Rhine between the towns of Emmerich and Wesel and the right wing was to threaten the Ruhr by advancing on the industrial centre of Krefeld. Simultaneously General Hodge's troops were to advance from the Aachen

DSC/TS.108/9 Pts.1 and 2

S.C.A.F.93 29 Sept. 1944

21 Army Group Directive M.527 27 Sept. 1944

<sup>(1)</sup> By 16 February 1945 however, this had been increased to 1569 tons of petrol per day. (File DSC/TS.108/9 Pt.2).

<sup>(2)</sup> On 7 November it was estimated that the port of Marseilles, severely damaged by the enemy, would be unloading 3,000 tons by 15 December. In fact, average landings at this port from 13 - 19 December amounted to 16,130 tons. (File DSC/TS.108/9 Pt.1).

<sup>(5)</sup> For Field Marshal Montgomery's views on the conduct of the campaign that autumn the reader should refer to 'Liberation of Northwest Europe', Vol. IV, Chap.6, page 129.

district and seek a crossing of the Rhine between Dusseldorf and Bonn.

It fell to the First Canadian Army to clear the Scheldt. This was an operation which needed considerable regrouping as these troops were strung out along the Channel coast. Only a week had elapsed since the capture of Boulogne while the protracted siege of Calais by a Canadian force was still in progress.

After a week's fighting during which the enemy tried his utmost to dislodge the Second Army from the Nijmegen bridge-head a crisis arose in the northern sector. This was due to the shortage of troops who faced a determined enemy fighting with his back to the Meuse in the north and manning the Western Wall in the south. Insufficient ammunition prevented both British and U.S. Armies using their superior weight of artillery. The problem of reinforcements and supplies had in the meantime been aggravated by a strong autumn gale which swept the Channel during the first week in October and interrupted the unloading of ships at Cherbourg and Arromanches.

'Eyes only' Montgomery to Eisenhower 6 Oct. 1944

'Eyes Only' Montgomery to Eisenhower 7 Oct. 1944

Montgomery's Notes on Situation for D.S.C. 7 Oct. 1944

In a series of signals to General Eisenhower from 6 - 9 October the Commander of Twenty-First Army Group expressed his anxiety over the tactical situation in the north and the inability of First U.S. Army to make any It had become obvious to him that the 7th U.S. progress. Armoured Division originally intended to form a link between the Second British and the First U.S. Army and to clear out the enemy west of the Meuse was unable to cope with the task. He considered that there was a serious lack of co-ordination between the plans of the two Armies. On the evening of 7 October Field Marshal Montgomery informed the Supreme Commander that he had been compelled to halt the thrust to-wards the Rhine(1) which according to the latest S.H.A.E.F. directive was the main objective in the north. was the enemy pressing too hard on the right flank of the Second Army between Gennep and Roermond but Twenty-First Army Group was not strong enough in man power to deal with the three tasks to which it was committed namely:-

- (i) Clearance of the approaches to Antwerp
- (ii) Defence of the Nijmegen bridgehead
- (iii) Clearance of the enemy west of the Meuse

At this point it should be explained that at that date there were only sixteen full scale divisions in Twenty-First Army Group with seven Independent or Special Service Brigades. This total included the two U.S. airborne divisions which had taken part in Operation Market and were now due for withdrawal from the fighting line to re-equip for future airborne operations.

The Supreme Commander, after receiving this signal, realised that the thrust of the two Armies towards the Ruhr must be postponed, although he told General Bradley that the

<sup>(1)</sup> Preliminary heavy bomber operations in support of this attack (Operation Gatwick) had already begun that day and a force of over 700 Lancasters and Mosquitoes bombed Emmerich and Cleve communication centres behind the enemy's defence line on the Meuse.

S.A.C. to Bradley 8 Oct. 1944

'Eyes Only' S.A.C. to Montgomery 9 Oct. 1944

'Eyes Only' Montgomery to Eisenhower 9 Oct. 1944

'Eyes Only' Montgomery to Eisenhower 1 Oct. 1944

21 Army Group Directive N.530 9 Oct. 1944

'Eyes Only' Montgomery to Eisenhower 8 Oct. 1944

Eyes Only' S.A.C. to Montgomery 10 Oct. 1944

See Map No. 1

first mission of the Northern and Central Groups of Armies was still to reach the Rhine north of Bonn 'as quickly as humanly possible'. He suggested shifting the weight of the First Army north of Aachen and moving the Ninth U.S. Army as soon as possible into that area. On the other hand, writing to Field Marshal Montgomery on the following day, he said that unless the port of Antwerp was in operation by mid-November the winter campaign in the west would have to close down. He indicated that the clearance of the Scheldt required Field Marshal Montgomery's personal attention and reinforced this argument by quoting a complaint from the Navy that the Canadians, owing to lack of a port had insufficient ammunition to launch their offensive on the Scheldt.

C

The Twenty-First Army Group Commander vigorously denied that there was any lack of ammunition and declared he would use every means available to open up Antwerp for shipping at an early date. While this interchange of signals was in progress Field Marshal Montgomery called a conference on 8 October at which General Bradley and General Hodges (First The Deputy Supreme Commander came from U.S. Army) attended. S.H.A.E.F. to ascertain the latest intentions of the Twenty-First Army Group Commander. Another visitor to the latter's Tactical Headquarters that day was General Marshall, Chief of Staff to the U.S. Army, then on a tour of inspection on the continent. As a result of decisions taken at these talks new orders were issued to the British Armies on 9 October. The Second Army was limited to clearing out the enemy west of The U.S. - British boundary was shifted to a line the Meuse. The area south across the Meuse between Hasselt and Sittard. and inclusive of these two towns was to be later taken over by the First U.S. Army. The 7th U.S. Armoured Division and a Belgian contingent were to come under command of the Second Army to help the operations along the Meuse. Meanwhile the Canadian Army was to devote its entire energies to clearing An American division, then arriving in the the Scheldt. Brussels area, was diverted and placed at the Canadian Army Commander's disposal and the 52nd (Lowland) Division (originally destined to be landed at Arnhem) was also earmarked for employment in the Scheldt offensive.

Field Marshal Montgomery had also shown disquiet over the fact that no Air Commander-in-Chief had been appointed in place of Air Chief Marshal Leigh Mallory who was about to leave for South East Asia. But General Eisenhower assured him that Air Chief Marshal Tedder was to be in command of all Air Forces in the west and would be personally responsible for air operations over the Scheldt.

## Clearance of the south bank of the Scheldt

The great port of Antwerp lies some fifty miles from the mouth of the Scheldt. On the south bank of this estuary there is polderland - flat, low-lying, marshy fields criss-crossed by ditches and canals. It was admirable country for defensive purposes and an attacking force either had to fight along narrow roads raked by machine guns or flounder through watery polder. On the north side lies South Beveland connected to the mainland by a narrow isthmus crossed by a causeway carrying a road and railway line and Walcheren, an island separated from South Beveland by the shallow Slooe Channel but joined at its narrowest point by a similar type of causeway. Walcheren stands like a sentinel at the mouth of the Scheldt and it was the keypoint in the German defence system. A large number of long range coastal guns had been

# THE BATTLE FOR THE APPROACHES TO ANTWERP

LEGEND. H.Q. 2 TACTICAL AIR FORCE AIRFIELDS OF No 83 & 84 GROUPS 6 NOV 1944 GROUP MAIN H.Q. (84) GROUP CONTROL CENTRE INTER-ARMY BOUNDARY SCHOUWEN APPROXIMATE FRONT LINE HERTOGENBOSCH VOLKEL N. BEVELAND THOLEN ERP WESTKAPELLE WALCHEREN MIDDELBURG -ROSENDAAL S. BEVELAND 2 ARMY BERGEN OP ZOOM ESSCHEN WOENSDRECHT BRESKENS EINDHOVEN KNOCKE TERNEUZEN TURNHOUT OSTEND BRUGES MALDEGEM DEURNE ANTWERP URSEL I CORPS MACHTELGAELSHOOK WONDELGEM. GHENT ST. DENIS WESTRAM DIEST CANADIAN CORPS @ GRIMBERGHEN EVERE 83 BRUSSELS

erected on the west side of the island and a quantity of anti-aircraft artillery had also been accumulated there.

At the beginning of October Antwerp city and the dockyards were in Allied hands. The enemy had been driven along the south bank of the Scheldt into what was called the Breskens Pocket. This was surrounded by a number of natural obstacles. On the east was the inlet of the Scheldt known at the time as the Savojaards Plaat but which is more correctly known as the Braakman Inlet. (1) To the south the enemy held the north bank of the Leopold Canal which begins just south of the Braakman Inlet and runs almost in a straight line towards the coast entering the sea below the holiday resort of Knocke Sur Mer. On the north and northeastern sides of this pocket were the North Sea and the The coastline between Breskens and Knocke was also heavily fortified with long range guns able to dominate the Leopold Canal while the heavy guns at Flushing in Walcheren covered the north bank of the Braakman Inlet.

On this coast Canadian troops advancing northwards from Bruges and Ghent had reached Zeebrugge and further inland had made an unsuccessful attempt to cross the Leopold Canal above Maldegem at the close of September. The 4th Canadian Division then began to control the Canal to the Braakman Inlet. At this time the 1st British Corps under command of the Canadian Army was responsible for operations north and east of Antwerp and after crossing the Antwerp-Turnhout Canal its main task was to support the left flank of the Second Army. The Canadian 2nd Division had begun to advance from Antwerp towards the South Beveland isthmus.

During September the enemy had been active in ferrying troops from the mainland to the Dutch islands. The 2nd T.A.F. had harassed this movement immediately before Operation Market and the prolonged spell of bad weather experienced at that time. The attacks had not been very successful for a number of reasons; prior commitments elsewhere, the poor weather and the powerful flak which was a deterrent to the fighter bombers. At night Mosquitoes of No. 2 Group attacked movement along the Scheldt whenever possible. The Supreme Commander foresaw that air power would play an important part in reducing the Scheldt defences and he requested the Deputy Chief of Air Staff that R.A.F. Bomber Command and the VIIIth U.S. Air Force should be made available for the coming operations.

Planning for operations in the Scheldt were begun in September by the First Canadian Army in conjunction with No. 84 Group R.A.F. and 'T' Force, The Royal Navy, the latter being detailed to put ashore the assault forces on The object of the operation was to clear the Walcheren. Scheldt estuary and from the first it was realised that arduous combined operations were required which might also involve airborne landings. The plan fell naturally into First it was necessary to capture the south three phases. bank of the Scheldt to enable an assault force together with artillery to concentrate on mounting an attack against Walcheren. This made the immediate clearance of the Breskens Pocket essential, the operation being known as Switchback. In conjunction with this attack South Beveland

Liberation of N.W. Europe Vol. IV. Chap. 6

S.A.C. to A.M. S.H.A.E.F. FWD 15386 21 Sept. 1944

<sup>(1)</sup> The Savojaards Plaat is the name given to the mud flats at the mouth of the inlet.

was to be isolated from the mainland. In the second phase this peninsula was to be captured by a thrust along the causeway from the north and an amphibious attack launched from Terneuzen on the south bank of the Scheldt. This was to be known as Operation Vitality. The final assault, Operation Infatuate, was to take place against Walcheren where, it was expected, the toughest fighting would take place owing to the formidable nature of the defences.

The plan for Operation Switchback was that elements of 3rd Canadian Division should attack across the Leopold Canal near Maldegem followed by an amphibious assault by a brigade across the Savojaards Plaat or Braakman Inlet. The latter force would then make for the defended areas of Breskens while the other troops advanced towards them clearing the enemy out of the centre of the pocket. No. 84 Group was to give full support to the ground forces. At the onset of the operation No. 84 Group had a Typhoon and a Spitfire Wing located at the large airfield of Deurne outside Antwerp and another Spitfire Wing was at Grimberghen in the same area. Also located near by were the reconnaissance squadrons and the Main Headquarters of the Group at St. Denis Westram. The remainder of the Group was at Courtrai and Merville south of Brussels.

File 2nd T.A.F. Orders of Battle June 1944 -May 1945

2nd T.A.F. Air Staff Appendices 58 et seq Oct. 1944

See Map No. 7

See Chap. 2 P. 34

2nd T.A.F. Daily Log Sheet Nos. 1772 - 1775

2nd T.A.F. Daily Log Sheet Nos. 1785 - 1789 and No. 84 Group O.R.B. App. 7. Oct. 1914 At this time the main task of the 2nd T.A.F. was to disorgenise communications leading to the battlefield north of the Ruhr. This plan involved the cutting of railway lines connecting the towns of Zwolle, Amersfoort, Utrecht, Deventer, Zutphen, Almelo, Hengelo, Winterswijk, Munster, Emmerich, Wesel north of the Rhine and Cleve, Goch, Xanten, Geldern, Venlo Roermond and others south of the Rhine. Thus all available aircraft not employed in direct support of the Army were engaged in bombing bridges, embankments, viaducts, fly-overs, cutting lines and attacking locomotives and goods wagons with rocket projectiles and cannon. These operations were slowly beginning to delay the arrival of enemy supplies and reinforcements.(1)

The assault across the Leopold Canal began on the morning of 6 October supported by flame throwers which, it was hoped, would dislodge the enemy entrenched on the reverse slope of the canal bank. The crossing was made in the face of strong opposition and reinforcements carried in assault boats found difficulty in reaching the far bank to strengthen the bridgehead. Good weather that day enabled No. 84 Group to give full support to the attack and gun positions at Breskens and a headquarters at Oostburg were bombed. Nearer the battle zone machine gun and mortar posts were strafed with rocket projectiles.

Although the weather deteriorated on the 7th there was intensive air activity. Fighter-bombers answered calls for close support from the Forward Control Post and over 100 sorties were flown against seven gun positions, three mortar emplacements and ten strongpoints and other targets. An attack by No. 2 Group had to be abandoned because of poor visibility. The Canadian troops were unable to make much headway as the canal was so well covered by enemy machine gun fire that they could not throw pontoon bridges over to the far bank.

<sup>(1)</sup> A photograph of a typical rail cut may be found at Appendix No. 7.

No. 84 Group 0.R.B. Oct. 1944

For the next three days low cloud and drizzle curtailed active air support over the Breskens Pocket. The force responsible for crossing the Braakman Inlet navigated its Buffaloes(1) up the Canal from Ghent to Terneuzen and after 24 hours' delay crossed over at midnight on 8 October. pre-arranged medium and fighter-bomber support had to be Once established on the far bank these troops cancelled. came under fire from the guns at Flushing and Breskens. the 10th Spitfires of No. 84 Group attacked enemy forming up areas south of Breskens but it was decided to use heavy bombers to silence the coastal batteries.

R.A.F. Bomber Cmd. 0.R.B. App. A. Oct. 1944

Ibid

2nd T.A.F. 1801-1820

No. 84 Group 0. R. B. App. 11 Oct. 1944

Daily Log Sheets Nos.

R.A.F. Bomber Cmd. 0.R.B. App. A. No. 930, 932. Oct. 1944

The first of these attacks took place on 11 October when two forces of Lancasters from R.A.F. Bomber Command One force attacked four batteries in flew to the Scheldt. Flushing and the other made for the guns in the ancient Fort Frederik Hendrik in Breskens. Fair visibility was experienced but the bomber crews had to fly through severe Another force returned to Fort Frederik Hendrik on the next day and after photographic reconnaissance had been made two guns were claimed to be out of action. these two days (11-12 October) 257 sorties were flown by Bomber Command in support of the Canadian Army. Medium bombers of No. 2 Group made a small attack against guns at Cadzand to the west of Breskens.

No. 84 Group made an intensive effort in the face of bad weather to support the Breskens operation from Typhoons and Spitfires attacked the road 10-12 October. Typhoons and Spitfires attacked the road junctions and towns of Oostburg, Schoondijke and Sluis south of Breskens where enemy infantry were believed to be concen-Strong points and mortars were strafed and trating. Typhoons assisted the heavy bombers by attacking gun positions at Breskens with 500 and 1,000 pound bombs. 11-12 October 1,400 sorties were flown and although a proportion of aircraft flew far from the battle area to cut German railways the majority of targets were either at Breskens, Walcheren or north of Antwerp. It was true that little damage was caused to the heavy guns, but so long as the fighter-bombers remained overhead the German gunners were quiescent.

As the troops on the north bank of the Leopold Canal were making little progress another infantry brigade crossed the Braakman Inlet and was ordered to strike southwards and link up with 4th Canadian Armoured Division on the Leopold The offensive This was achieved on 14 October. now developed into a two pronged drive, one column thrusting along the Scheldt to Knocke and the other probing to the The first stage was an assault coast north of Zeebrugge. against the fortified towns of Schoondijke, Breskens and The heavy guns at Flushing which Bomber Command Cadzand. had attempted to silence during the previous week had revived and were again harassing the Canadians west of the Consequently on 21 and 23 October 187 Braakman Inlet. Lancasters were despatched to re-attack the batteries. these two occasions just over 1,000 tons of high explosives were dropped. The latter attack was undertaken in bad were dropped. weather making accurate bombing almost impossible and several aircraft made two or three runs over the terget before releasing their bombloads. Powerful anti-aircraft defence went into action and claimed four of the Lancasters.

<sup>(1)</sup> Amphibious armoured carriers.

8

The 21st of October was a day of great activity for 2nd over the Breskens Pocket. It began with an attack T.A.F. over the Breskens Pocket. by a force of Mitchells and Bostons which had been directed to bomb the batteries at Cadzand. Visibility was poor and only the Mitchells were able to press home their attack using navigational aids. Further attempt was made that afternoon but only three 'boxes' of aircraft claimed to have bombed correctly. Operational orders to No. 84 Group gave first priority to the support of the Canadian Army and Typhoons and Spitfires were active throughout the day. A concerted attack was made against Fort Frederik Hendrik and other defended localities in Breskens. Heavy guns, fortified houses, pillboxes, slit trenches and roads were strafed with By nightfall about 230 sorties had been rocket projectiles. flown in support of the 2nd Canadian Division while other squadrons had attacked targets north of Antwerp. same time a high proportion of fighter bombers undertook the routine task of rail interdiction in north-west Germany.

2nd T.A.F. Daily Log Sheets No. 1911-1918

> In spite of the air bombardments the Canadians were still harassed by the enemy artillery although they experienced little difficulty in taking the town of Breskens. A last stand was made by the garrison of Fort Frederik Hendrik. But after a set piece attack had been planned, involving the support of medium and fighter bombers, the From garrison tamely gave in without a fight on 25 October. this date onwards the arduous battle south of the Scheldt drew rapidly to its close. The final task of the troops was to comb out the enemy in his concrete defences at Cadzand and Knocke. Bad weather once again prevented much air support and preparation for the assault on Walcheren due to begin on 1 November claimed first priority for No. 84 Group. The last troops of the German 64th Infantry Division surrendered near Knocke on 3 November and Belgium became the first of the occupied countries to be completely liberated by the Allies.

Report No. 188
Historical
Section.
Canadian
Mil. H.Q.
pp. 74 to 75

No. 84 Group O.R.B. App. 2. Nov. 1944

Among the captured was Major General Eberding who had commanded the troops in the Breskens Pocket. In an interview with the Commander of the 3rd Canadian Division he admitted that his artillery had been compelled to remain silent while Allied aircraft were overhead which is evidence that the efforts of the Typhoons had not been made in vain. Another interesting point brought forward by the German General was his opinion that more air attacks against his line of communication would have been more effective than the persistent strafing of town and village strongholds. other side to this picture was provided by the Commander of the 3rd Canadian Division who, shortly afterwards paid a tribute to the work of 2nd T.A.F. and referred to the value of the fighter bomber attacks on enemy observation posts, the destruction of buildings in fortified areas and tactical air He said that the constant availability of reconnaissance. aircraft for close support had greatly stimulated his troops who had to fight under such difficult conditions and that although on several occasions targets submitted for the fighter-bombers were sometimes less than 1,000 yards from the front line, there were only six occasions reported when aircraft fired upon Allied troops. In these cases no more than three men were wounded. The report ended with the follows words, "The effective air support provided from all channels materially assisted in the completion of our task and speeded up the clearing of the Breskens Pocket." The report ended with the following

A daring exploit by No. 84 Group during that week took place further afield. This was another attack by five Typhoon Squadrons of No. 146 Wing against the Headquarters of No. 84 Group O.R.B. Serial No. 59, 74. Oct. 1944 and App. No. 47 Nov. 1944

2nd T.A.F. Daily Log Sheet No. 1930

the Fifteenth German Army at Dordrecht just north of the Waal Estuary at mid-day on 24 October. Advantage was taken of a break in the low rain clouds which were so prevalent at that Careful planning made the raid a complete success. Dordrecht was known to be plentiful in anti-aircraft artillery and while some of the squadrons made feint attacks in various quarters of the town a rocket carrying squadron struck at the buildings lodging the Headquarters, Wing Commander Gillam, who led the attack, then dropped two phosphorus bombs which served as a guide to further Typhoons flying at a very low level and carrying eight 1,000 lb and fifty 500 lb bombs. strong barrage of flak then broke out, but owing to the success of the feint attacks all the aircraft returned safely to base. A number of the Dutch Resistance Movement watched the raid and afterwards inspected the damage. At least one building was in ruins and others were badly knocked about. The staff was just about to sit down to lunch at the time of the attack and several senior officers were apparently killed. Although a number of the inhabitants of the town also suffered from the attack the spirits of the Dutch were greatly exhilarated by this display of Allied air power. (1)

## The decision to abandon the thrust to the Ruhr

By the middle of October the operations to clear the Scheldt were slackening in tempo due to lack of troops to carry out the task and the weariness of men who had had no rest since the Normandy battle. The enemy was naturally determined to prevent the Allies from using Antwerp for as long as possible and although he was short of armoured troops he was able to make the maximum use of his infantry in defensive positions behind water obstacles. Winter was now approaching and unless the unloading of ships at Antwerp could begin soon, all Allied offensive operations would have to But it was not until 14 October that Field Marshal Montgomery became really anxious both about the slow progress being made towards the Scheldt and the inability of the First U.S. Army, owing to shortage of artillery ammunition, to strike towards the Rhine from Aachen. On that date he wrote to General Eisenhower and informed him that he was going to close down all offensive operations other than those along the Scheldt and that he would order the Second Army to strike eastwards to assist the Canadians. He said 'There seems no point in going off alone towards the Ruhr and to do so would not be good.

'Eyes only' Montgomery to Eisenhower

See Chap. 2, p. 29

21 Army Group Directive 532 16 Oct. 1944

A new directive was issued to Twenty-First Army Group on The Second Army was to launch an offensive from 16 October. the Nijmegen area towards S'Hertogenbosch and Breda and prevent the enemy escaping over the Maas. The boundary line between the British and Canadian Armies was to be the road running north and south from Turnhout to Tilburg. the main strength of the First Canadian Army was to move forward to clear Breskens, Walcheren and South Beveland, now that the Second Army was about to strike westwards, a more powerful thrust could be made by I Corps north of Antwerp in the direction of Bergen Op Zoom and Rosendaal to prevent the enemy reinforcing the South Beveland isthmus. Field Marshal Montgomery left his Tactical Headquarters at Eindhoven and came to his Main Headquarters at Brussels so as to be nearer the crucial battle.

<sup>(1)</sup> Further attacks were made on enemy headquarters in Holland, See Chap. 2, p. 44.

## The isolation and capture of South Beveland

During the first week of October the 1st British Corps had been given the dual task of advancing northwards towards the Maas to isolate the South Beveland isthmus while at the same time it was to support the left flank of General Dempsey's Army. At first good progress was made in the wooded country north of Antwerp against a scattered and demoralised enemy. A number of blows were dealt by fighter-A new technique for air support was bombers of 2nd T.A.F. tried out here by No. 84 Group. It had been customary in Normandy for the infantry to pin point targets by firing red smoke shells on to the target. But in this flat country it was difficult to ascertain the exact position of guns and Instead a smoke screen was laid along the strong points. British forward position extending from about 2,000 to 3,000 Beyond this line the fighter-bombers were free to attack targets of their own choice. Known as Operation Winkle, this system worked successfully on several occasions.

But once it was apparent that the 2nd Canadian Division was trying to cut off the South Beveland isthmus the enemy began to resist vigorously and strong reinforcements began to arrive in the threatened area. On 8 October air reconnaissance showed that there were over 2,000 troops assembling in the vicinity of Bergen Op Zoom. The Canadians continued to advance through Korteven and Woensdrecht and from 10-16 October several waves of troops tried to storm their way across the flat isthmus, but these attempts failed. Enemy machine guns took a heavy toll of men, many of whom were experiencing their first taste of battle.

The prospect of a westerly advance by the Second Army meant that pressure on these Canadians would soon be lifted. The 1st Corps was reinforced by the 104th U.S. Infantry Division and the 4th Canadian Armoured Division which had arrived from the Leopold Canal. The latter division now formed the spearhead of a new attack (Operation Suitcase). Its task was to strike across the Rosendaal Canal and seize the town of Esschen southeast of Bergen Op Zoom. This would force the enemy to relinquish his hold on the road from the Moerdijk bridge to South Beveland.

The attack began on the morning of 20 October and in front of a long line of smoke laid down by the artillery, rocket-carrying Typhoons of 2nd T.A.F. swept the straight road from the woods north of the Camp de Brasschaet to Esschen itself. This town was bombed by Spitfires which afterwards set alight a number of houses believed to be harbouring the enemy. Over 100 sorties were flown in that area by the end of the day. Esschen was captured by the armoured troops on the 21st. Bergen Op Zoom was the next objective and other troops of 1st Corps lunged at Rosendaal and Breda. On 22 October the Second Army attacked towards S'Hertogenbosch and from that date onwards the enemy began a slow withdrawal across the Maas. By the beginning of November Allied troops stood on the southern bank of the great river.

In the meantime the 2nd Canadian Division had regained strength for a fresh attack along the treacherous South Beveland isthmus. Once a footing had been gained on the peninsula the main obstacle was the Beveland Canal a wide waterway used by barges which cuts the peninsula in half from North to South. It was anticipated that the enemy would defend this line and an amphibious assault from the south

2nd T.A.F. Daily Log Sheets No. 1897-1902

No. 84 Group

O.R.B. Oct. 1944

p.2

See Map No. 1

bank of the Scheldt was designed to take the enemy garrison in the rear.

The assault on the isthmus began on 24 October but the Germans, among whom were hardened paratroops, still bitterly contested the district of Woensdrecht and they had sown numerous minefields to slow down the Allied advance. But the threat to Bergen Op Zoom in their rear forced them to withdraw and during the next two days 2nd Canadian Division crossed the narrow neck of the isthmus and advanced on the Beveland Canal. Their path was blocked by minefields and flooded polderland while the straight cobbled road which afforded the only dry approach was covered by fierce machine gun fire. Often the troops had to wade to their objectives through the waterlogged fields.

A brigade of 52nd (Lowland) Division carried out the The expedition put out in 'Buffaloes' amphibious operation. from Terneuzen in pitch darkness on the night of 25/26 October and landed on the dykes and slimy mudbanks of South Beveland to the east of Ellewoutsdijk. The defenders, mainly invalids and middle-aged men, were taken by surprise and a lodgement area was speedily formed. Meanwhile on the isthmus the 2nd Canadian Division experienced great hardships in crossing the watery landscape. The Beveland canal was crossed under heavy mortar and machine gum fire on 26 October. Although reinforcements to the Scottish troops were delayed by fog in the Scheldt, the 52nd division penetrated inland and on the 29th joined hands with the Canadians. The enemy was now pushed back to the causeway leading to Walcheren with little difficulty and by 31 October South Beveland had been entirely liberated. An attempt was made to follow the Germans across the causeway but it was too effectively covered by artillery, mortars and machine guns while the Slooe Channel at that point was too shallow for assault boats. After a gallant attempt to gain a footing on the far side of the causeway in Walcheren on 1 November, supported by rocket-firing Typhoons, the exhausted 2nd Canadian Division was withdrawn to rest and the Lowland Division planned a fresh assault which took place on the following day.

These operations had been for the most part an affair of the infantry. There were few targets for the fighter-bombers and owing to the exposed nature of the ground most of the advances were undertaken at night. But the part played by the Mosquitoes of No. 2 Group should be remembered. From the middle of September until the capture of outh Beveland these aircraft had ranged up and down the Scheldt by night attacking trains, barges and motor vehicles whenever the foul weather experienced throughout those weeks gave them an opportunity. Although a great deal of physical damage may not have been caused the fact that whenever a move was made by a formation, whatever its size or importance, it was likely to be attacked, must have played on the nerves of the enemy garrisons on Walcheren and Beveland.

## Reorganisation of the Air Command

While the opening stages of the Battle of the Scheldt were being fought, the control of the Tactical Air Forces passed into new hands and so before beginning the account of the combined operations against the island of Walcheren the new air organisation must be described. It was caused in the first place by the appointment of Air Chief Marshal Leigh-Mallory to the post of Air Commander-in-Chief, South-East Asia. But a simplified system for controlling the

File D.S.C./ T.S. 108/14 Encl. 1

S.H.A.E.F. (Air) Hist. Record and Diary p.1. Oct. 1944

File D.S.C./T.S. 108/14 Enc. 14 & 29A

Files D.S.C./H.3 and D.S.C./D.S. 108/14 Anglo-U.S. Tactical Air Forces had already been discussed shortly after the landings in Normandy and tentative proposals were made by the Deputy Chief of Staff (Air) for a joint Anglo-American Air Staff integrated in S.H.A.E.F. which would begin to function when the Supreme Commander assumed direction of operations on the continent.(1) By the end of September the Main Headquarters of A.E.A.F. had crossed the Channel to Versailles where it was alongside S.H.A.E.F. (Main), thus dispensing with Advanced Headquarters A.E.A.F. which had landed in Normandy in August. On 11 October Air Chief Marshal Leigh-Mallory left Versailles for London to prepare for his journey to South-East Asia, and on the 15th General Eisenhower announced the changes in command.(2)

The old Headquarters of A.E.A.F. which had been responsible for directing the air support to Overlord was disbanded and the Supreme Commander undertook responsibility for the operational control of the Air Forces which, until then, had been under the Air Commander-in-Chief. General Eisenhower delegated to the Deputy Supreme Commander authority to exercise this control and from hence forward until the end of the campaign the latter was responsible for co-ordinating all air operations in support of the Allied Expeditionary Forces. Air Chief Marshal Tedder was most unwilling to shelve his other duties as Deputy Supreme Commander and adviser to General Eisenhower, and determined to retain his interest in ground operations. It was for this reason that the appointment of the Deputy Chief of Staff (Air) assumed great importance, as this officer was to be responsible for day to day tactical air operations. After some discussion between the Deputy Chief of Air Staff and General Spaatz as to whether an American or British Officer should be appointed, Air Vice-Marshal J. M. Robb, on the strong recommendation of the Deputy Supreme Commander, was designated, and shortly after was promoted to the rank of Air Marshal(3) He became responsible for reporting on all air operations to the Supreme Commander and was on the same level of rank as General Bedell Smith, the ground forces Chief of Staff to General Eisenhower.

The Anglo-U.S. Staff was formed under the Deputy Chief of Staff (Air) and was divided into two echelons known respectively as Air Staff S.H.A.E.F. (Main) and Air Staff S.H.A.E.F. (Rear). The forward echelon, Air Staff S.H.A.E.F. (Main), was situated at Versailles. It was responsible for the policy and co-ordination of air operations supporting the Allied Expeditionary Force. In particular it was concerned with tactical air operations but it also had to assess and pass on requests made by the Tactical Air Force for assistance from the heavy bomber forces. In organisation it differed from A.E.A.F. in that it copied the Staff Division system on

<sup>(1)</sup> Air Staff S.H.A.E.F. would then co-ordinate the operations of the Tactical Air Forces attached to each Army Group in the same way that the Ground Staff of S.H.A.E.F. co-ordinated operations of the Army Groups.

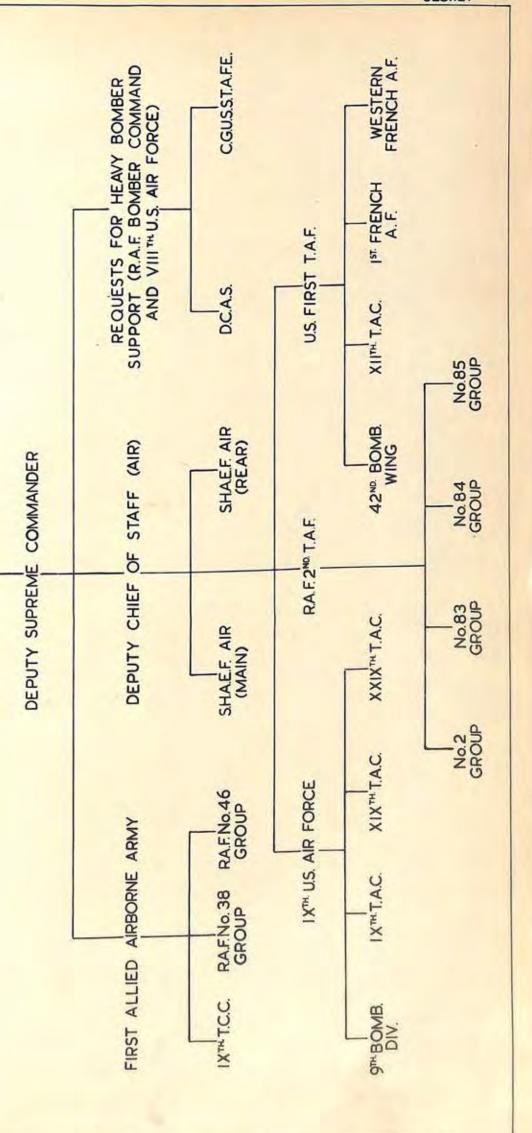
<sup>(2)</sup> The York aircraft carrying Air Chief Marshal Leigh-Mallory and party to India, while flying in a severe snow storm, crashed on a mountain about 30 miles east of Grenoble, France shortly after mid-day on 14 November. It was not until 5 June, when the snow had thawed, that the wreckage of the aircraft and remains of the crew were discovered by a peasant. (See File D.S.C./T.S.200).

<sup>(3)</sup> The post was, however, to be interchangeable to R.A.F./ U.S.A.A.F. Officers.

# CHAIN OF COMMAND: ALLIED AIR FORCES

SUPREME ALLIED COMMANDER

0



which the ground staff at S.H.A.E.F. was based. These divisions were as follows:-

A2 Intelligence
A3 Operations
A4 Administration

Air Signal Section Special Staff Section

A3 was divided into two sections, one was responsible for current operations, plans, airborne operations and C.A.T.O.R. (Combined Air Transport Operations Room), and the other for navigation, flying control and safety, airfields, service control and a section to compile operational records. The Special Staff Section dealt with such matters as chemical warfare, weather, air defence etc.

The Rear Echelon of Air Staff S.H.A.E.F., was located at Stanmore, the old Rear Headquarters of A.E.A.F., and was controlled by the Deputy Chief of Staff (Rear), Air Vice Marshal Wigglesworth. There were two reasons for keeping a large air staff in the U.K. In the first place the Combined Air Transport Operations Room operated at Stanmore and transmitted the demands of the Allied Expeditionary Force for air supply to the air transport Groups, which for the British were Nos. 38 and 46 Groups, and for the Americans, the IXth Troop Carrier Command. All these aircraft were based on the U.K.(2) Secondly, requirements in heavy bomber support which had been approved by the Deputy Supreme Commander at S.H.A.E.F. (Main) were passed on to S.H.A.E.F. (Rear) which arranged operations with the Strategic Air Force, also based in the U.K.

Air Defence Great Britain which, for the opening phases of Operation Overlord had been placed under the Air Commanderin-Chief, reverted to its old title of R.A.F. Fighter Command. The Air Marshal Commanding 2nd T.A.F. thus became the senior R.A.F. officer on the continent, apart from the Deputy Supreme Commander, and it was decided that he should dispose of all R.A.F. administration matters in conjunction with the Air Ministry. At the same time he was redesignated Air Officer Commanding-in-Chief 2nd T.A.F. In the U.K. Air Marshal Hill was given the title of Air Officer Commanding-in-Chief, R.A.F. Fighter Command, Nos. 38 and 46 Groups R.A.F. remained under the administrative control of Headquarters R.A.F. Fighter Command and Headquarters R.A.F. Transport Command respectively; operationally they continued to be directed by the Commanding General, First Allied Airborne Army.

In the strategic sphere the Deputy Chief of Air Staff and the Commanding General, United States Air Forces in Europe, continued to control the heavy bomber forces by

<sup>(1)</sup> A1 Personnel. This division was considered superfluous as matters of this nature were to be dealt with by the Headquarters of 2nd T.A.F. for British and Headquarters U.S.S.T.A.F.E. for U.S. personnel.

<sup>(2)</sup> The Deputy Supreme Commander directly controlled C.A.T.O.R. In theory all air transport was pooled for the use of S.H.A.E.F. (Air) wherever needed: in practice the U.S. aircraft were generally used in support of U.S. forces.

issuing directives from time to time on behalf of the Chief of Air Staff and the Chief of Staff U.S.A.A.F.(1) The Deputy Supreme Commander informed them when General Eisenhower required heavy bomber support in the battle and co-ordinated these operations with the ground and air forces participating. It was the responsibility of the Tactical Air Force Commanders to assess the Army's requests for heavy bomber support and, if acceptable, request S.H.A.E.F. to take action.

Acting under directives issued from time to time by the Supreme Commander the Tactical Air Force Commanders were to arrange normal day to day operations within their resources in consultation with their respective Army Group Commanders. Secondly, they were to give any necessary mutual support to each other's operations and were to consult directly with each other for that purpose. The Air Officer Commanding-in-Chief R.A.F. Fighter Command was to deal directly with the Air Officer Commanding-in-Chief 2nd T.A.F. for any necessary co-ordination of air operations.

Coincident with the direction of air operations by S.H.A.E.F. (Air) a new series of air meetings was held with the Army beginning on 13 October at Versailles. These took place after General Bedell Smith's daily staff conference and dealt with operational matters requiring immediate decisions; were, therefore, kept as brief and to the point as possible. Either an airman or soldier presided at this meeting it usually being Air Chief Marshal Tedder or Air Marshal Robb, for the Air Forces, and Lieutenant General Bedell Smith or Lieutenant General Morgan, his deputy, for the Ground Forces. Senior Staff Officers from R.A.F. Bomber Command, the First Allied Airborne Army and the Royal Navy usually attended the meeting in addition to the Assistant Chiefs of Staff (Air) in charge of Intelligence, Plans and Operations. Commanders Conference, which had been a feature of the campaign since it opened, continued to take place twice a week at Versailles and was attended by Air Officers Commanding and Senior Air and Ground Staff Officers. (2)

## The Assault on Walcheren - preliminary air operations

Walcheren island is about nine miles in length and about the same distance in breadth. Like the neighbouring

<sup>(1)</sup> One result of the control of the Strategic Air Force passing into the hands of the Chief of Air Staff and the Chief of Staff U.S.A.A.F. was that on 30 October the Combined Strategic Targets Committee was set up to advise the D.C.A.S. and C.G.U.S.T.A.F.E. on the priority of the different systems of strategic objectives and of the targets within these systems. The Committee was advised by Working Committees on oil, transportation, G.A.F. and any other target systems which required consideration. addition the Committee issued weekly priority lists of strategic targets for attack under the current directive. Members of both Air and Ground Staff S.H.A.E.F. as well as representatives from the Strategic Air Forces attended these meetings in order to acquaint themselves with strategic bombing policy and to put forward the viewpoints of their particular commands. (See S.H.A.E.F. (Air) Historical Record and Diary App. No. 5B-5C October 1944)

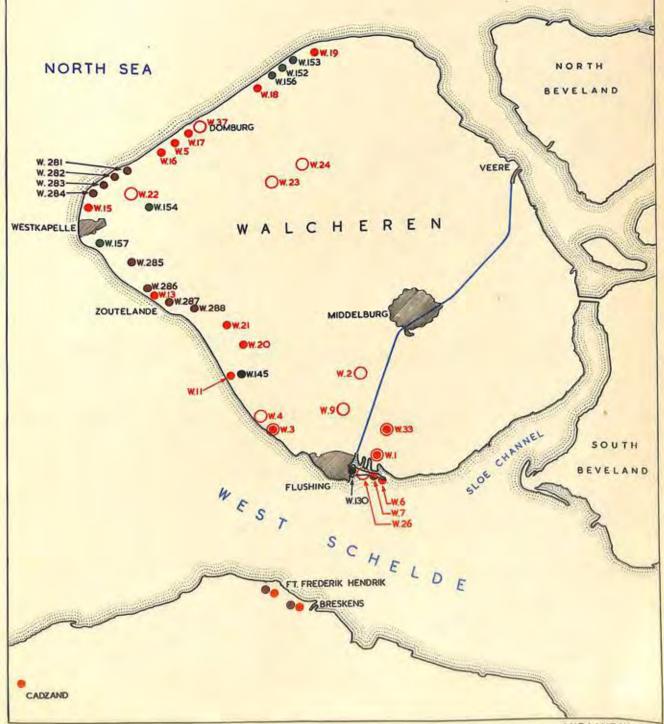
<sup>(2)</sup> For the move of S.H.A.E.F. to Reims, See Chap. 4, p.116

## PRE-ARRANGED AIR ATTACKS ON WALCHEREN

17 SEPT. - 30 OCT. 1944

## LEGEND

- AMMUNITION DUMP
- O BATTERY (ATTACKED BY 2ND. T.A.F.)
- BATTERY (ATTACKED BY BOMBER COMMAND)
- STRONGPOINT
- RADAR STATION



peninsula of South Beveland its interior is mainly below sealevel and is composed of cultivated fields criss-crossed by Throughout the dykes and ditches and marshy polderland. centuries the Dutch have patiently tried to reclaim the land by building sea walls reinforced by sand dunes round the island so that from the air Walcheren resembles a giant saucer. On the western side this sea wall, which was largely built of clay and faced by stone varied from 250 to 300 feet in width Out to sea at high tide and had very broad, gradual slopes. there are numerous shoals which obstruct navigation. A force attempting to take the island by storm would have to land on the southwest coast where there was the only beach though even there the sand dunes were too steep for vehicles to Elsewhere the wall ran parallel with the sea. the southern side of the island is Flushing, a fair sized port connected by canal to Middelburg which lies roughly in the centre of the island and is the capital and market town.

The island played an important part in the enemy's defences along the coast line of Europe and consequently these positions were built facing the west in anticipation of an assault from the sea. What the Germans had not foreseen was an attack from the rear, the occupation of Antwerp and an advance to the South bank of the Scheldt or along the isthmus The most heavily defended area was thereof South Beveland. fore the coast-line between Flushing and West Kapelle where coastal guns could cover the mouth of the Scheldt in company with those ensconsed at Breskens. There were reckoned to be with those ensconsed at Breskens. There were reckoned to be about twenty-five batteries, the largest calibres being 220mm. Pill boxes, minefields and underwater obstacles and 150 mm. such as stakes studded this part of the coastline, in addition to the many groins built by the Dutch. It is curious that the possibility of the flooding had not occurred to the enemy; he made no counter-preparations against this threat and a number of his batteries, headquarters and other defensive positions had been placed on low lying ground, At the same time Allied Intelligence doubted whether the Germans would risk flooding Walcheren for their own purposes, and believed that even they would shrink from being responsible for such a calamity.

After the battle of Arnhem the Commander of the Fifteenth German Army gave orders that Walcheren was to be held to the last for, the order went on to say, 'After overrunning the Scheldt fortifications the English would finally be in a position to land great masses of material in a large and completely protected harbour. With this material they might deal a death blow at the north German plateau before the onset of winter.' But the troops on Walcheren island who were to undertake this important task were far from being first class. The majority of them were dyspeptics and had been posted to Holland where they might enjoy the white bread, milk and fresh vegetables of the district. Nevertheless the German High Command believed that from behind concrete and steel these troops were as capable as any at firing a gun or a rifle and certainly the fierce resistance met during the assault tends to support this theory.

General Crerar (First Canadian Army) made Lieutenant General Simonds, Commander of 2nd Canadian Corps, responsible for carrying out the operation and, from the last week of September when General Crerar was compelled to relinquish his command temporarily owing to sickness, General Simonds became entirely responsible for the operations in the Scheldt.

No. 84 Group O.R.B. App. No. 6 Nov. 1944

Report No. 188 Hist. Sect. Cdn. Mil. H.Q. p.39 No. 84 Group's Report on Walcheren Ops. No. 84 Group O.R.B. App. 19 Nov. 1944 Between 13 and 29 September six meetings were held at
First Canadian Army Headquarters. Officers who attended were
the Allied Naval Commander, Expeditionary Force, the General
Officer Commanding First Canadian Army, the Commander of 'T'
Force, the Royal Navy, the Chief of Staff, Twenty-First Army
Group, the Air Officer Commanding No. 84 Group and Senior
Staff Officers from A.E.A.F., Bomber Command and the Canadian
Army. The main topic discussed was the nature of the bombing
programme to be undertaken before D Day.

The requirements of the Navy were that the heavy coastal guns south of the Scheldt should be put out of action to enable the naval bombardment ships to approach Walcheren and in the second place to allow mine sweeping at the mouth of the But by 10 October Scheldt to be carried out without hazard. these guns had not fired and there seemed no longer to be any urgency for their immediate destruction. In their place the radar stations on Walcheren became first priority as they were more likely to interfere with mine sweeping operations. No. 84 Group required the silencing of heavy anti-aircraft guns to enable its fighter bombers to operate more extensively over the island. It was agreed that heavy bombers should undertake the destruction of the fixed defences and the heavy anti-aircraft batteries while the fighter-bombers should destroy enemy headquarters, the lock gates on the Beveland and Walcheren canals, shipping in the Scheldt and telephonic communications on the islands. The Army endeavoured to establish a direct link between Canadian Army Headquarters and Bomber Command as had been done in the operations against Boulogne and Calais but this was not sanctioned. direct link was set up between No. 84 Group and Bomber Command through which information and details about targets were passed.

File II S1/13(A) Encl. 3A No. 84 Group O.R.B. App. 19 Nov. 1944

The first plan for the reduction of Walcheren was the isolation of the island by medium bombers outting the causeway which links it to South Beveland and the road and railway crossing the neck of the South Beveland peninsula. this, heavy bombers were to 'soften' the coastal batteries. The Senior Air Staff Officer of No. 84 Group confidently expected that these guns would be thrown out of alignment because of the soft sand in which the casemates were constructed. In the next phase airborne troops were to land in the area west of the Veere-Flushing Canal. Once beach obstacles and minefields had been cleared a seaborne force would cross the Scheldt and occupy the island in force. the air programme did not work out according to plan, coinciding as it did with the Arnhem operations and the bad The medium bomber flying weather at the end of September. attacks made by No. 2 Group and the IXth Air Force (the latter making one attack) did little damage to the causeway and the enemy was able to withdraw troops into the islands for their defence. General Brereton, supported by Air Chief Marshal Leigh-Mallory persuaded the Supreme Commander to squash any idea of an airborne operation as they firmly held that although heavy casualties would be accepted to gain such an important objective, the terrain was altogether unsuitable and, in addition, aircraft would be diverted from their ground support role.

The Brereton Diaries PP-340-1, 353

6 A.C. to F.H. Hontgomery 8-H.A.E.F. PWD 19385 21 Bapt. 1944

P116 8.C./30717/16 Encl. 11A But the Supreme Commander had resolved that the assault on Walcheren should have full support from the heavy bomber forces, both British and American, and sent a signal to the Air Ministry asking that they should be employed in this operation. In London it was decided that Bomber Command should undertake the attacks which were to be co-ordinated by

A.II. File. II51/13(A) Encl. 4A

R.A.F. Bomber Command O.R.B. App.A 906 Sept. 1944 Ibid A907 A908 Ibid A910 No. 84 Group Sept. 1944

A.M. File II51/13(A) Encl. 5A

File R.A.F. Bomber Command B.C./T.S.30717/16 Encl. 18A

D.S.C./T.S. 100/9 Pt. 3 Encls. 3B 4A 5A

A.M. File II.S/13(A) Encl. 5A

Report No. 188 Hist. Sect. Cdn. Army H.Q. PD. 36-37 pp. 28-29.

On 14 September, only three the Air Commander-in-Chief. days before operation Market was due to begin, Field Marshal Montgomery requested the Air Commander-in-Chief that the air programme for Walcheren should begin at once. Although the battle situation on the ground clearly did not permit an assault against the island for some time, heavy and fighter-bomber attacks took place on the week beginning On that day 100 heavy bombers of Bomber 17 September. Command attacked coastal defence guns at Flushing, Biggekerke and West Kapelle and in the course of their attack dropped During the next two days about 519 tons of high explosive. 100 aircraft flew to Walcheren but nearly all were forced to Eventually on return because of the bad weather. 23 September a small force of 50 aircraft managed to bomb the batteries at Domburg on the north coast of Walcheren. Fighter-bomber attacks took place on 20 and 22 September against the garrison headquarters at Domburg but only one of these operations was at all successful. On 1 October Typhoon squadrons attacked six radar stations on the island in response to the Navy's request but it was difficult to ascertain whether or not they had been put out of action.

On 23 September at a conference of Army, Naval and Air Officers hald at First Canadian Army Headquarters, General Simonds declared that he wanted Walcheren to be a 'second Pantellaria' and that a prolonged heavy bomber attack should at once begin. The Air Commander-in-Chief had, by should at once begin. this time, become anxious over the squandering of the heavy bomber effort when it was obvious that there were no chances of launching a ground attack until sufficient stocks of This might not become posammunition had been built up. He expressed his doubts as sible for another three weeks. to the success of the air operations in a letter to General Eisenhower on 27 September and told him that the landings in Normandy had proved that unless the heavy bomber attacks were followed rapidly by a ground assault their effect on the enemy would be wasted. It was better that for the present the Strategic Air Forces should attack targets in Germany and then make a sustained effort on the enemy defences during the 48 hours before a combined air and ground assault on the island.

This advice did not appear to be heeded for, at the Air Commanders Meeting at S.H.A.E.F. two days later, the Air Commander-in-Chief stated that General Eisenhower had insisted on an all out air effort against Walcheren and at the Air Meetings held on 3 and 6 October the Deputy Supreme Commander said that Walcheren should rank as first priority for the heavy bomber force. But by that time, faced by a re-invigorated enemy the Army decided that the only way to take Walcheren would be by the methodical process of driving him out from the south bank of the Scheldt and isolating and capturing South Beveland. Thus for the time being the air effort was to be directed in support of operations south of the Scheldt and not against Walcheren.

It was at the Conference at Canadian Army Headquarters on 23 September that Lieutenant General Simonds first mooted the idea of flooding the island by making a breach in the sea wall with heavy bombers, although his Chief Engineer had condemned this operation as being impracticable. There was, of course, a tactical argument against the scheme. The enemy could turn the floods into an ally and place his weapons to cover the high ground over which the only movement would be possible. Yet the advantages seemed to outweigh

all doubts about the efficacy of the plan. Flooding would completely disorganise the enemy's communications, immobilise his reinforcements and at the same time put out of action a number of his defence works. Furthermore the assault forces would be able to take advantage of the floods by swimming through the breach in amphibious vehicles and operating behind the enemy's forward positions. The scheme for flooding the island was discussed in detail at a further conference on 29 September attended by Lieutenant General Simonds, Captain Pugsley Commander of 'T' Force, Air Vice-Marshal L. O. Brown, Air Officer Commanding No. 84 Group and Air Commodore Dickens representing Bomber Command. photographs of the dyke had been examined the Air Officers agreed that the task of making a breach was practicable although it might take time. Air Commodore Dickens emphasised that he could not guarantee success but said that Bomber Command was capable of making the attempt single-handed. Although the floods would ruin the livelihood of thousands of Dutchmen and undo the work of centuries the need for Antwerp was so pressing that it was decided by all present to carryout the scheme with the sanction of the Supreme Commander. The heavy bombers were therefore to concentrate on flooding the island and were to leave the bombing of fixed defences until three or four days before the assault began. Supreme Commander gave his assent to this fateful strategem on 30 September.

A.M. File IIS 1/13/(A) Encls. 11A and 12A

File B.C./T.S. 30717/16 Encl. 27A

R.A.F. Bomber Cmd. O.R.B. App. A 918 Oct. 1944

File B.C./T.S.30717 /16 Encl. 38A

R.A.F. Bomber Cmd. C.R.B. App. A 921 Oct. 1944

R.A.F. Bomber Command, the force detailed for the task, was instructed to make the breach at the earliest opportunity for it was during the first week of October that the spring tides were due to take place and it was thought that this extra weight of water would increase the gap in the dyke made Preparations began at once and on 2 October by the bombers. the Dutch inhabitants of Walcheren were warned by radio and leaflet that heavy bombardment of the island was about to take place and they were advised to evacuate their homes. The first attempt to make a breach took place on the next day. The spot chosen was at West Kapelle which is the most westerly promontory of the island. North and South of this village the sea wall was much narrower than elsewhere. force of 259 Lancasters and Mosquitoes took off to make the first attempt and the pathfinders dropped their markers on the target area at 1300 hours. The heavy bombers attacked in waves of 30 aircraft and the whole operation lasted two hours, during which 1,262 tons of explosive were dropped. A large amount of flak was experienced during the operations but only twelve aircraft made abortive missions. (1) time did the G.A.F. put in an appearance. By 1500 hours bomber crews observed the sea pouring through a gap in the wall and spreading about three quarters of a mile inland. Reconnaissance aircraft of No. 84 Group confirmed their reports a few hours later and estimated that the gap was about 75 yards in width while the sea was rapidly covering the fields south of West Kapelle.

On 7 October aerial reconnaissance discovered that the floods which had increased to about two miles in width had spread beyond the town of Middelburg and theatened to cut the island in half. On the same day another attack was made by 113 Lancasters and Mosquitoes, this time further south, on

<sup>(1)</sup> The attack was to have been concluded by the dropping of a number of Tallboys (12,000 pounders) but as the object of the mission had already been fulfilled they were brought home.

the sea walls on either side of the port of Flushing.
During these attacks 730 tons of high explosive were dropped. Here too, the water seeped inland and penetrated into the streets of the town. Another smaller attack was made four days later at Veere on the eastern side of the island by 66 Lancasters and again a substantial hole was made in the dyke.

The successful flooding of the island put a new complexion on the Scheldt battle and preparations went forward for a combined operation to take place at Flushing and West A schedule for heavy bomber targets to be attacked by D Day minus one was drawn up by the Senior Air Staff Officer of No. 84 Group and the Chief of Staff, First Canadian Army. There was a total of 32 targets which were to be attacked by Bomber Command. Of these four were long to be attacked by Bomber Command. range guns which might harass Allied naval craft in the Scheldt, seven were capable of attacking military preparations on the south bank of the Scheldt, seven were antiaircraft batteries and finally there were another six heavy batteries and eight defended localities. (1) A final schedule of target for No. 84 Group was issued on 29 October and was to be completed by midnight on the 31st. They were two ammunition dumps or stores, four radar stations(2) and one battery of 75 mm. guns. The decision to swim amphibious vehicles through the gap in the dyke at West Kapelle led the Navy to request a widening of the breach. Bomber Command undertook this operation on 17 October and the force dropped bombs on the southern shoulder of the gap. By this date Bomber Command had flown 494 sorties and had dropped a total of 2,665 tons of bombs on the dykes.

R.A.F. Bomber Cmd. App. A Oct. 1944

A.M. File 1151/13(B) Pt. II

A.M. Coningham's Draft Report para. 143 and File D.S.C./T.S. 100/9 Part 5 Encl. 19A

Ibid Encls. 11A to 14A

See Chap. 2, p. 32 The Army when making its requests for pre-arranged heavy bomber attacks had been frankly told by Air Marshal Coningham and Air Commodore Dickens of Bomber Command that the effects on the gun positions might well be negligible. In the meantime S.H.A.E.F. (Air) had become apprehensive over the diversion of the heavy bomber effort to Walcheren, for between 11 and 23 October four daylight raids were made against the guns at Flushing and Breskens besides an attack on the dykes.(3) At this time many Senior Allied Air Officers believed that it was more important to strike a heavy blow against German communications and industry.

The Deputy Supreme Commander and air officers of S.H.A.E.F. (Air) had approved the plan known as Operation Hurricane - a combination of heavy bomber attacks against communication and oil targets in the Ruhr which were to be supported by fighter-bomber attacks on railways and bridges on the fringes of the industrial area and this plan was to be put into effect as soon as favourable weather came.

It was therefore not surprising that they should regard the expeditions of heavy bombers to Walcheren with disfavour especially as these operations did not have the effect of

<sup>(1)</sup> Eight of these gun positions were discovered later to have been flooded.

<sup>(2)</sup> These had been attacked on 1 October.

<sup>(3)</sup> During that period many Bomber Command aircraft were not available for other operations as they were standing by for good weather to attack the guns.

File D.S.C./T.S.100/9 Part 5 End 15A permanently silencing the batteries. On the other hand the Army wented as much heavy bomber support as possible owing to the general exhaustion of the troops and the pressing need for artillery to support an offensive against the Ruhr. A similar view had been taken by General Marshall who had been urging full support by heavy bombers to the Army in a supreme effort to finish the war by the New Year. At the Air Commanders Conference on 24 October the Deputy Supreme Commander forbade further heavy bomber attacks against the Walcheren dykes and ordered a joint air plan to be made by the 2nd T.A.F. and the First Canadian Army. (1) On the same day No. 84 Group was instructed by Headquarters 2nd T.A.F. to take over from the heavy bombers the task of silencing a number of batteries.

R.A.F. Bomber Cmd. O.R.B. App. A Oct. 1944

See Chap. 2, p. 34

Ibid

See Map No. 3

2nd T.A.F. Daily Log Sheet Nos. 1944-1979 and No. 84 Group 0.R.B. Oct. 1944 But despite these diversions Bomber Command was able to deal a number of heavy blows against the Ruhr during the last two weeks of October. On 14 October a thousand bomber raid was made against Duisburg in daylight and that night another thousand bombers returned to the same town. On the night of 23/24 October 1,000 aircraft bombed Essen; this raid was followed up on the next day when 770 heavy bombers revisited Essen. Similar tactics were adopted against Cologne on the 28th and on the night of 30/31 October. During these attacks 1,639 aircraft dropped their bombloads on the city.(2)

The assault on Walcheren was planned to begin on 1 November and from 28-30 October just over 740 aircraft of Bomber Command attacked strongpoints and gun positions dropping 4,092 tons of bombs. Although strong flak was experienced on the first and last of these attacks only rour of the heavy bombers failed to return to base. Escort was provided by Fighter Command Spitfires but on no occasion did the Luftwaffe attempt to interfere. The largest of the attacks took place on the 29th which happened to be almost oloudless. Over 350 aircraft were involved and eleven targets from Domburg to Zouteland (north of Flushing) were Thirty to thirty five aircraft were detailed for attacked. each battery. It was unfortunate that the attacks for the 31st (D Day minus one) had to be cancelled because of bad weather and thus it was impossible to carry the saturation of targets up to the last minute.

On 28 October No. 84 Group was instructed to make the gun positions on Walcheren its first priority. these batteries were in the Flushing area and one north of Zouteland in the Domburg area. Repeated attacks were made that day by Spitfires and Typhoons carrying 500 pound bombs; rocket projectiles were used as well. Reconnaissance showed that very little physical damage was caused and in only one case was a battery destroyed and this was after thirty tons of high explosive had been dropped on it. On the 29th a further attempt was made and one of the batteries was reattacked a number of times with both 500 pound and 1,000 pound bombs. Strong points were also strafed. Although the flak met by the fighter-bomber pilots was severe no aircraft was lost during these operations. The drizzly rain and low cloud once again covered the area on 30 October

<sup>(1)</sup> As seen, the plan was in fact made by H.Q. No. 84 Group and the Canadian Army.

<sup>(2)</sup> Attacks by over a thousand aircraft were made by the VIIIth Air Force against Cologne on 14 and 17 October.

21

making it possible to fly only 28 sorties against Walcheren. These were attacks against the port facilities in Flushing and Veere. But weather conditions worsened. On the 31st visibility was reduced to a thousand yards in certain areas and flying operations had to be abandoned. This gave the enemy a valuable respite for two days before the assault took place.

Nevertheless a substantial effort had been made by 2nd T.A.F. for from 28-30 October, 646 sorties had been flown against the island defences. This total does not include the effort made south of the Scheldt where Typhoons assisted in the worming out of the enemy garrison there and also in support of the 1st British Corps operations north of Antwerp.

## The Plan for the assault

The main problem which the planners had to face was the weather and the heavy seas on the Dutch coast to be expected at that time of year. This limited the amphibious operation to either the first days of November or about the middle The assault (Operation Infatuate) was to be of the month. Operation Infatuate I was the carried out in two phases. attack on Flushing. Commandos were to sail from Breskens on the night of 31 October/1 November and were to land on the sea front of the town in the early hours of that morning. The Army was anxious to swamp the defences by a heavy bomber attack while a strong artillery barrage was to be fired from Apart from this the operathe south bank of the Scheldt. tion was not to depend on air support. The landings at West Kapelle (Infatuate II) were to be made about three and a half hours later. The force consisting of Royal Marine Commandos and a Naval Support Squadron were to leave Ostend, shortly after midnight on 1 November and take up their posi-At 0900 hours the Support Squadron tions in the Scheldt. was then to deluge the coast defences with rockets and medium and light artillery were to fire from converted land-Out to sea the battleship H.M.S. Warspite and ing craft. the monitors H.M.S. Erebus and H.M.S. Roberts were to give supporting fire with their 15 inch guns assisted by air At 0945 hours the Commandos were to pass through the gap in their amphibians, land on the dunes and link up with the assault force at Flushing and capture the batteries at Domburg.

No. 84 Group Report on Walcheren. Lessons learnt.

A.M. File II

S1/13(B)

Part II

Unfortunately it was found impossible to concentrate the sea and ground forces involved in Infatuate until shortly Thus it happened that before the start of the operation. the Commandos trained for the landings at Ostend and the Naval force which was to support them prepared for its role Similarly the combined planning staffs working in England. at Bruges, although only a short distance from Ghent, the Main Headquarters of First Canadian Army and No. 84 Group were too far away from the staffs of the higher formations, Twenty-First Army Group and 2nd T.A.F., to facilitate the exchange of ideas on all aspects of the landings and this later led to misunderstandings and recriminations despite, the representation of all three Services at the most important planning conferences and despite the ultimate success of the operation. (1)

<sup>(1)</sup> Another point to be noted during the planning phase was the lack of low level air photographs of the Walcheren coastline. See Report on Infatuate II by the Commander Force 'T' App. E para. 8.

A.M. File II SI/13(B) Part II

All available aircraft of No. 84 Group which could be spared from other commitments were to support Operation Infatuate by giving cover to the naval craft and close support for the landings and the subsequent ground operations in the interior of the island. The close support was to consist of fighter-bomber attacks along the coast at West Kapelle for twenty minutes before H Hour to subdue the For fifteen minutes immediately enemy gun positions. before and after H Hour (H Hour minus 5 to H Hour plus 10) four rocket carrying Typhoon squadrons were to attack preselected targets in the interval when the Support Squadron had fired their rockets and while the Commandos were going ashore. For the rest of D Day a cab rank of fighter-bombers was to be on call from the Air Support Signals Unit which was to land with the ground troops. (1) An Air Staff Officer aboard the Headquarters ship H.M.S. Kingsmill(2) was to be in touch both with No. 84 Group Control Centre and the aircraft participating and would give them orders to begin the attacks.

In the interval between the establishment of the Air Support Signals Unit ashore and the link up of communications with the Forward Control Post free-lance squadrons were to engage targets of opportunity. Medium bombers of No. 2 Group were to provide a smoke screen before and after H Hour and air spotting squadrons from the U.K. were to direct the fire of the naval guns.

The decision to abandon the heavy bomber attack on Flushing

D.S.C./T.S. 100/9 Part 3 Encl. 19A

File

See Lib. N.W.Europe Vol. IV Chap.6

File D.S.C./T.S.100 Part 7 Encl. 45A

A.M. File ID4/38 D.S.C./T.S.100 Part 7 Encl. 46A

The Army's demand for the bombing of Flushing soon met with disapproval from the Air Commanders and this matter was fully discussed at an important Air Staff Meeting on Sunday, 29 October attended amongst others by General Eisenhower, the Chief of Air Staff and the Deputy Supreme Commander. Marshal Coningham in reply to a question put by the Deputy Supreme Commander as to why 2nd T.A.F. could not deal with the targets in Flushing, said that its defences were believed to be very strong and that as the assault was to take place at dawn he had suggested night attacks by Mosquitoes. Assistant Chief of Staff (Air) then recalled the havoc brought by Bomber Command on Le Havre and thought that the Dutch might suffer a similar fate. The upshot of the discussion was that the Deputy Supreme Commander forbade heavy bomber attacks on the town but permitted Mosquito attacks immediately before the assault. In this decision he was supported by the Chief of Air Staff.

On the same afternoon the Commander in Chief, Bomber Command telephoned to Air Chief Marshal Tedder and told him that he felt extremely reluctant about bombing Flushing. After this conversation it is believed that Air Chief Marshal Harris put forward the same opinion to the Prime Minister. At all events Mr. Churchill placed a veto on the bombing of the town that evening and this was communicated to S.H.A.E.F. (Air) shortly after midnight on 30 October. Later on the 30th the British Chiefs of Staff asked the Supreme Commander whether he thought the bombing of Flushing was essential and after consultations between 2nd T.A.F. and

<sup>(1)</sup> The Air Support Signals Unit was to be in contact with the Forward Control Post at Breskens.

<sup>(2)</sup> Group Captain Cleland.

A.H. File ID4/38

Twenty-First Army Group the air plan was revised to exclude attacks on Flushing. At the meeting of the War Cabinet in London that day it was decided that Flushing would only be bombed on instructions from the Combined Chiefs of Staff.

File D.S.C./T.S.100 Part 7 Encl. 48A

But by the following day, 31 October, a new situation had arisen. As a result of the collapse of South Beveland it was believed that from two to three thousand of the enemy Accordingly at mid-day had entered Flushing. General Bedell Smith signalled the British Chiefs of Staff and asked that the C.C.S.(1) should sanction fighter and medium bomber attacks on the town to assist the assault. The reply of the Prime Minister that evening was to the effect that while all efforts should be made to spare the Dutch inhabitants of Flushing 'the view of the Supreme Commander must prevail'.

A.M. File I D4/38

Meanwhile the Air Officer Commanding 2nd T.A.F. had been urging a heavy bomber attack on Flushing as he did not believe that weather conditions would permit the Mosquitoes S.H.A.E.F. (Air) to operate while the heavy bombers would have the advantage Hist. He was then informed of the Prime Minister's ban. The Army although extremely pessimistic about gaining surprise thereupon decided to carry out the attack that night as planned.

Record-Diary Apps. 6A - 6B

> At the same time naval and military commanders had been discussing the feasibility of an assault at West Kapelle Air Vice Marshal Brown in view of the bad weather forecast. recommended postponement for 24 hours, but General Simonds and Admiral Ramsay agreed that the force should sail, although they empowered the Commanders on the spot to turn back if they thought weather conditions were too bad to land the troops. Shortly before leaving Ostend the Air Staff Officer on board H.M.S. Kingsmill informed the Force Commanders that it was unlikely that they would get air sup-The decision to sail with port before mid-day on the 1st. The decision to sail with the knowledge that air support would not be forthcoming was indeed a grave one, but it was felt that if a postponement was made then, on another occasion the seas might be too rough for assault craft to land.

A.if. File II S1/13/(B)

## The Landings at Flushing

Just after 1900 hours on the evening of 31 October 35 Mosquitoes of No. 2 Group took off from the U.K. to attack The pilots the defences along the water front of Flushing. encountered very bad weather over Walcheren, but pressed home their attacks until the early hours of the morning strafing the beaches with cannon and 500 pound bombs. observed a large explosion and flames rising to the height All the aircraft had returned safely to of 1,000 feet. The Commandos base by 0630 hours on the next morning. left Flushing in their assault craft at 0440 hours and cruised in the Scheldt watching the air attacks on the town and identifying landmarks silhouetted by the explosions. This was accompanied by a powerful artillery barrage fired by eight regiments of artillery. At 0545 hours the leading detachments of Commandos landed on the sea front. enemy was, in fact, completely taken by surprise and opposition did not become troublesome until after the initial objectives had been taken.

2nd T.A.F. Daily Log Sheet No. 1985

> At the airfields of No. 84 Group back in Belgium that morning rain was falling, the cloud base was less than 1,000 feet and visibility in some cases was only up to 2,000 yards. Thus the rocket carrying Typhoons due to support the

<sup>(1)</sup> Combined Chiefs of Staff.

## SECRET

24

2nd T.A.F. Daily Log Sheets No. 1987 to 1989

operation against Flushing did not become airborne until 1100 hours. But from that time onwards until about 1700 hours vigorous support was given to the Commandos in the face of rain and drizzle which persisted throughout the day. About 160 sorties were flown, over half of them under direction of the Forward Control Post at Breskens. Targets were heavy guns, concrete emplacements, the fort on the mole and other strong points. By nightfall the Commandos were in . firm possession of Flushing with the exception of a few isolated parties of the enemy who held out in various quarters of the town.

## The Landings at West Kapelle

A.M. File II S1/13/(B) Encl. 50A

Ibid Part III ANCXF Report on Walcheren

2nd T.A.F. Daily Log Sheet No. 1988

The assault force destined to land at West Kapelle sailed from Ostend in the early hours of 1 November. By dawn the rain had ceased off the coast of Walcheren, the cloud base was as high as 2,500 feet, visibility was good and there was no swell on the sea. The Air Staff Officer on board H.M.S. Kingsmill signalled to the Air Officer Commanding No. 84 Group that conditions were favourable for close air support operations and the Force Commander decided to go ahead with the assault. But on the airfields around Antwerp, as already described, the fighter bombers were grounded by low cloud and rain and the pre-arranged support before H hour did The Naval Support Squadron in the meantime had attack. The time was then 0900 hours. But not arrive. gone into the attack. the enemy who had had forewarning by the battle in progress at Flushing was fully awake and he directed the coastal guns to fire at the Support Squadron, and at the same time laid a smoke screen to obscure prominent land marks on the beaches. The naval craft gallantly continued to fire at the enemy defence, but their casualties began to mount up and by the time the Commandos were due to land only seven out of 23 craft of the Support Squadron were capable of further action; some of them were unable to steer and were making involuntary discharges of rockets among the neighbouring craft. (1)

It was at this crucial stage of the action that the Typhoons, due to make the pre-arranged attacks immediately before H hour, arrived on the scene. They were on time having taken off from Ursel and Grimberghen near Antwerp at 0910 hours in the most adverse conditions, (ten tenths cloud and visibility 1100 yards) and they circled round waiting for the signal to go in. This was given after the Naval Commander had ordered the rocket craft to cease fire. of the batteries north and south of the gap firing at the naval craft were at once attacked with cannon and rocket projectiles, the majority of which found their way into the target area. The radar station on the north shoulder of the gap was attacked in a similar fashion and many direct hits were scored. As the Commandos advanced inland the Typhoons attacked targets further ahead. In this manner the enemy gunners were distracted while the Commandos embarked on their amphibians from the tank landing craft and later scrambled onto the dyke.

The Air Staff Officer in H.M.S. Kingsmill then asked No. 84 Group Control Centre to despatch all available aircraft

<sup>(1)</sup> That the Naval Support Squadron bore the brunt of the assault is shown by their casualty figures; 172 naval personnel were killed or missing while the Commandos and other troops involved lost about eleven men during this phase,

A.M. File II S1/12/(B) Part II Encl. 56A

No. 84 Group Report on Operation Infatuate to attack the strong points and guns near West Kapelle and a number of Typhoon and Spitfire sorties were flown and directed to their targets by the Group Control Centre. The latter was in turn given information either directly by fighter aircraft or by the Forward Control Post via the Navy as to which of the hostile batteries were firing and the whereabouts of the Commandos. But little news of progress filtered back from the island and the situation ashore remained confused. Pilots stated afterwards that had they been allowed to attack batteries on their own initiative they would have been of more assistance. But this unfortunately was impossible because of the scanty information sent back by the Army, and control from the ground had to be maintained for the safety of the troops.

Unfortunately the 15 inch guns of the warships had to fire blindly as the spotter aircraft were not able to take off from England until about 1600 hours, and until that time their firing was largely ineffective. An Auster aircraft belonging to an Air Observation Post Squadron attempted to remedy the situation, but it did not prove to be satisfactory as communications between aircraft and ship were poor and the The artillery at pilot was unfamiliar with naval procedure. Breskens attempted to hit two batteries near the gap, but the troops who had gone ashore reported that they had little The bad weather over England also prevented the effect. Boston aircraft of No. 2 Group from laying their smoke screen as arranged.

As the morning wore on rain and cloud once more covered Walcheren and it was only owing to the depression of the land that aircraft were able to identify any targets at all. Great credit is due to the pilots for flying in such condi-After mid-day the weather became almost impossible for flying and the air effort of No. 84 Group was restricted to providing cover to the naval vessels until about 1745 hours. But the battery near the south shoulder of the gap which had caused so many casualties to the Support Squadron(1) was at last silenced by rocket firing Typhoons at about 1500 hours. There was no sign of a single enemy aircraft throughout the day. By nightfall 148 sorties had been flown in support of the Commandos around West Kapelle by Typhoons and Spitfires and 84 sorties flown by Spitfires in providing cover to the naval force. By that time the Commandos were in control of the area around the village of West Kapelle and had advanced northwards to take the batteries at Domburg while other troops had struck out for Flushing.

There is little doubt that the action of the Typhoons during the initial landings was decisive end the Commander of the Naval Support Squadron (Commander K. A. Sellar) who was in the thick of the battle, reported afterwards that air action had contributed greatly to the success of the operation. Messages of appreciation of the effort made by No. 2 Group during the night and No. 84 Group by day were also sent by General Simonds of the Canadian Army.

Fighting was to continue on Walcheren for another eight days, but on 3 November Field Marshal Montgomery was able to report to the Supreme Commander that the approaches to Antwerp and the Scheldt Estuary were no longer dominated by the enemy and that minesweepers had already reached the port of Terneuzen on the south bank of the Scheldt. But the Commandos did not have an easy task in clearing the island. Those advancing along the dunes in the direction of Flushing

ANCXF Report on Walcheren App. E. p. 7

'Eyes Only' F.M. Montgomery to S.A.C.

и. 316 3 Nov. 1944

<sup>(1)</sup> Naval Support Squadron.

2nd T.A.F. O.R.S. Report No. 9 App. D.

2nd T.A.F.

Daily Log Sheets No.

1996 - 2044.

had to fight hard for the possession of the strong points and batteries which lay in their path. The bombing of these positions had clearly not affected all of the guns and as soon as the crews had recovered from the stunning effect they continued to fire them until they were surrounded. Guns unrevealed by air reconnaissance also came into action.

Flushing itself was not clear of the enemy until
4 November and until that date small parties continued to
hold out in the dockyards, some installing themselves to
snipe from the cranes and gantries. On the eastern side
of the island troops of 52 Division crossed the Sloce Channel
in amphibians on the night of 2/3 November and forced the
enemy to relax his grip on the Walcheren causeway.
Shortly afterwards Allied troops were able to cross over at
that point. After Flushing had been captured several
columns converged on Middelburg which fell on 6 November.
The enemy then became isolated on the north coastline and
it was here that, apart from a few troops isolated by the
floods, resistance at last ended on 8 November.

The dogged struggle made by the enemy at all points meant that the aircraft of No. 84 Group remained much in demand. On 2 November its effort (204 sorties) was nearly as high as on the previous day. Valuable work was done by the rocket firing Typhoons which helped to expel the suicide squads in the Flushing docks. Elsewhere the usual targets were engaged, gunpits, casemates, pillboxes and fortified houses. On one occasion a pilot claimed to have fired a salvo of rockets through the aperture of a casemate. Between 2 and 7 November a total of 310 sorties were flown by Typhoons and Spitfires in the prevailing bad weather.

The flooding of Walcheren had, without doubt, caused much dismay among the enemy and had thoroughly unnerved him apart from besetting him with the practical difficulties of maintaining food and ammunition supplies for the island. Commandos reported that the prisoners which they captured were dazed and helpless and senior German officers maintained that had it not been for the flooding the island

The minesweepers did not complete their task for another three weeks and it was not until 28 November that the first Allied convoy sailed up the Scheldt. American administrative personnel took over the docks at Antwerp and thousands of tons of supplies were unloaded in the following weeks. At long last a capacious port within easy distance of the front line was in active use and the severe strain on the continental line of communication was relieved. This was a landmark in the north-west European campaign and preparations could then go forward to invade the Reich. As General Eisenhower later said The end of Nazism was in clear view when the first ship moved unmolested up the Scheldt'.

### Conclusion

A.M. File II SI/B(C) PART III Encl. 28 A.N.C.X.F. to S.A.C. 20 Dec. 1944. The air side of the planning and execution of Operation Infatuate came in for criticism both from the Naval Commander, Expeditionary Force and the acting Canadian Army Commander. Admiral Ramsay asserted that no joint plan had been evolved and that both he and the Naval Commander of 'T' Force were never informed about the plan for pre-arranged air attack on coastal batteries or whether or not they had been successful. This, as described above, was quite untrue.

would have been impregnable.

Both the Navy (represented by the Commander of 'T' Force) and the Army attended conferences held at Canadian Army Headquarters at which the plan for air targets was discussed on 19 September and later on 1, 7 and 26 October. schedule for pre-arranged attacks based on the requirements of the Navy, Army and Air Force was forwarded to the Commander of 'T' Force and the results were discussed at the joint conferences. The Air plan for Operations Infatuate I and II was also known to the Navy and the Air Staff Officer attached to 'T' Force was at hand to discuss air matters.

At the same time a joint naval and military plan was issued by the naval and military Force Commanders. Simonds correctly pointed out that the essence of the plan A hard and fast for Operation Infatuate was flexibility. plan was neither possible nor desirable when the assault was dependent on so many factors - the clearance of the south bank of the Scheldt and South Beveland and the successful breaching of the Walcheren dykes.

The second criticism was directed at the attempts made by R.A.F. to destroy the coastal batteries. Both Admiral Ramsay and General Simonds, impressed with the urgent need to open the Scheldt to sea traffic as soon as possible, were prepared to launch the operation in the face of weather They recognized that which would preclude air support. postponement of the date meant that on another occasion the weather might be unfavourable for the naval craft thereby causing the abandonment of the amphibious operation As it happened the weather was favourable both altogether. for sea and air forces at the critical stages of the action But both these commanders at West Kapelle on 1 November. D.S.C./T.S.100/9 appeared surprised that the enemy batteries were able to retaliate so effectively during and after the assault, in spite of the warnings made by officers of 2nd T.A.F. and Bomber Command and the evidence garnered from attacks on batteries on the Normandy beaches. General Simonds criticized the policy which caused the diversion of the strategic air effort to other targets and implied that had a greater tonnage of bombs been dropped the results would have been more effective. (1) He ignored the fact that the last heavy and fighter-bomber attacks took place on 29 and 30 October, more than 48 hours before the operation was launched, and that the bad weather made it impossible to carry out further air operations until D Day itself. should be recalled at this point that both Air Chief Marshals Leigh-Mallory and Tedder had advocated an intensive aerial bombardment during the 48 hours prior to the assault to stupefy the enemy. As it was, given a respite, the gun crews recovered from the shock of the attacks and fought back assured of their protection by steel and concrete.

Part 3 Encl. 28A.

A.M. File II S1/13(C) Encl. 2B G.D.C. 2 Cdn. Corps to G.O.C. 1st Cdn. Army. 1 Jan. 1945.

> Four batteries in the Flushing area were examined later by the Operational Research Section of No. 84 Group. It was discovered that a good deal of damage by bombs and even rockets was in fact caused to guns in open emplacements fitted with steel cupolas. Eight 105 mm guns in this category were estimated to have been silenced by air attack.

<sup>(1)</sup> General Simonds attempted to compare the bomb concentrations on the dyke at West Kapelle with those on batteries - a very different type of target.

2nd T.A.F. O.R.S. Report No. 9 App. C. Two were accounted for by heavy bombers, two were severely damaged by rockets, one by a shell and a rocket and one by The guns in emplacements covered with fighter-bombers. thick concrete naturally suffered little damage. guns were examined of which one was put out of action (by the barrel being broken off) and superficial damage was Although many rockets hit the caused to three others. emplacements they did little harm. Most of the guns were destroyed by the enemy before surrender and it was difficult to ascertain whether or not they had been put out of action by air attack. Another interesting effect of the bombing was that few casualties were caused to enemy personnel and at Flushing only two graves were discovered in the vicinity of the batteries.

Once again, as was proved by the bombing of gun positions (1) in the Channel ports and the attacks by rocket firing aircraft on armoured fighting vehicles during the battle of Normandy, the intangible effects of an air attack on the mind of the enemy were not properly estimated. Le Havre and Boulogne gun crews dazed by the bombing quickly surrendered when infantry followed close in the wake of the In other cases the enemy's will to resist bombers. decreased as a result of air attack for often those positions which had not been air targets took twice as long to capture. The action at Walcheren was no exception for there a heavy and accurate air bombardment took place. (2) A quick follow up on the ground was not possible yet the action of the Typhoons at West Kapelle demonstrated that even rockets and cannon could silence the strongest defences for sufficient time to enable the infantry to come to grips with the troops within.

<sup>(1)</sup> The fact that bombs do not destroy gun positions but temporarily put them out of action was learned early in 1943 after the operation to capture Pantellaria.

<sup>(2)</sup> It appears that even at Walcheren morale was effected and in one casemate a white flag was discovered.

### CHAPTER 2

### CONSOLIDATION OF THE RIVER MAAS AND THE PIERCING OF THE WESTERN WALL

Air Support to Second Army during October 1944

The urgent necessity to clear the Scheldt blunted the offensive power of Twenty First Army Group further to the east. The Second British Army was at this time still insecurely contained within the narrow bulge between the Albert Canal and the Lower Rhine. Beside it was No.83 Group which occupied three airfields in the same perimeter. The lack of airfields put the Group at a serious disadvantage for airstrips constructed a few weeks earlier became waterlogged during the bad weather and the two permanent airfields formerly occupied by the German were all that was available. A good example of the congestion experienced was to be seen at Eindhoven airfield which then held eleven squadrons. It was in this small town that No.83 Group Main Headquarters was established.

At the beginning of the last chapter brief mention was made of the part played by 2nd T.A.F. to repulse the powerful enemy attacks east of the Meuse. During the first week in October a vigorous offensive was waged by both medium and fighter-bombers in the Rhine valley. No.2 Group set out to destroy concentration areas, containing guns, troops and motor transport, petrol, oil and lubricant dumps, railway centres and bridges. Targets in the first category were attacked at Arnhem and round Nijmegen, in the second was a large fuel depot at Amersfoort south of the Zuider Zee and in the third category were the important rail bridges crossing the River Ijssel at Deventer and Zutphen. By night the ubiquitous Mosquitoes attacked waterways in eastern Holland and railway traffic north of the Ruhr, severely handicapped as they were by the poor weather.

During the following weeks No. 83 Group did not experience the heavy demands for close support to which it had been accustomed during the summer but nevertheless proved to be of great assistance to the Army on several occasions. On 2 October for example rocket-carrying squadrons earned the gratitude of the XXX Corps Commander when they dispersed a counter attack directed at Nijmegen. Other tasks performed on that day were of more indirect assistance. Typhoons harassed the enemy's rear areas, striking at the marshalling yards at Goch and Geldern west of the Rhine and Winterswijk east of that river. Other fighter-bombers destroyed a span of the bridge over the Lower Rhine at Rhenen, a few miles On the same day, No.2 Group flew 120 west of Arnhem. sorties from Dunsfold and Hartford Bridge against enemy concentration areas on the Lower Rhine. But this activity was exceptional for the bad weather alluded to so frequently (it was the wettest November on the continent experienced for years) equally affected No. 83 Group's area of operations.

On 12 October the Second Army, in accordance with Field Marshal Montgomery's directive of the 9th, began to clear the marshy and wooded ground between Gennep and Roermond. It was hoped that this limited offensive would eventually reach Venlo on the east bank of the Meuse. During this and the following days besides attacking the familiar close support targets, the principal activity of No.83 Group took place well behind the enemy's lines; locomotives and trains were shot up and railway lines were cut from Goch to Munster.

No.83 Group O.R.B. Oct. 1944.

See Chap. 1, p. 10

No.2 Group O.R.B. Oct. 1944.

No.83 Group O.R.B. Oct. 1944.

See Chap. 1 p. 4

No.83 Group O.R.B. Oct. 1944. See Chap. 1 p. 9. Slow progress was made on the ground and Venray west of the Meuse was not reached until 17 October. On the 16th Field Marshal Nontgomery closed down this operation, the Second British Army faced about and began to push back the enemy over the lower reaches of the Maas.(1)

2nd T.A.F. Daily Log Sheet 1819.

Thid 1923.

No.2 Group O.R.B. Oct. 1944 and 2nd T.A.F. Daily Log Sheet No.1984.

No. 83 Group O.R.B. Oct. 1944.

Thid

From the air point of view these operations were uneventful and in all probability a greater number of enemy transport would have become victims to air attack had the rainclouds dispersed. One feature was the number of raids On 12 October, for instance, No.137 on enemy headquarters. Squadron attacked the headquarters of General Student, Commander of the redoubtable First German Parachute Army at Terborg north-east of Emmerich. The centre of the building was claimed to have been destroyed with rockets. (2) opening day of the thrust on S'Hertogenbosch five field On the last day of headquarters were strafed in that area. the month No. 2 Group made another of its lightning raids on enemy headquarters. This time the target was the Gestapo headquarters at Aarhus in Denmark. Photographs taken afterwards showed that the attack made by 25 aircraft was highly successful and the building was left in ruins. On one aircraft became a casualty to flak and was last seen limping in the direction of Sweden. (3)

The Luftwaffe continued to be inactive and only took the air in strength when Allied heavy bombers flew over the Reich. But patrols of Me.262s frequently ventured west of the Rhine and skirmishes with Spitfires and Tempests took place. The British aircraft were put at a great disadvantage, lacking the jet fighter's speed and manoeuvreability. The enemy pilots, however, took few risks and for the most part avoided a dog fight. But the destruction of the first Me.262 by a Spitfire of No.401 Squadron on 5 October should be recorded. The bridges at Nijmegen were still useful objectives for the Luftwaffe and the congested airfields in that salient invited attack. A large fighter umbrella was flown over the former during the first half of October by Spitfires of No.83 Group. The attacks on airfields were little more than a nuisance value but casualties were caused on one or two occasions by anti-personnel bombs. In retaliation sweeps were made by Tempests and Spitfires over the German airfields north of the Ruhr.

### The German counter attack west of Venlo - 27 October

The enemy was not slow to take advantage of the diversion of the Second Army north westwards and he endeavoured to frustrate that movement by launching a counter attack west of Venlo. Although only on a small scale it had the effect of turning back several British divisions towards the Meuse. On 27 October one Panzer division and one Panzer Grenadier division took the road in the direction of Deurne. The full weight of this punch hit the 7th U.S. Armoured Division, then attached to the Twenty First Army Group, and

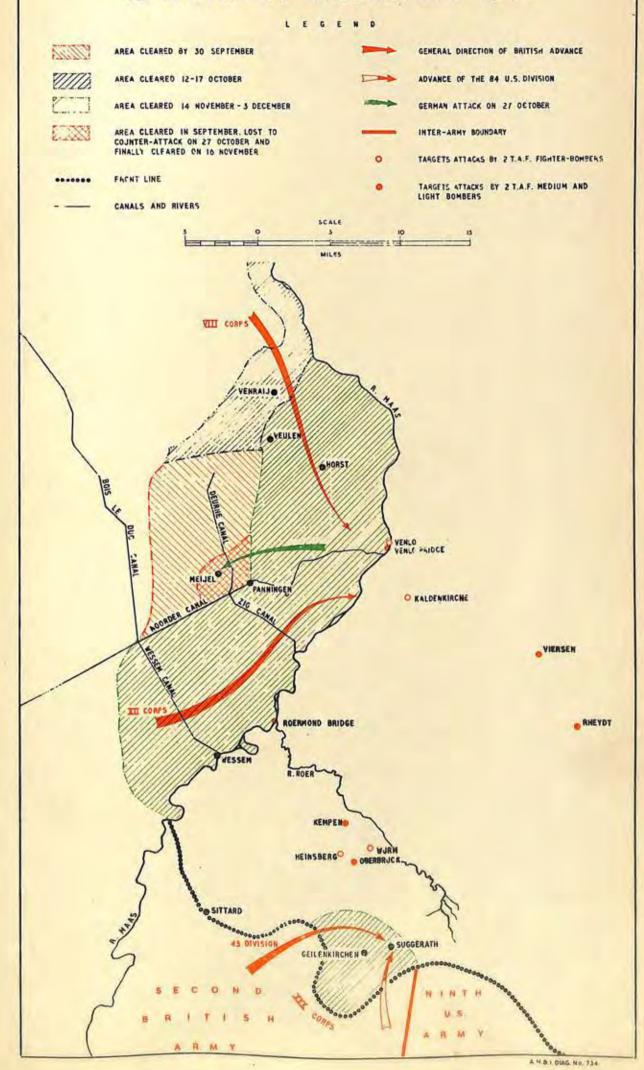
<sup>(1)</sup> Operations in the Venlo area were resumed on 14 November. (See p. 42).

<sup>(2)</sup> According to the German Situation Map of the Western Front for 4 October this location was the correct one (Infm. from A.H.B.6.).

<sup>(3)</sup> For further details of this operation, see 2nd TAF/30450/1/Ops.

# AIR GROUND OPERATIONS ON THE MAAS 12 OCTOBER - 3 DECEMBER 1944

0



2nd T.A.F. Daily Log Sheets No. 1944-1948.

Ibid Sheets No. 1963-1964.

See Chap. 4, p. 132.

Ibid Sheets No. 1950-1951.

Tbid Sheets No. 1973-1975.

See Chap. 6 p. 184.

2nd T.A.F. Daily Log. Sheet No. 1963.

the Germans succeeded in recapturing the town of Meijel which lies due west of Venlo. This offensive took place under low cloud and haze and robbed No. 83 Group of an opportunity to strike at the enemy's armour. following day the weather had improved and allowed a powerful medium bomber strike against communications over the Rivers Meuse and Ijssel. No.2 Group made two raids on the Rivers Meuse and Ijssel. Venlo railway bridge but only one of them, during which six direct hits were scored, were successful. To the south the central span of the Roermond bridge was destroyed and the bridge over the Ijssel at Deventer received a concentration of bombs at one end. On the 29th a further attack was made on the Roermond bridge but without inflicting any more damage. Further north a second force attacked the bridge at Zwolle; there, no results were observed.

No. 84 Group, in the meantime, had been searching for But for the most part they were not in the panzers. evidence and it was only on the 28th that the Typhoons had an opportunity of dealing with a tank attack. occasion one was claimed to have been destroyed and four damaged. By the 29th the Second Army was in control of the situation, though in achieving this three divisions were diverted from the Lower Maas area. Great activity took place over the Rhineland that day. Fighter-bombers of 2nd T.A.F. flying north of the Ruhr were responsible for making 59 rail cuts and claimed to have either damaged or destroyed 43 railway trucks or wagons and 12 locomotives. To the south R.A.F. Bomber Command carried out a heavy daylight attack on Cologne. This stung the Luftwaffe to action and jet fighters patrolled along the Meuse. Tempests of No.83 Group were at once dispatched to Krefeld and Achmer airfields to lie in wait for their return but no victories were obtained.

Another operation of interest that morning was a mission carried out by 30 Typhoons of No.143 Wing, with a strong fighter escort, each aircraft carrying one 1,000 pound bomb which was to be dropped on the lock gates of the Dortmund-Ems canal at Bevergen north of Munster. The aqueduct had been bombed on the night of 23/24 September by No.5 Group of Bomber Command but it was believed that if the lock gates (still untouched) were destroyed a further section of the canal would be drained. The Typhoon pilots discovered that in fact the lock gates were raised and that a good deal of barge traffic was passing through. (1) They did not succeed in destroying the gates but an oil barge was blown up and a house along side the lock was ruined.

### Plans for a November Offensive

On the eve of the assault on Walcheren, General Eisenhower issued a new directive to the Allied Expeditionary Force. His plan for the advance to the Rhine was that the main effort should still take place in the North and the enemy was to be defeated 'decisively' west of the Rhine. The plan for the Northern Group of Armies was that after they had reached the Rhine, bridgeheads on the river

<sup>(1)</sup> The reason for the activity on the canal was discovered shortly afterwards by 2nd T.A.F. reconnaissance air-craft. A temporary dam had been built just above Ladbergen which maintained the water level. Bomber Command attacked the embankment of Ladbergen and the Mitteland Canal at Gravenhorston 21/22 November.

S.C.A.F. 114 28 Oct. 1944. were to be secured and finally an advance into Germany would take place. The Central Group of Armies north of the Ardennes were to deploy to the Rhine and capture bridgeheads south of Cologne. This advance was to be co-ordinated with Field Marshal Montgomery's push and the target date of 10 November was given. The First Allied Airborne Army was warned that it must be ready to support the Twelfth Army Group's crossing of the Rhine. South of the Ardennes General Bradley's forces were to occupy the Saar but no target date for this operation was given, it being left to the Army Group Commander to co-ordinate it with the principal thrust in the north. The Southern Group of Armies were to protect General Bradley's right flank and when feasible they, too, were to advance to the far bank of the Rhine.

21 Army Group Directive M.534 2 Nov. 1944.

Field Marshal Mongomery's directive to Twenty First Army Group issued on 2 November was somewhat cautious in His chief problem was to shift the weight of the Second British Army from the lower reaches of the Maas where they had been relieving pressure on the First Canadian Army back to the neighbourhood of Venlo. There, the most press-ing task was to drive the enemy back across the Meuse past Venlo and thus secure the river as a line of defence which would enable more troops to be released for an offensive The Field Marshal did not consider that the push on his right flank would be very effective owing to the long line which the American troops had to protect. To assist them he ordered the U.S. divisions temporarily attached to his command to be released as early as possible. when the situation on the Meuse became more favourable he would take over part of Twelfth Army Group Sector and finally offensive operations on the Second Army's right flank were to go forward in conjunction with the American The First Canadian Army was in the meantime to relieve the Second Army front as far east as Nijmegen.

#### Operation Hurricane

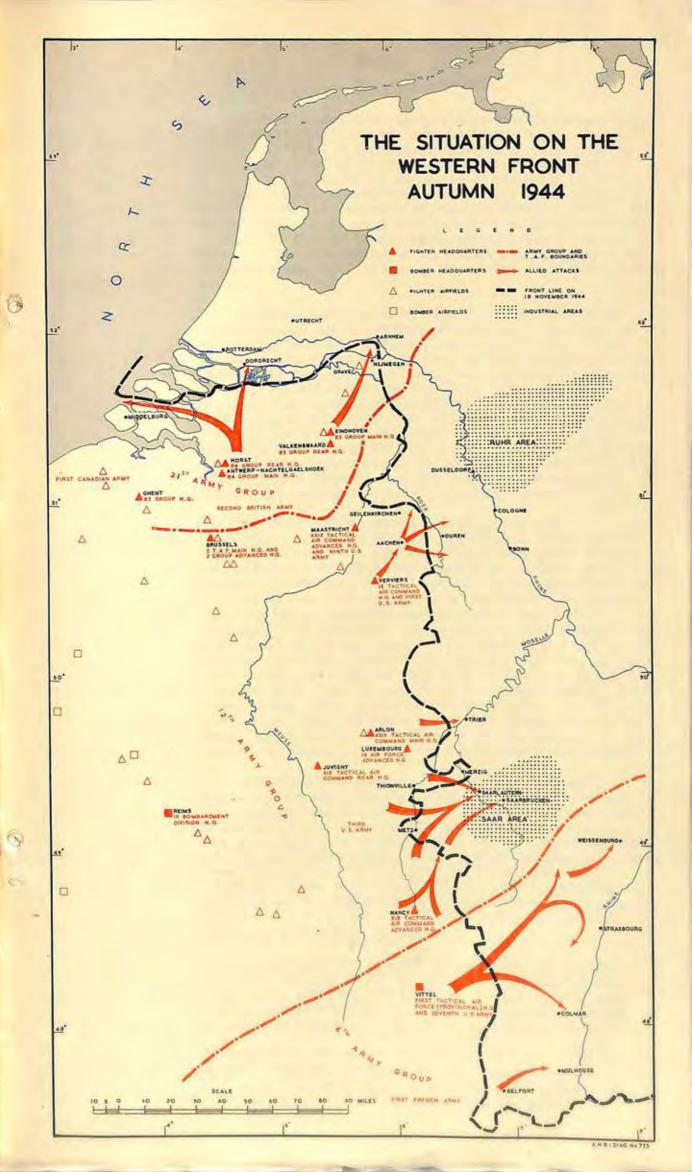
The stalemate in northwest Europe, which began at the end of September, gave rise to much discussion amongst senior air officers and their planning staffs over the future role of the Strategic Air Forces. The problem was whether a speedy end to the war could be made by continuing attacks on the enemy's oil production and by dislocating his system of communications or whether the heavy bombers could best be employed in the role of artillery to extricate the ground forces from their present impasse.

The first of several plans which attempted to solve this problem was evolved by the Combined Operational Planning Committee at the Air Ministry on 2 October. In the first place it made it quite clear that the greatest contribution which the Strategic Air Forces could make towards victory was to maintain their attacks on oil targets. In addition it advocated a policy of concentrated heavy bomber raids on the Ruhr which would help to break the stalemate on the western front.(2)

File ID4/38A and D.S.C./T.S.100 Pt. 7 Encls. 54 A = 35 A

<sup>(1)</sup> For an account of operations in the Venlo area, see p. 42.

<sup>(2)</sup> As will be seen this was the policy supported by the Deputy Supreme Commander (See p. 35.).



In this plan attacks on transportation in Germany were compared with similar operations in France during the past summer and it was shown that the heavy bombers now had to face a new series of problems. Opportunities for visual bombing during the winter months would obviously be fewer. The more complex railway system of Germany would require a greater effort made against it than the French system. The heavy bomber forces would have to face a well organised belt of flak and fighter defence which was almost non-existent in France. The destruction of the German oil industry, being first priority, would naturally absorb the bulk of the visual effort.

Nevertheless it would be possible to dislocate the enemy's supply system by rail cutting operations carried out by the Tactical Air Forces behind the front and with precision attacks by heavy bombers on vital targets like the Dortmund-Ems and Mitteland canals and the viaducts carrying the main railway lines into the Ruhr. The Committee believed that the main deficiency of this scheme was that it left the Ruhr untouched - the great fire power of the two Strategic Air Forces would not be used effectively and, moreover, they thought that it neither took into account the moral factor of concentrated air attacks in a limited area on the civilian population nor afforded an opportunity to demonstrate the superiority of Allied air power.

The object of the Hurricane plan, then, was a simultaneous attack by both U.S. and British Strategic Air Forces on the Ruhr: a concentration of fire power in time and place. (1) R.A.F. Bomber Command was to bomb area targets approximately one mile square in size which were to be selected from undamaged parts of the Ruhr. The VIIIth Air Force was to attack synthetic oil and benzol plants The operation would require two situated in the vicinity. days visual effort and would, it was expected, create a state of chaos in the Ruhr which might have repercussions on local Such attacks were to be followed up by the government. direction of a large proportion of the 'blind' bombing effort of the winter months against the same targets. time the XVth U.S. Air Force was to make visual attacks on benzol plants in southern Germany or 'blind' attacks on the industrial centres of Stuttgart, Saarbrucken and Karlsruhe.

On 13 October the Deputy Chief of Air Staff and General Spaatz instructed the Strategic Air Forces to put this plan into operation. On the first occasion on which it was possible to bomb visually over the Ruhr and at the same time impossible to make visual bombing attacks against oil targets. Furthermore, R.A.F. Bomber Command was to take every opportunity of striking at the Dortmund-Ems and Mitteland canals, the railway viaducts at Bielefeld and Paderborn and the Sorpe Dam as they would not only substantially add to the success of Operation Hurricane but would indirectly affect land operations.

A plan known as Hurricane II had also been designed. Its object was that the Strategic Air Forces should make a simultaneous effort on the first day suitable for visual attacks against the most important oil targets in Germany and the occupied countries. R.A.F. Bomber Command was to

<sup>(1)</sup> The Committee estimated that in the space of one or two hours some 2,500 heavy bombers could be deployed and some 12,000 tons of bombs could be dropped.

concentrate on synthetic oil plants in the Ruhr and Rhineland. The Tactical Air Forces were to make an all out attack on rail communications with the object of pushing back the enemy's rail heads and so force him to use more fuel in carrying supplies to the front.

See Chap. 1 p. 20. Operation Hurricane was, in fact never executed as a co-ordinated plan because of the poor weather experienced in October and November but it was realised in a modified form on 14 and 14/15 October when 2,000 bombers of R.A.F. Bomber Command attacked Duisburg in less than 24 hours. On the same day, the 14th, the VIIIth Air Force dispatched 1,000 bombers against Cologne. During the next week, on the night of 23/24 October, over 1,000 R.A.F. heavy bombers attacked Essen and this was followed up by a further heavy raid on the same target thirty-six hours later.

AHB6 Trans. Report by Tpt. Officer A.O.K.7 9 Sept. 15 Dec. 1944.

See Chap. 1 p. 6.

See Chap. 5 p. 166 et seq.

A.M. File ID4/38 J.S.M312 21 Oct. 1944.

Ibid J.S.M. 315 23 Oct. 1944. There is evidence to show that these concentrated attacks caused great confusion, although they did not, by any means, break the enemy's will to resist. For example, the transport officer in charge of rail movement within the Seventh German Army area reported that, as a result of the attacks in the Cologne area on 15 October, lines on both sides of the Rhine were blocked or closed for eight days. In addition, a number of locomotives during that period were put out of action (the work of the Tactical Air Forces) and the necessity to run all trains at night delayed the arrival of important supplies at the front. Further attacks on targets mentioned in the Hurricane plan were made in October and November by the Strategic Air Forces. On 18 January 1945 Operation Hurricane was finally cancelled. By that time other plans were being matured. (1)

### Revision of the Directive to the Strategic Air Forces

Meanwhile the role of the Strategic Air Forces was being discussed at a high level on both sides of the Atlantic. At an informal session of the American Chiefs of Staff in Washington on 21 October General Marshall strongly advocated the abandonment of long term policies which presupposed the conclusion of the war well into 1945. He believed that if the total resources of the Allies were thrown into the battle on the western front the deadlock there would be broken and the Allies would be able to resume the offensive before the winter bogged down mobile operations. He then looked forward to seeing the end of the war by the beginning of the New Year.

Following upon this, a draft directive drawn up by the American Chiefs of Staff was sent for consideration to their British colleagues in London. This directive was addressed to the Supreme Commanders of the Northwest European and Mediterranean theatres, the Chief of Air Staff and the Commanding General of the XXth U.S. Air Force. The most significant passage in it referred to the Strategic Air Forces, urging that they should be employed whenever possible to assist the advance of the ground troops. This bore out the contention of General Marshall who had said that targets of long term interest should 'look after themselves'. This policy was, of course, entirely contrary to that pursued by the British Chiefs of Staff who hitherto

<sup>(1)</sup> The nearest approach to Hurricane was the series of heavy bomber attacks against the Ruhr prior to the crossing of the Rhine at Wesel. (See Chap. 6).

had based their strategy on the efficacy of the Bomber Command offensive against oil and transportation targets in Germany.

File D.S.C./T.S.100 Pt.7. Encl.32A.

Tbid Encl.33B.

Tbid Enc.55A.

File D.S.C/T.S.100/9 Pt.3 Encl.10A pare, 26.

File ID4/38 C4N.

The Chief of Air Staff asked Air Chief Marshal Tedder for his views on this matter and in a letter to him dated 22 October said that while he agreed to the valuable role of heavy bombers in launching a land offensive or assisting a vital attack, on the other hand, should they be used indiscriminately the heavy bomber effort would be 'frittered away in small packets if the Army is to attack at all'. This point of view coincided with the opinions held by the In his reply to the Chief of Deputy Supreme Commander. Air Staff three days later he referred to the recent misuse of heavy bombers in attacks upon the coastal batteries at Walcheren. He then elaborated his views in a paper in which he criticized the handling of heavy bombers up to that He believed that there was no guiding principle behind the great striking power of these forces and that they were being used in an indiscriminate fashion attacking targets scattered up and down Germany. The breaking of one link would bring about the rapid defeat of the enemy; These had become was an all out attack on communications. increasingly important with the dispersion of German industry while governmental control could not be carried out He reinforced his argument by effectively without them. pointing to the success of the attacks on railway centres in northern France which was a major factor in the defeat of In Germany the limitathe German Army west of the Seine. tions which had restricted air operations in France would not apply and every attack on rail traffic would decrease the enemy's war effort. But it was necessary to concentrate these attacks on one or two focal points to gain the The Ruhr was the principal objective of maximum effect. the ground forces and it was there that air attacks against rail and waterways, cities and oil refineries could be combined.

This challenge to the policy for Bomber Command operations was naturally taken up by its Commander-in-Chief. His argument consisted of an explanation of the tactics of his bomber forces and the diverse factors which influenced the selection of targets. He pointed out that, in fact, the Ruhr had been attacked whenever conditions permitted. But such considerations as the weather, the strength of flak, the use of markers, whether it was a mconlit or dark night, had to be borne in mind. Then there were other targets, requests from the Navy and the Political Warfare Department etc. which claimed attention quite apart from the priorities laid down in the directive to the Strategic Air Forces.

In the meantime the Army had requested the destruction of the Rhine and Ijssel bridges with the object firstly of interrupting the flow of reinforcements and supplies to the enemy fighting west of the Rhine and secondly of preventing him from withdrawing his heavy equipment into Germany. This programme was to be concluded by 15 November, the date for the beginning of the new offensive against the Western Wall. This demand was examined in detail by representatives from Air Ministry and the two Tactical Air Forces. They came to the conclusion that it was too big a task to

tackle in so short a time(1) and that the visual effort of the Strategic Air Forces would be so absorbed that they would be unable to maintain the offensive against oil. Instead they decided to improve upon the rail and bridge cutting programme of the Tactical Air Forces. The medium bombers of 2nd T.A.F. were to destroy the three bridges over the Ijssel and the IXth Air Force was to continue its programme of interdiction west of the Rhine from Wesel to the River Moselle. Five of the Rhine bridges were to be allotted to the two specialist squadrons of Bomber Command and the Azon squadron of the VIIIth Air Force which, it was hoped, would stop inroads on the other commitments of the heavy bomber forces.

The Deputy Supreme Commander was dissatisfied with the results of this Conference as the problem of isolating the Ruhr had been untouched nor had the railway experts been consulted. A few days later a planning Committee comprising the Director of Bomber Operations, and representatives from S.H.A.E.F. the War Office and the Railway Research Service investigated the most suitable means of isolating the German Armies in the west from their supply bases, particularly the Ruhr and Frankfurt areas. Once again they came to the conclusion that attacks on oil should remain the first priority They estimated that only 46 trains per for heavy bombers. day were necessary to supply the forces west of the Rhine and that half of these were required for troops north of the Moselle. In the Ruhr 30 out of 40 railway centres would have to be effectively attacked. However they agreed the However they agreed that a total of 16 bridges from Emmerich to the confluence of the Moselle with the Rhine must be cut of which nine were suitable for heavy bomber attacks. This would deny 27 train-loads per day to the enemy and compel him to use approximately 7,000 lorries.

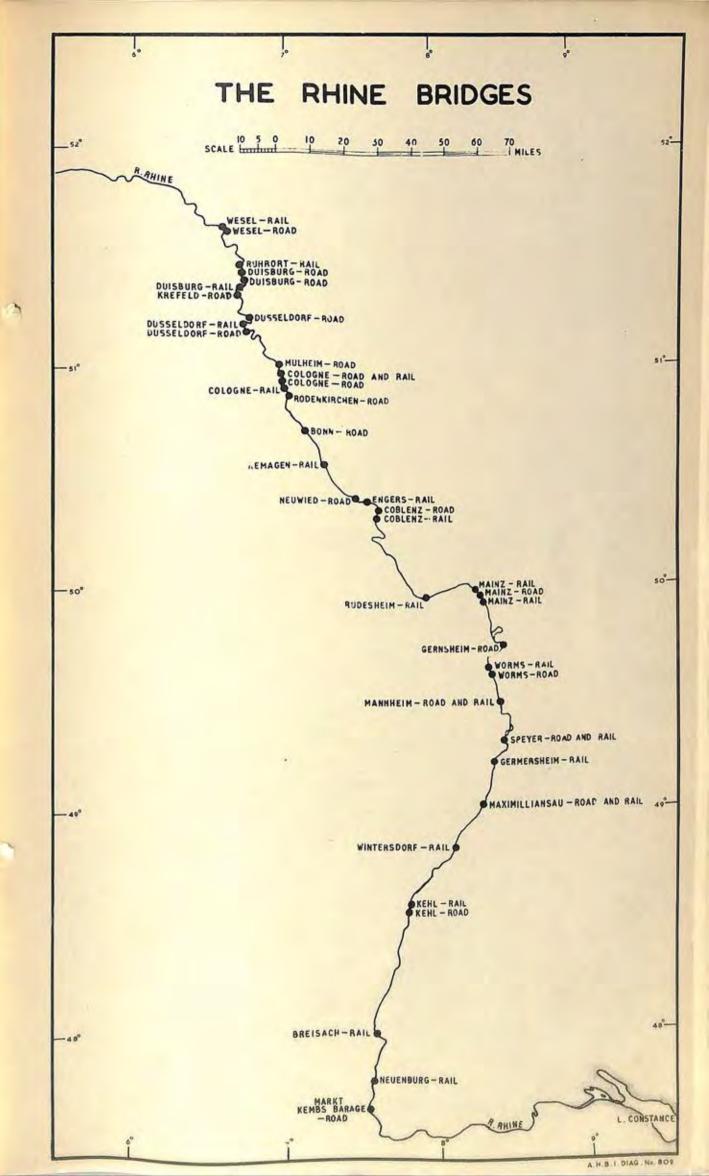
This led to a final conference held at S.H.A.E.F. on 26 October to discuss future bombing policy. It was attended by the Deputy Supreme Commander, General Spaatz and Air Marshal Bottomley. The former emphasized that although The former emphasized that although everyone was agreed upon the necessity to keep oil as a first priority the object must be to 'police' targets already attacked rather than to embark on a long term policy of destruction.(2) The shortcoming of the suggested plan was the lack of emphasis on transportation attacks with particular reference to the Ruhr. There followed an examination of the strategic bomber effort during September which proved that the largest proportion of attacks had been directed against cities and secondly in answering requests from the Army despite the fact that rail and water transportation targets were included in the second priority of the current directive to the Strategic Air Forces. Marshal Tedder then propounded his theory that throughout the war supply difficulties had been the major cause of defeat, in Egypt and Tunisia and in the stalemate then in progress in Isolation, he said, was not a practicable scheme the west. but rather they should attempt to dislocate a limited area around the Ruhr and Frankfurt.

S.H.A.E.F. (Air) Hist. Record and Diary Oct. 1944 App.5A.

Thid

<sup>(1)</sup> A total of 57 bridges crossed the Rhine between Emmerich and Basle consisting of 21 railway, 22 road bridges and 14 pontombridges for road transport. See Map No.6.

<sup>(2)</sup> Oil production had been reduced to 23% of the pre-attack figure but it was reckoned that it would rise to 60% of pre-attack capacity unless 'policing' was maintained.



File D.S.C./T.S.100 Pt.7 Encl.

File ID4/38 A.M.M.S.O. to J.S.M. 31 Oct. 1944.

B.C/S.32131/3 Vol. I. Encl.1.

D.S.C./T.S.100 Pt.8 Encl.26A.

B.C./S.32131/3 Vol.I Encl.2A. As a result of this conference a new directive was issued to the Strategic Air Forces by the Deputy Chief of Air Staff and the Commanding General U.S.S.T.A.F.E. on 1 November. First priority remained the petroleum industry and second the German lines of communication with emphasis placed on the Ruhr.(1) On the previous day, the British Chiefs of Staff had informed Washington that they considered the issuing of a directive committing the Strategic Air Forces to the support of the land battle premature and re-asserted their belief in the value of continuing attacks on oil targets. They made it clear that they were doing everything possible to further the big offensive due in a few weeks time but they were sure that 'premature committal of all resources now available might seriously prejudice our chances of obtaining a quick decision and thus prolong the war well into 1945'.

Policy for attacks by the Tactical Air Forces against oil and communications targets

At this point it is necessary to explain briefly the policy for heavy bomber attacks on communications in the late autumn. On 15 November the Combined Strategic Targets Committee issued a priority list which was divided into two categories. The first was the major rail and water communication system which contained the Dortmund-Ems and Mitteland canals and the Bielefeld and Altenbeken viaducts carrying the trunk lines into the Ruhr. The second category consisted of a long list of marshalling yards, junctions and railway centres which were grouped into regions. Finally there were a number of built up areas adjacent to or containing communications targets hitherto substantially undamaged by air attack.

Early in November, following upon a suggestion of R.A.F. Bomber Command that area targets should be chosen with regard to their connection with the oil industry or the transportation system, a new list of industrial area targets was issued by the Combined Strategic Targets Committee. This list was divided into two sections. The first consisted of targets which were all placed west of 10° East (a line running north to south through or near the towns of Hamburg - Kassel - Wurzburg - Ulm) and which, if bombed, might influence the course of the land battle. The second section contained targets which were situated east of 10° East and which had a particular economic importance apart from their connection with oil or transportation. But this target system was only to be attacked when weather conditions did not permit the bombing of normal priority targets.

But air attacks were increasingly directed against the Ruhr for several reasons. In a signal on 17 November the Combined Strategic Targets Committee stated that it did not intend to specify targets in the Ruhr as its communications would be attacked under other priorities. They were the numerous high priority oil targets within the Ruhr, Hurricane I operations and industrial area targets chosen because of their relation to oil and transportation. R.A.F. Bomber Command was to concentrate on area attacks in the Ruhr as it was difficult for it to operate effectively against precision targets at night. The Ruhr was becoming more and more important as an objective for land operations and,

<sup>(1)</sup> Reference to motor transport, armoured fighting vehicle production and ordnance depots was omitted.

Thid Encl. 3A.

D.S.C./T.S.100

Pt. 8.

Encl. 26A.

during November and the early part of December R.A.F. Bomber Command was mainly concerned with attacks on area targets within the Ruhr and raids on oil targets outside it. On 24 November the Combined Strategic Targets Committee issued a new list of priorities for communications targets, all of which were concentrated in the vicinity of the central sector, then the most important part of the front.

As a result of this trend in strategic bombing policy, the Deputy Supreme Commander, in a memorandum addressed to the Tactical Air Force Commanders on 23 November, defined a policy for tactical air operations against oil and transportation targets which would fit into the general pattern of heavy bomber operations. He reminded them of the part played by the Strategic Air Forces so far during the campaign in denying the enemy of fuel for his armoured divisions, motor transport and air forces and foretold that during the coming winter months the bad weather would tend to limit this But the offensive might be sustained if the Tactical Air Forces raided oil targets whenever ground operations permitted it. He suggested three types of suitable targets. They were petrol, oil and lubricant dumps, benzol plants and concentrations of tank cars at railway centres or en route from station to station. (1) I drew the attention of the Tactical Air Force Commanders to the current priority list of oil targets issued by the Combined Strategic Targets Committee. He also asked them to watch closely the direction of heavy bomber attacks on communications in order that their fighter bomber force might take full advantage of the confusion caused by strategic air attacks in the rear areas.

Attacks by the VIIIth Fighter Command returning from bomber escort missions as well as the Tactical Air Force took place in accordance with these instructions and oil facilities were destroyed whenever possible. A notable attack by the VIIIth Fighter Command took place on 18 November when they attacked two fuel depots of the G.A.F. in the Hanau - Ulm area. At least five fuel tanks amounting to about 1,750 tons were left burning and the second a fuel tank of 800 tons capacity and a number of tank waggons were also destroyed. On the same day this command set on fire a fuel train of about 25 tank waggons near Mannheim. Several outstanding attacks of this nature were made by 2nd T.A.F. and

See Chap. 5 P. 155.

### Operations of 2nd T.A.F. 1-18 November: Attacks on Transportation

will be mentioned in a later chapter.

While Twenty-First Army Group re-adjusted itself for the offensive against the Rhineland, 2nd T.A.F. occupied the interval by continuing its operations against railways and bridges in north west Germany and western Holland. As usual the fighter bombers of the two tactical groups performed this task by day and the Mosquitoes of No.2 Group at night. The weather continued to be wet and cloudy causing poor visibility and this factor often restricted air operations. Conditions on the ground were equally poor and pilots had to contend with water logged airfields in addition to battling with the weather in the air. Nevertheless the squadrons located close to the German border were quick to take advantage of a lull on every occasion that the sky lightened.

<sup>(1)</sup> The enemy was relying increasingly on Benzol as fuel for motor vehicles on the western front.

## RAILWAY INTERDICTION BY 2NDT.A.F. AUTUMN 1944 E E 54" - RAILWAYS ATTACKED BY 83 GROUP ----- RAILWAYS ATTACKED BY 84 GROUP SCALE 20 MILES 53 2 APELDOORN AMERSFOORT UTRECHT INTERSWIJK ARNHEM BOCHOLT BORKEN 2 0 WESEL GELDERN RHEINBURG KEMPEN MUNCHEN-GLADBAC 0 ROERMOND A.H.B.I.DIAG. No 731

### SECRET

39

2nd T.A.F. Daily Log Sheets No.1992-1993.

Tbid Sheets No. 2003-2004.

D.S.C./T.S. 100/9 Pt.3. Enol.27A.

A.H.B.6. Trans. No.VII/96 P. 10.

1bid p. 16.

D.S.C./T.S.100/9 Pt.3 Encl.33A

2nd T.A.F. Daily Log Sheets No. 2011-2019.

Thid Sheets No. 2022-2023.

By the beginning of November the rail cutting was at last beginning to make itself felt. The ceaseless fighterbomber operations compelled the German rail transport to move at night which gave No. 2 Group's roving Mosquitoes some On the night of 1/2 November for excellent targets. example, these aircraft searching for movement in western Holland (Apeldoorn - Amersfoort - Deventer - Utrecht) spotted and attacked no less than 46 trains and on the following night 21 trains were strafed with 500 pound bombs, The latter attack was particularly cannon and machine guns. successful as an ammunition train was probably destroyed in It should not be forgotten the course of the operation. that all the trains were strongly defended and the bombers flew on to their objectives in the face of heavy fire.

The enemy's railway repair service methodically coped with the damage and it was reckoned by Air Marshal Coningham that the lines were active again within 48 hours of being There is, however, evidence that the interdiction of railways was becoming a nuisance. A war appreciation prepared by the German Air Historical Branch early in November indicated that the Allies were attempting to destroy all communications in North Holland and the Ruhr with the object of starving the troops on the Western Wall of essential supplies and so bringing about the collapse of the Contained in the same document were suggested Wehrmacht. counter-measures; for example, the decentralisation of marshalling yards, the camouflage of even the smallest installations, the defence of locomotives, the use of condensers to draw off the tell-tale white steam and the establishment of ferries at all important railway and road By 10 November Army Intelligence believed that the bridges. enemy in Holland had to some extent abandoned the railways in preference for the canals.

Attacks on transportation varied little from day to day and a detailed account of sorties would merely become a series of repetitions. The programme undertaken by the fighter bombers on 4 November is typical of this phase in the air war. The weather was above average on that day and But it is of full advantage was taken of this fact. interest to note that three aircraft of one squadron were unable to take off because of the boggy state of their air-This was not an unusual occurrence. The types of field. targets attacked in armed reconnaissance missions were barges, a ferry across the Lower Maas at Gorinchem, flak The majority of positions, tugs, locomotives and trucks. These were sorties were flown on pre-arranged support. attacks on railways in the area of Zutphen, Zwolle, Xanten, Rees, Groningen, Deventer, Winterswijk and Almelo; flyovers and railway junctions were attacked at Coesfeld, Dulmen, Borken and Rees; locomotives and trucks were strafed at The day ended with the score of Coesfeld and Dulmen. 41 rail cuts, one locomotive claimed as destroyed and nine damaged.

During the following night 59 Mosquitoes undertook the following three tasks. Firstly, they were to harass and attack the enemy in the area extending from the estuary of the Maas - Rotterdam - Hilversum - Deventer - Dusseldorf - Roermond the last named on the boundary line between the British and American Armies. Secondly, they were to attack movement along the road and railway west of the Erft Canal in western Holland. Lastly, they were to harass movement along railway lines in eastern Holland and northwest Germany. These operations proved successful and ten trains, several

40

railway junctions, marshalling yards, railway trucks and an illuminated station were attacked. On other nights the Mosquitoes sought out movement along the Dutch canals in particular the waterways connecting Neuschauz - Winschoten - Groningen - Leeuwarden - Sneek and Lemmer in the flat country east of the Zuider Zee.

Air operations against the rocket and flying bomb installations

The campaign against the rocket and flying bomb which was the responsibility of Fighter Command was, of necessity, shared to some extent by 2nd T.A.F. For by this date the enemy had switched his rocket offensive from London to vulnerable and important targets such as Antwerp, Liege and According to Brussels on the Allied line of communication. the war appreciation already quoted the Germans had begun to consider whether attacks by V weapons behind the Allied front line might not influence the battle more effectively than attacks on the U.K. which had been of such little effect. If the information extracted from German documents is correct, between 21 October and the night of 10/11 November 865 flying bombs were launched against Brussels and Antwerp and out of this total 733 were directed against Antwerp alone. This port had in fact become the main target and the enemy fully appreciated what dislocation at such a place would mean to the Allies. In the period of ten days from 21 to 31 October about 100 rockets were estimated to have landed in the environs of Antwerp.

The Air Officer Commanding Fighter Command looked to 2nd T.A.F. for support from its fighter and medium bombers, (1) for the latter force could obviously spend much longer time over the target area in Holland than the former whose aircraft had first to cross the Channel. For the time being, however, the policy was that the rocket threat to London was not sufficient to justify a diversion of effort from the battle area. By the middle of November this point of view was modified. At the Air Commanders Meeting on 16 November, Air Chief Marshal Tedder, Air Marshals Bottomley and Hill and Air Vice-Marshal Groom discussed the problem of Big Ben. They agreed that while a major diversion at this stage was unnecessary counter measures against the rockets were on the same level of importance as close support. In the event of the Army complaining of lack of support it should be pointed out that the principal target, Antwerp, was essential for the Army's requirements. Air Vice-Marshal Groom, however, warned his colleagues that 2nd T.A.F. was already behind hand in fulfilling commitments for close support.

The enemy's rocket firing teams relied upon an efficient transport system to maintain them with essential equipment such as liquid oxygen cylinders and spare parts and the routine attacks on transportation and bridges by 2nd T.A.F. proved to be of indirect assistance to the action against V weapons. More specific orders were given to Nos.83 and 84 Groups. Their aircraft flew armed reconnaissances during the early part of November to locate and to attack personnel and motor transport hidden in the woods at Rijs near the northeast shores of the Zuider Zee. Orders were also given

See Map No.8

A.H.B.6. Trans. Nov.VII/96 p.

See A.H.B.1 Narrative A.D.G.B. Vol.VII.

D.S.C./T.S. 100/9 Pt.3 Encl.38A.

2nd T.A.F. O.R.B. Air Staff Apps.29 et seq.

<sup>(1)</sup> Air Marshal Hill wanted attacks to be made on the railway station at Leiden and certain targets in the Hague area,

2nd T.A.F. O.R.S. Report No.34.

See also p. 48 and Chap. 4, p. 129.

2nd T.A.F. Orders of Battle. 1944-45.

No.2 Group O.R.B. Nov. 1944.

Air Staff S.H.A.E.F. Ops. Journal 13 Nov. 1944.

D.S.C./T.S. 100/9 Pt.3 Encl.38A.

for attacks on rocket firing(1) trains believed to be operating on the railway connecting Zwolle - Apeldoorn - Deventer -Amersfoort. Attacks were made on vehicle parks believed to On 26 November two squadrons of contain rocket equipment. Spitfires bombed vehicles believed to be carrying oxygen cylinders hidden in the woods near Doorn (east of Utrecht) but the Operational Research Section of 2nd T.A.F. discovered that although several vehicles were hit no trace of any cylinders could be found. A similar type of target was a convoy of motor vehicles believed to be carrying liquid oxygen cylinders hidden in the Wilhemina Park at Sneek east Spitfires despatched to this area of the Zuider Zee. discovered no trace of rocket equipment. Photo reconnaissances were also flown over suspected launching sites and unusual activity or suspicious motor transport was noted. On the whole there was little evidence to show that these operations had been effective.

### Operations by No. 2 Group

Daylight activities of No.2 Group during this period consisted of attacks on bridges and railway centres west of By 26 October No.139 Wing (Mitchells) had the Rhine. crossed the Channel and established itself on Brussels Melsbroek airfield and No.137 Wing (Mitchells) had arrived at Vitry by 6 November. Owing to the scarcity of sirfields in the British sector the Mosquito squadrons remained for the time being in the U.K.(2) By the first week in November the Mitchells and Bostons were flying operational sorties from Their two most important targets were their new airfields. bridges over the Meuse, the road and rail bridge at Venlo and the rail bridge at Roermond used for supplying the enemy salient west of the river. Strong flak defences covered the bridges and the air operations against them were hazard Four attempts were made to destroy Venlo bridge and three attempts were made against the one at Roermond beginning on 3 November and ending on the 19th.

Missions were usually flown in bad visibility and crews often found difficulty in identifying their targets in spite of the use of navigational aids. Damage to the medium bombers from flak was considerable although not more than three aircraft were lost in the period, 4 to 19 November. Of the two bridges, that at Venlo was probably the most important to the enemy as three important roads west of the Meuse converged upon the town. (3) After a raid on 4 November in which 61 aircraft took part the bridge was still in operation. A request was made to S.H.A.E.F. by Headquarters, 2nd T.A.F. that it should be taken on by the heavy bombers which would attack from a higher altitude. This commitment was undertaken by the VIIIth Air Force on 16 November. A squadron was detailed to stand by to attack the bridges but owing to the weather the operation never took place. In the meantime further heavy attacks were made by No.2 Group (125 aircraft) and by 22 November the

<sup>(1)</sup> These were mobile rocket mortars in which tubes some nine to fifteen feet in length were mounted pointing upwards at an angle of 60 degrees.

<sup>(2)</sup> The first Mosquito Wing was based on the Continent at the end of November.

<sup>(3)</sup> Artillery of Second Army was also directed against Venlo bridge.

Thid

Venlo bridge and both the road and rail bridges at Roermond were pronounced to be impassable. The difficulty experienced in destroying these bridges shows how hard it would have been to cut the Rhine bridges within a limited period. Other targets attacked by No.2 Group were the railway junction at Oldenzaal where results were unobserved and the railway centre at Kempen (west of the Rhine). The latter target was re-attacked on 19 November and a heavy concentration of bombs fell on the lines south-east, northeast and east of the town.

Operations by Second Army and 2nd T.A.F. in late November and early December

See Chap. 2 p. 32. When the enemy had been driven from the Scheldt estuary the valley of the Meuse became the centre of interest. (1) But operations conducted by the Second British Army were of lesser importance than the effort being made by General Bradley east of Aachen to reach the Rhine with the First and Ninth U.S. Armies. The objectives of the British operations were twofold; firstly, the enemy pocket in the lowlying country west of the Maas near Venlo was to be eliminated and, secondly, XXXth British Corps was to launch an offensive east of the Meuse with the object of relieving pressure on the Ninth U.S. Army.

West of Venlo the plan (Operation Guildford) was that VIIIth Corps should thrust towards Venlo from the line of the Deurne Canal while XIIth Corps cleared the watery countryside south of Meijel intersected by the Noover, Wessem and Zig canals. Crossings over the first two of these canals were made on 14 November and two days later the town of Meijel which had been occupied by the enemy during his counter attack at the end of October was recaptured by VIIIth Corps. British troops then crossed the Zig and Deurne Canals and by 22 November had lined up on the south bank of the Meuse at Roermond. The enemy resisted strongly outside the important communications centre of Venlo while the nature of the ground offered no help to the attackers. It was not until 3 December following upon a set piece attack that the last enemy stronghold west of the river was cleared.

The XXX British Corps was to advance towards Ceilenkirchen in equally difficult country, with the River Wurm (a tributary of the Roer) on its right and the Meuse on its left flank. (2) South of the Wurm was the Ninth U.S. Army commanded by General Simpson. Composed of the latest U.S. formations to arrive on the continent it had entered the line on 22 October. Owing to the spell of very bad weather in the middle of November the American attack due to start on the 10th did not get under way until 16 November. The British attack up the Wurm valley began two days later. Geilenkirchen was soon captured but the advance was rapidly brought to a standstill after heavy rain had soaked into the ground and made it impossible for armoured vehicles to move. Strong German armoured reinforcements had also arrived in the neighbourhood. Thus the position in the first week of December was that the Germans were enclosed in a salient west of the River Roer centred on the town of Heinsberg.

<sup>(1)</sup> It will be recalled that operations in the Venlo area were closed down on 16 October. (See p. 29).

<sup>(2)</sup> An offensive later known as Operation Blackcock.

If the bad weather retarded the operations of the Army it was even more of an obstruction to the Allied Air Forces and there were days when no flying was possible. 12-17 November air operations were out of the question and another bad spell occurred in the third week of the month when for three days only a few reconnaissance sorties were Nevertheless the Army was given support whenever possible albeit on a very limited scale. For the first two days of the XXXth Corps offensive east of the Meuse, fighter bombers of No. 83 Group attacked the villages of Wurm and Heinsburg which contained gun positions, tanks and concentrations of motor vehicles. On the 20th bad weather made flying impossible. On the following day there was an improvement and the fighter-bombers' contribution to the land battle was in the form of armed reconnaissance covering an area from Heinsberg and Erkelenz (west of the Roer) in the XXXth Corps area northwards to Emmerich and Dinslaken on the Rhine. For the remainder of the month No. 83 Group became absorbed in rail cutting and armed reconnaissance missions.

During the first fortnight of December the Typhoons once again took part in close support missions. They were called upon to support the operation west of Venlo where the last enemy outposts were being driven eastwards. A successful attack took place on 2 December against a factory north of Over 100 rockets Venlo believed to be sheltering troops. fell in the target area and the place was lit by fires. During that night Mosquitoes of No.2 Group attacked batteries east of Venlo which had been firing (at the British) across the Meuse. On the 3rd, the day of the ground assault at Venlo, over 30 sorties were made by rocket carrying Typhoons against the same gun positions on the edges of the forest east of Venlo. Owing to bad visibility these attacks were largely a failure. Better results were achieved in an attack on Kaldenkirchen south of Venlo through which it was expected enemy reinforcements would pass. Here the rockets started two large fires. This town also became the target for a force of No. 2 Group which attempted to create a choke point in the streets. Seventeen fighter-bombers again attacked in support of XIIth and XXXth Corps on 10 December.

A valuable contribution to ground operations was also made by the medium bombers in the valley of the Wurm and elsewhere in the Rhineland. Road and rail communication centres were bombed in the period from 19 November to 3 December. Two attacks were made on the marshalling yards at Rheydt which lies due west of Dusseldorf and is hard by the other industrial town of Munchen Gladbach. During the second attack there was 10/10ths cloud and no results could be observed. Other railway targets were at Kempen (due east of Venlo) and Viersen some 14 miles south of the former.

In the XXXth Corps sector No.2 Group was active during the first two weeks of December. On the 5th its aircraft bombed a billeting area and an ammunition dump behind the front line at Dremmen near Heinsberg. A large number of bombs hit the target area. It was known that in this sector the enemy was billeting his troops in villages behind the front line to shelter them from the wintry weather. This gave rise to a new type of mission for the Mosquitoes of No.2 Group which were ordered to strafe the villages by night. The first of these operations began on the night of 6/7 December when weather conditions made a big air effort possible. Just over 100 aircraft took off both from England and the Continent and while half the force attacked movement east and west of the Rhine the other half carried out low

2nd T.A.F. Daily log Sheets No. 2098 and 3005.

No.83 Group O.R.B. Nov. 1944.

No.2 Group O.R.B. Dec. 1944.

No.2 Group O.R.B. Nov. and Dec. 1944. 44

level attacks on the village of Oberbruck (east of Heinsberg). Six aircraft made a diversionary strike on another village a few miles away. The pilot of one aircraft was fortunate enough to discover the location of a stationary convoy which was estimated to be about 100 vehicles. Bombs were dropped on it and the column was illuminated by a number of bright The harassing of the enemy in this district was resumed on the next night when effective attacks were made on four more villages. On the night of 11/12 December another assemblage of motor transport and troops in three more villages were bombed. (1)

### Operation Cloak and Dagger in Holland

A period of static warfare set in on the First Canadian Army front. During the first week of November resistance south of the Maas came to an end and Canadian troops faced the enemy from behind a wide water barrier which safeguarded their preparations for the coming advance into Germany. 9 November II Canadian Corps took over the Nijmegen bridgehead from the Second Army with the object of making it a base for a southward strike on Krefeld in the Rhineland. In the meantime it fell to the aircraft of No. 84 Group to carry the war into enemy territory. There being no specific close support missions, sorties were not restricted to the Canadian Army front but also covered the Rhineland and railways and roads north of the Ruhr.

Several tasks occupied the attention of the Group apart from the routine armed reconnaissance and rail interdiction missions. They included Big Ben operations, the destruction of midget submarines in the neighbourhood of the Scheldt, attacks against wireless stations, barracks and headquarters. The latter came under the heading of Operation Cloak and Dagger and the targets were passed on to 2nd T.A.F. from First Canadian Army Headquarters whose Air Photograph Interpretation Section later estimated the damage wrought. Information about them was usually supplied by Dutch agents of the underground movement. There were cases when an alleged headquarters had moved from a particular house and gone elsewhere but there is little doubt that these operations caused confusion amongst the Wehrmacht in Holland and sometimes upset the direction of the battle. A special factor which had to be taken into account was the need for great accuracy in the execution of these raids in order to avoid casualties.

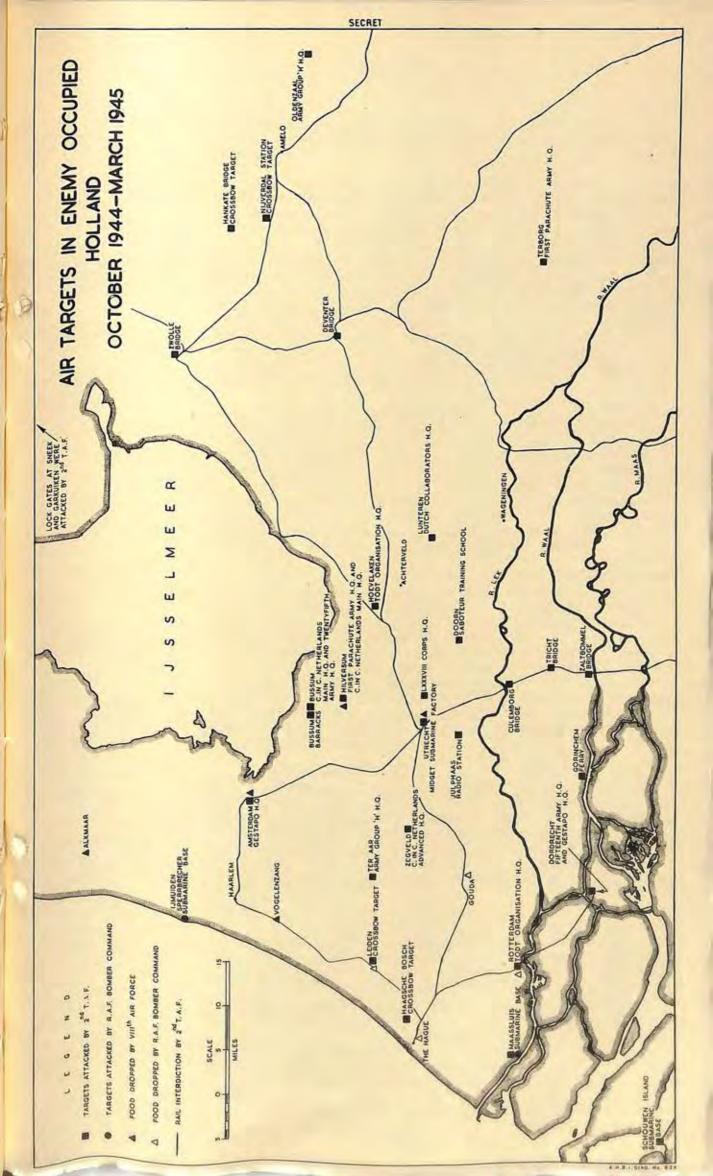
See Chap. 8

A.M. File 033814/47/I Encls.49A 60A.

p. 246.

Air attacks on targets in Holland were naturally regarded with apprehension by the exiled Dutch government. Moreover, there was a growing shortage of food in western Holland and the distress caused by famine combined with the damage, which inevitably resulted from Allied air operations, would not tend to make the Dutch amicably disposed towards the armies of liberation. On 21 October the Dutch air liaison officer in London informed the Air Ministry that barge traffic on the canals passing through an area north of the line Hilversum - Utrecht - Vianen - Rotterdam and west of the Zuider Zee was of greater value to the civilian population than to the enemy. He explained that there was little military water borne traffic in this district and that barges carried farm produce from eastern Holland to the The Air Commanders sympathised with this local inhabitants.

For Air Operations in support of Operation Blackcock (17 Jan. - 26 Jan.). See Chap. 4, p. 124.



request and S.H.A.E.F. instructed the Air Forces that they should not molest movement within this specific area as from 3 November.

D.S.C./T.S.100/9 Pt.3. Encl.31A.

D.S.C./T.S.100 Pt.8. Encl.22B. Four days later the Deputy Supreme Commander at the Air Commanders Meeting, ruled that as little damage as possible should befall Dutch property. On 23 November the policy for air attacks on Dutch territory was further clarified by S.H.A.E.F. Towns and targets in towns where bombing might cause civilian casualties were only to be attacked in exceptional circumstances and then only with the permission of S.H.A.E.F. and alternative targets outside built up areas were to be chosen whenever possible. Fighter-bomber attacks were prohibited in the thickly populated areas in north-west Holland e.g. Amsterdam, Rotterdam, Utrecht, Hilversum and along the western border of the Zuider Zee north of Amsterdam. Barge traffic in the Zuider Zee and in eastern and south-west Holland was open to attack. (1)

But it was difficult to adhere to this policy rigidly; not only did the German Army make full use of the elaborate canal system in various districts of Holland but the rocket launching sites were often constructed in urban areas and railways and canals were used for the carriage of rocket equipment. However, the Dutch Underground Movement occasionally requested (through the Special Force Headquarters attached to Twenty-First Army Group) that certain targets, such as S.S. headquarters, lock gates and railways, known to be vital to the enemy, should be attacked.

Typical of such targets were the lock gates at Sneek and Gaarkuiken situated near the north-east shore of the Zuider Zee and which controlled the Friesland - Groningen canal system. A heavy attack was made on them by Typhoons carrying 1,000 pound bombs on 11 November. Of the two targets the locks at Gaarkuiken were most heavily damaged. They were evidently an important link in the enemy's transport system and he set about repairing them at once. By 9 December a Special Force report stated that the lock gates had been repaired and a quantity of traffic was passing through them. The battle situation did not permit another fighter bomber attack.

In November and early December the most spectacular raids were those on the Gestapo and Todt (Forced Labour) Organisation (N.D.S.A.P.) in the cities of Amsterdam and Rotterdam. The Dutch Government in London had requested the destruction of the Gestapo Headquarters at Amsterdam.

No.146 Wing was given the task and thirty-six Typhoons took off shortly after midday on 26 November. The method of attack was similar to the raid on Dordrecht in October(2) and

2nd T.A.F. Daily Log Sheets No.2064-2066.

2nd T.A.F. 30450/1/Ops Encl.44A and A.M. File 33814/471I Encl.72B.

See Map No. 8.

No.84 Group O.R.B. Nov. 1944 and 2nd T.A.F. Daily Log Sheet No.2134.

<sup>(1)</sup> By the beginning of December the food shortage in north-west Holland was becoming increasingly serious and supplies were being brought by ship at night across the Zuider Zee to this area. On the return journey the ships carried children to a safer area. The Dutch requested that Allied night air attacks on traffic on the Zuider Zee should cease. As there was little air activity by night in this region S.H.A.E.F. did not concur with the Dutch proposal and informed their government in London accordingly.

(A.M. File 33814/47/I Encls.101A-103A).

<sup>(2)</sup> For an account of this operation, see Chap. 1,

some of the aircraft made a diversionary attack to confuse the defences. As it happened the enemy was completely taken by surprise and no flak was met by the Wing. The buildings were marked with four phosphorous rocket projectiles and afterwards the Typhoons dropped their 1,000 and 500 pound bombs. The area was then strafed by rockets. The result of the attack was that one building was claimed to have been destroyed and another was left burning furiously.(1)

File 2nd T.A.F./ 30450/1/Ops. Encls.27B, 57A, 91A. During the next fortnight a series of reports acknowledging the success of the attack were received from Resistance sources in Holland. They confirmed that the headquarters buildings had been hit and that the Gestapo were compelled to move to another part of the town. There were few casualties either to German personnel or to Dutch civilians. However, the police records the destruction of which, was one of the primary objects of the attack, were not destroyed and another raid was planned by 2nd T.A.F. But, after due consideration, the Dutch government refused to sanction this operation.

2nd T.A.F. Daily Log Sheets No.2133-34.

2nd T.A.F. O.R.S. Report No.34.

The 26th must have been a disturbing one for the enemy occupiers of Holland for three other attacks were made on headquarters. No.123 Wing despatched 44 Typhoons to wipe out a Dutch collaborator's headquarters in the little village of Wekerom, a few miles to the north of Arnhem and the building was burned to the ground. Unfortunately the information in this case appears to have been unreliable and 2nd T.A.F. Operational Research Section discovered that the building had in fact never been used as a headquarters although some Germans stayed there on the previous night. Amsterdam Spitfires of No.135 Wing bombed barracks and buildings near Bussum. Interpretation reports indicated that much The last attack was made by No. 331 damage was done. Spitfire Squadron on a suspected headquarters in a house in The pilots claimed to have dropped 25 bombs in Rotterdam. the target area.

2nd T.A.F. Daily Log Sheet No.3001.

No.84 Group O.R.B. Nov. 1944 and 2nd T.A.F. O.R.S. Report No.34.

2nd T.A.F. Daily Log Sheet No. 2125.

No.84 Group O.R.B. Dec. 1944 App.12.

Other attacks against Dutch Collaborationist or German Police Headquarters were made on 19 November when the collaborationist Headquarters at Lunteren north of Ede was largely destroyed. largely destroyed. No more than four or five were killed as the majority of the Collaborators were not there at the time of the attack. On 20 News the field Organic at the time On 29 November the Todt Organisation headof the attack. quarters at Rotterdam was attacked by No.146 Wing, with the object of destroying documents. Here again the information was faulty and the house was empty when the fighter-bombers struck. Fortunately little harm was done to the Dutch people or their property. Yet another attack on this organisation was made, this time at Hoevalaken near Amersfoort on 8 December. The roof was badly damaged but the Germans in occupation escaped unscathed.

Attacks on Army barracks and headquarters included the destruction of a barracks at Hilversum (25 November) occupied on the previous day by Panzer troops; it was estimated that approximately 100 men lost their lives. Possibly the most successful raid on the Army's command system in Holland was made on the tactical headquarters of the LXXXVIII Corps in the village of Houten near Utrecht on 28 November. In spite

<sup>(1)</sup> Eight 1,000 pound, thirty-two 500 pound bombs H.E., six 500 pound incendiaries, four phosphorous rockets and seventy-six rocket projectiles were used for the operation.

2nd T.A.F.
O.R.S.
Report No.34
and 2nd T.A.F.
Daily Log Sheet
No.2154-2155.
2nd T.A.F.
Daily Log Sheet
No.2113.

of inconsiderable damage the staff was at once moved to Bilthoven. On the next day the main headquarters of LXVII Corps believed to be contained in five houses near Gouda were bombed by 48 Spitfires. In this case the attack was fruitless as enemy troops no longer occupied the building. Other squadrons attacked and hit a regimental headquarters in Wasserburg Castle north of Cleve that day. Another type of target was the radio station at Jutphaas south of Utrecht. Two attempts were made to destroy it and on the second occasion the rocket projectiles of No.123 Wing put one building out of action.(1)

### Other Air Operations in Holland: 3 November to 16 December 1944

Some anxiety was expressed by the Navy over the threat of one man torpedoes and midget submarines with which the enemy might harass the sea traffic in the estuary of the Scheldt particularly as the arrival of the first convoy in Antwerp had been subjected to great publicity in the press. These weapons had been used, sometimes with effect, against the shipping off the Normandy beaches. It became the responsibility of No. 84 Group to attack the bases and factories where these craft were assembled. A raid on such a factory at Utrecht was made on 4 November and twelve direct Over a month later, on 8 December, two hits were claimed. squadrons of Typhoons were despatched to the island of Schouwen north of the two Bevelands. In the harbour at Burghsluis pilots identified a number of large objects moored against a jetty which might well have been one man torpedoes. They fired 100 rocket projectiles into the middle of them and caused a large patch of oil to cover the water.

The Navy was also concerned over possible attacks by small surface craft - the E and R-Boats, and asked that their bases should be raided by heavy bombers. As usual the Commander-in-Chief, Bomber Command was reluctant to send his force against a target inhabited by a friendly population but the Deputy Supreme Commander enjoined that since Antwerp was of the utmost importance as an Allied supply base this type of operation should rank as first priority. Following upon this statement at an Air Commanders Meeting, the E and R-Boat base at Ijmuiden in eastern Holland was raided by a small force of Lancasters with excellent results.

There is little to relate concerning close air support on the Canadian front. During these winter months No. 84 Group's role was to attack observation posts, gun positions and defended localities which were out of range of Allied Towards the end of November the siege operations in charge of the Independent Czech Brigade at Dunkirk were intensified and the usual targets such as strong points, batteries and headquarters were passed to No. 84 Group for Attacks were also made by British medium bombers on Beyond the lower Rhine the enemy continued to be the port. sensitive over the presence of the Allies east of Nijmegen. In which ever direction an advance into Germany was made, either eastwards across the Lower Rhine or southwards into the Rhineland a foothold across the River Waal was prerequisite. An attempt was made to flood out the bridgehead when on 2 December the dykes holding the Lower Rhine at

Tbid Sheet No. 2016.

Thid Sheet No. 2215.

D.S.C./T.S. 100/9 Pt.3. Encl.60A.

R.A.F. Bomber Cmd. O.R.B. App.A.969.

See Chap. 4, p. 134.

Attacks by No.84 Group on special targets were also made during the month of January. (See Chap. 4, p. 133).

### SECRET

48

No.84 Group O.R.B. Dec. 1944. Arnhem were cut. This was followed up with an attack by enemy paratroopers. The Canadians withstood these onslaughts and continued to hold on to the Nijmegen bridges and the east bank of the Waal. Counter measures were taken by No.84 Group and fighter bombers breached the dams near. Arnhem flooding an area about twelve miles in length stretching from the Nijmegen - Arnhem railway to the town of Tiel between the Waal and the Rhine.

Toid

No.2 Group O.R.B. Dec. 1944. At the beginning of December air operations against Crossbow targets were intensified. Air reconnaissance had revealed a number of railway trucks carrying V.2 rockets in Leiden station in addition to which an abnormal amount of troop and supply traffic were passing through this railway centre. Two attacks were made on the station by Typhoons and pilots claimed three direct hits. During the night of 12/13 December Mosquitoes followed up the raid by another harassing attack. A strike was made at this time against bridges and canals in Holland. Fighter-bombers damaged a bridge over the Oude Maas near Dordrecht while Mitchells and Bostons inflicted more damage on the bridges at Deventer and Zwolle. The medium bombers also tried to destroy the lock gates at Zutphen (a canal flowing from Enschede in Germany joins the River Ijssel at this town). Two attacks were made but both times cloud obscured the targets and no results were observed.(1)

Continued Attacks on Communications by the Tactical Air Forces: 1 to 16 December 1944

For both the tactical groups of 2nd T.A.F. rail cutting continued to be the most effective way of disorganising the enemy's rear installations. The number of cuts claimed for November amounted to over 300. In December sorties were being flown into Germany far deeper than before. Bielefeld, where stood the important viaduct so often attacked by the Strategic Air Forces, was the most easterly point reached by 2nd T.A.F. The rapid repairs made by the enemy entailed a succession of visits to the same stretch of line and thereby caused operations to be conducted at a high price, as the Germans had greatly increased their anti-aircraft artillery north of the Ruhr and disposed it at likely points of attack. Losses to pilots and aircraft had begun to mount up.

2nd T.A.F. O.R.B. Nov. 1944.

At the Air Commanders' conference on 5 December, the Air Officer Commanding 2nd T.A.F. announced that he was losing up to two pilots a day in low level attacks, which was more than he could afford. (2) Statistics in 2nd T.A.F. Operational Record Book for November show that during that

D.S.C./T.S. 100/9 Pt.3. Encl.61A.

<sup>(1)</sup> For further operations by 2nd T.A.F. against Crossbow targets, see Chap.4, p. 129.

<sup>(2)</sup> Filots of 2nd T.A.F. lost on operations in Oct. and Nov. numbered 80 and 86 respectively. Greater losses occurred during the more active phase of operations in June (191), July (123) and Aug. (183), but by December there was a serious shortage owing to the fact that the flow of pilots from the O.T.U.s was decreasing, it having been assumed that the war would be over by Christmas. The Air Ministry took measures to rectify this matter and Air Marshal Coningham was assured that his force would be at full strength for the final advance into Germany. (See Coningham's report, paras. 184-185 and 2nd T.A.F. O.R.B. Int. Apps. for 1944).

month 110 aircraft were lost, the majority of them due to flak. On the other hand a good deal of dislocation was undoubtedly being caused behind the enemy lines and daylight movement for him was just as difficult as it had been in France during the summer months. However, the enemy seized every opportunity to run supply trains to his forward areas when the weather was too bad for flying.

An equally active and profitable effort was being made by the Mosquito squadrons. On the nights of 26/27 and 29/30 November, 41 and 42 Mosquitoes were despatched to bomb and machine gun movement along railways and waterways and to harass movement in general in the British sector. hits were scored on trains and locomotives and derailments The necessity for after attacks on trains were observed. the enemy to move at night provided plenty of targets. the first week in December, No.138 Wing was operating from Belgium thus enabling the light bombers to stay longer over enemy territory. Forces of between 40 and 50 aircraft were active on the nights of 6/7 and 7/8 December in spite of Motor transport, electric storms and poor visibility. railway bridges and villages were among the targets. indication of the effort being made by the Mosquitoes to support ground operations is shown by No. 140 Wing which, on 2/3 December, had flown 4,000 sorties since D Day, 6 June.

No.2 Group O.R.B. Nov. and Dec. 1944.

> At the same time the IXth Air Force strove to wreck rail communications in the American zone from Aachen to the Saar. Its plan of interdiction was not dissimilar to that of the British, with the exception that it covered a wider area, but which, on the other hand, contained fewer railway The medium bombers devoted much time to attacking lines. barracks, supply dumps, petrol and ordnance depots, The majority of these marshalling yards and bridges. targets lay immediately to the rear of the German front, Typical marshalling yard targets were west of the Rhine. at Kaiserslautern, Neunkirchen, Duren and Coblenz. Road and rail bridges over the Rivers Moselle, Ahr and the more southern tributaries of the Rhine were frequent targets, in particular the road-rail bridge over the Ahr at Sinzig near Remagen, which carried an important railway line from Cologne to Coblenz.(1)

S.H.A.E.F. (Air) Int/Ops. Summs Oct.-Nov. 1944.

> The Tactical Air Commands cut railways and bridges both east and west of the Rhine, but the programme was too large for it to be completed before more intensive air and ground operations began in the middle of December. The activities of the fighter bombers were divided into an 'inner' line of interdiction which included 27 railway lines west of the Rhine and bridges from Euskirchen in the north to Kaiserslautern in the Saar area and an 'outer' line of interdiction east of the Rhine. Few positive results were achieved in the latter zone, as it bore little relation to So far, no substantial evidence the battle in the west. has been discovered to show how damaging were the attacks on transportation immediately behind the western front but, as in the area north of the Ruhr there were considerable delays, dislocation and much effort expended on repair work,

Tis/108/1
The Effect of
Air Power on
Mil. Ops.
W. Europe p. 61,

<sup>(1)</sup> A report by the Transport Officer, Seventh German Army, covering the period, 9 September to 15 December, stated that the damage caused by these attacks made a number of diversions necessary and considerable delays were experienced. (A.H.B.6. Trans.: Reports of Tpt. Officer AOK7 1944.)

similar conditions doubtless prevailed further south.

Against this it should be pointed out that the assembly of the Panzer forces for the thrust in the Ardennes was not prevented, although it is probable that delays were imposed. At the same time, travelling at night and round about routes were taken for granted by the enemy in recognition of the vast Allied air superiority in the west. With regard to the first of these conditions, the Americans had no equivalent of the night armed reconnaissance work of No.2 Group and, during the hours of darkness in the American zone, the enemy could move with impunity.

### The Resurgence of the G.A.F.

The Luftwaffe had taken full advantage of the impasse on the western front to re-equip and re-organise the squadrons which had been driven back to Germany exhausted and depleted at the beginning of September. In the next two months an astonishing recovery was made. This had been possible to achieve by drawing upon the reserves of single-engined fighters whose construction had begun at the end of 1943. It was intended that a large force of night fighters should be built as a complement to the increasing numbers of twinengined fighter aircraft. By the time of the landings in Normandy, these single-engined fighters were converted to a day role and bolstered up the diminishing numbers of operational aircraft in France. Further fighter squadrons were formed during the summer and the new jet fighters made their first appearance in the autumn. Full use was made of these not inconsiderable reserves and, from the beginning of September to the middle of November, the front line strength of single-engined fighters had increased by seventy per cent.

Changes in command and policy marked the withdrawal to bases in Germany. For the time being the role of the Luftwaffe was determined by the necessity to protect industrial areas and cities from the incursions of the Allied heavy bomber force both by day and by night. The requirements of the Army came second. Thus for the time being the tables were turned, for during the summer it was the
Luftwaffe which had been sacrificed to support the ground forces. With the conception of a counter offensive in the Ardennes, however, the resources of the Luftwaffe were once again put at the disposal of the Army. For the time being, however, the air command responsible for home defence -Luftflotte Reich - took over the direction of strategic and tactical air operations. On 21 September Luftflotte 3 was dissolved and an organisation subordinate to Luftflotte Reich called Luftwaffe Command West was established. The new command directed the operations of Jagdkorps II, responsible for the northern sector of the front and Jagddivision 5, responsible for the south.

The policy adopted at the beginning of October was that tactical aircraft should remain on the defensive and at this time about 500 fighters were withdrawn from Luftwaffe Command West for home defence duties. The resumption by the Allies of a more intensive heavy bomber campaign against oil and transportation targets in the Reich had revealed serious flaws in the defences. General Galland, the chief of fighter operations, worked out an elaborate offensive plan known as Der Grosse Schlag in which swarms of fighters were to attack the VIIIth Air Force at the first favourable opportunity. These never fulfilled the expectations of the Luftwaffe commanders. For although strong enough in numbers the G.A.F. was severely handicapped, not only by a lack of

See Rise and Fall of the G.A.F. A.C.A.S.(I) Chap.17.

Toid

trained and experienced pilots but by the shortage of fuel while the concerted drive of the Allies towards Germany both from the west and the east had reduced the number of good bases causing units to adopt second rate airfields which were often unserviceable in wet weather.

A few pitched battles were fought between the G.A.F. and the VIIIth Air Force bombers and fighters in November and forces varying from 500 to 700 fighters were in action usually over central Germany where a deep incursion by the On 2 November, for Allied bombers became necessary. instance, a big attack by the VIIIth Air Force on Merseburg near Leipzig was opposed by over 500 fighters. An even greater effort was made by the enemy on 21 November when good weather was experienced all over the theatre of operations. This time nearly 700 fighters took off but only a small proportion pressed home their attacks and more American bombers were lost to flak than as a result of combat in the The day and night raids over the Ruhr on oil targets at Gelsenkirchen, Duisburg, Dortmund, Wanne Eikel and Castrop-Rauxel did not provoke so strong a reaction. Nevertheless the Commander-in-Chief Bomber Command pointed out on 7 November that the policy of concentrated air attacks on the Ruhr made an increase of enemy flak and fighter He said that he protection in that area inevitable. expected heavy casualties in the event of enemy fighter aircraft seriously interfering with his daylight operations.

D.S.C./T.S. 100/9 Pt. 3. Encl.31A.

> Early in November the German Supreme Command was already preoccupied with plans for a counter offensive in the Ardennes. This involved the fighter squadrons in yet another reshuffle and aircraft previously reserved for home defence was concentrated behind the western front. resources of Luftflotte Reich again became dispersed. Examination of the enemy's fighter strength on the western front in the autumn shows an increase from October onwards. On 31 October the strength of single engined and night ground attack fighter-bombers in Luftwaffe Command West was 463, out By 10 December the strength of which 348 were serviceable. of conventional fighters and fighter bombers had increased to 1,283 with 942 serviceable aircraft.(1) On the other hand the bomber force which at the end of October had numbered 325 (233 serviceable) steadily decreased in size and on the same date there were 233 aircraft of which 182 were service-Included in this total were 43 Me. 262's (32 serviceable. able) used as fighter-bombers.

A.H.B.6 Trans. G.A.F. Orders of Battle Oct. tc Dec. 1944.

Another change in the G.A.F. was an improvement in reconnaissance first noted at the beginning of December. Throughout the battle in Normandy the German High Command was acutely deficient in its knowledge of Allied movements because of the latter's tremendous air superiority. But in the autumn the force of short and long range reconnaissance aircraft was built up which, on 10 December, consisted of 58 serviceable aircraft, the majority of which were Me.109s but which also included two or three Arado 234s (jets). The increase in reconnaissance work was doubtless part of the preparations for the coming offensive in the Ardennes, for, on 4 December, reconnaissance activity which had previously been restricted to the northern sector of the front spread towards the south.

A.H.B.6 Trans. G.A.F. Order of Battle.

D.S.C./T.S. 100/9 Pt.3. Encl.58A, Para.2.

<sup>(1)</sup> Three fighter-bomber units were, however, being re-equipped on this date.

At this stage the major contribution of the G.A.F. to the land battle was made by the night bomber force of Junkers 88 and 188. They were used for harrassing communications behind the Allied front, particularly in the American zone and they also took part in sporadic mine-laying operations in the Scheldt and occasional raids on airfields and head-Their activities in the Scheldt never became a quarters. menace to Allied shipping, as the Mosquitoes of No.85 Group maintained constant patrols over the area of the Scheldt and the Netherlands. It is interesting to note that No.85 Group 2nd T.A.F. O.R.B. claimed nine out of 16 enemy aircraft claimed destroyed by App. Int. 2nd T.A.F. for the month of November, these being Jus.87, 88 and 188. By day the Me.262, working as a fighter bomber, made an exceptional time and many arrival assets. made an occasional tip and run raid across the front. great turn of speed enabled it to elude the Spitfire and The Allies' only method of retaliation was to strafe enemy airfields. In the course of such attacks a few jet aircraft were destroyed on the ground on airfields in north-west Germany.

The enemy's new dispositions did not pass unnoticed by Allied Air Intelligence, although they seemed to have no inkling of an imminent offensive on a grand scale. Chiefs of Staff Conference at S.H.A.E.F. on 11 November, it was reported that the G.A.F. might be able to fly from 400 -500 sorties per day either in support of the land battle or in attacks on airfields. But, it was known that the enemy would have to overcome a number of problems before he could employ his aircraft as an effective striking force, because of the poor state of airfields behind the front. Apart from a fairly heavy attack on airfields in the vicinity of Cologne made by the VIIIth Air Force on 10 November and numerous straffing attacks by fighter bombers, little effort was expended on such targets. Air Staff S.H.A.E.F. believed that the G.A.F. was still too weak to warrant extensive counter operations being made against it. As it was, the German fighter force was kept in readiness for the big attack and not squandered on minor operations.

D.S.C./T.S.100/9 Pt.3. Enc 1.46A, Para. 3.

> However, by 21 November, the VIIIth and IXth Air Forces were showing signs of uneasiness at the concentration of enemy aircraft behind the western front and General Vandenberg became responsible for originating a plan for a concentrated attack on German airfields in which 2nd T.A.F., his own Air Force and the VIIIth Air Force were to participate. bombers of the VIIIth Air Force were to bomb airfields in north-west Germany, medium bombers of the IXth Air Force were to attack airfields in central Germany and fighters of the Tactical and Strategic Air Forces were to follow up the bombing with machine-gun and cannon attacks on grounded sircraft and installations. At the beginning of December the Air Commanders were waiting for favourable weather to launch this attack, known as Operation Riptide. the German offensive in the Ardennes was launched and it was because the G.A.F. suffered such crippling losses in that battle that General Vandenberg and Air Marshal Coningham agreed to cancel the operation on 22 January.

File 2nd T.A.F./ 30317/69/Ops.

See Chap.3, P. 99.

Operations South of the Ardennes - The Capture of Metz

See p. 31.

It will be recalled that much was expected of General Bradley's push north of the Ardennes with the First and Ninth U.S. Armies and detailed plans for support from Strategic and Tactical Air Forces were discussed continually from the beginning of the month. Nevertheless it was General Patton who as usual was the first to get his Army on the move regardless of the appalling weather. His plan was to bypass the fortifications of Metz which had been holding up his troops since mid September by an enveloping movement on both flanks of the city. Leaving behind a Corps to reduce the fortifications systematically, the remainder of the Army was to advance along the Moselle Valley, one of the classic approaches to Germany, and seize the area surrounding Mainz, Darmstadt and Frankfurt. D Day was to be in the first week of November when the weather was favourable for ground and air.

Several small scale attacks against outlying defences had been made during the autumn which had been of little Fighter-bombers working in support were unable to crack the pillboxes and concrete casemates manned by a The armour which had stubborn and fanatical garrison. crossed France so effortlessly in the summer was engulfed in Once again the Army found it necessary to a sea of mud. call in the Strategic Air Forces. The plan was that from D Day minus one to D Day plus two the heavy bombers were to smother the outlying defences of Metz by an attack on seven A strike was also forts south and south east of the city. to be made against the neighbouring towns and communications centres of Thionville, Saarbrucken and Saarlautern. bombers were to attack forts, troop concentrations and supply dumps. The fighter bombers of the XIXth Tactical Air Command, then established in the Verdun district, were to make pre-arranged attacks on headquarters and movement in Fighters were to ground the Luftwaffe by the battle area. striking at airfields east of the Rhine.

Preparatory operations to dislocate transport in the rear areas began on 5 November three days before the assault with a heavy bombing of marshalling yards at Karlsruhe, Frankfurt and Kaiserslautern in which some 800 aircraft were It was intended that the ground attack should involved. start after the bombing but this was prevented by bad weather. On 8 November American infantry crossed the River Seille supported by nearly 400 fighter-bombers of XIX Tactical Air Commond. These aircraft effectively attacked transport and Command. troop concentrations and amongst others obliterated the headquarters of 17 S.S. Panzer Division. Although low cloud still covered the battle area on the 9th, 1,300 Liberators took off from the U.K. for the target area; 769 sircraft attacked and dropped 2,609 tons of high explosive. bombing in the Metz area was done with G.H. technique. nearest troops stood at about four miles distance from the target areas so that no withdrawal was required. Saarbrucken and Thionville were bombed by smaller forces. Owing to the poor visibility the bombing was far from accurate. from one or two direct hits on casemates material damage amounted to little. The intensity of the attack, none the less, stunned and demoralized the garrison with the result that on the 9th successful crossings were made over the Moselle and on the following day the Army had advanced some miles east of Thionville and was in possession of a number of towns and villages which were captured with small casualties. The medium bombers of the IXth Air Force were even more restricted by the weather and out of a force of 514 aircraft only 74 were able to identify and bomb two troop concentra-Only token opposition was offered by the Luftwaffe on 8 November and no aircraft were seen on the 9th.

The fighter bombers continued to give close support during the following week and from 8-19 November they flew 2,114 sorties against normal battlefield targets. From

II I/26 Effectiveness of Third Phase Tactical Air Ops. p.156 et seq.

VIIIth Air Force Summary of Ops. Nov. 1944.

II L/26 Thid and Effectiveness of Third Phase Tactical Air Ops. p.158.

VIIIth Air Force Summary of Ops. Nov. 1944 P.54. 54

13 to 15 November all aircraft were grounded because of the low cloud and rain. The advance on the ground progressed favourably, a deep bridgehead being established over the Moselle by 12 November. Inroads on the network of forts south of Metz then began. By 19 November Metz was finally encircled and on the following day resistance came to an end apart from the inevitable small number of fanatics holding out in one or two of the forts.

II S/108/1 Effect of Air Power on Military Ops. W. Europe pp.136-137. The opinion of the troops taking part in Operation
Madison, as it was called, was that the heavy bomber attack
on 9 November in general fulfilled its purpose. The enemy
was stunned by the bombardment and the opportunity to by-pass
forts was seized while their artillery was still inert.
Moreover, objectives were taken with light casualties and the
enemy was unable to bring up his reinforcements. The
fighter-bombers were particularly useful in harassing transport and dispersing troops forming up to counter-attack. By
the middle of November this offensive had to mark time while
the First U.S. Army moved towards River Roer farther north.
Operation Madison was thus extremely limited in scope but the
air side of it which was designed to blanket the strong
defences around Metz may be said to have been successful and
saved the Army many casualties.

### General Bradley's first attempt to reach the Rhine

The next operation to which the Allied Air Forces were required to give the utmost support was General Bradley's offensive east of Aachen known by the code name Queen. Taking part were the First and Ninth U.S. Armies which were to cross the River Roer and push on towards the Rhine in the area of Cologne and Bonn. It was intended that this push should coincide with a thrust across the Meuse by Field Marshal Montgomery. The provisional date of D Day was fixed for 10 November. On the 7th the plans were revised and it was decided that the operation should be launched on the first fine day between 10 and 16 November. If the weather was still too bad for heavy bombers General Bradley was to start the offensive without them relying merely on the Tactical Air Force. The fixing of the date was to be made by Generals Bradley and Vandenberg, the latter being the Air Force commander on the spot and in a position to judge when the weather was most favourable.

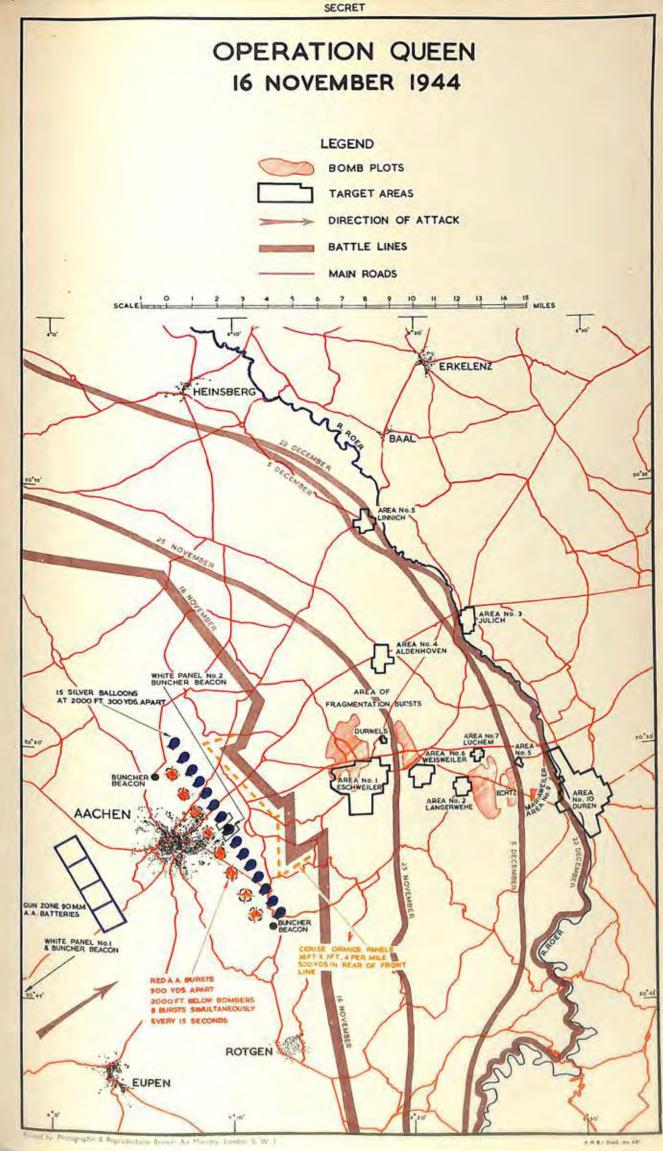
See p.

D.S.C./T.S. 100/9 Pt.3. Encl. 32A para.4.

II L/26 Effectiveness Third Phase Tantical Air Ops. F.166-167.

File B.C./T.S. 32192.

The air plan was to consist of a very powerful daylight attack by British and U.S. heavy bombers. The VIIIth Air Force was to bomb a number of defended localities in the neighbourhood of Langerwehe and Eschweiler (from seven to eight miles east of Aachen) which stood in the First Army's axis of advance. These target areas were picked because of their believed toughness and in this the operation differed from St. Lo when a large area was simply saturated by the VIIIth Air Force. Fragmentation bombs were to be used. The Army was to begin to attack immediately after the end of Two hours later Bomber Command was to bomb the bombing. the towns of Duren and Julich six miles east of Eschweiler in the valley of the Roer and Heinsberg north of Geilenkirchen. These places had been converted into fortified areas containing troops and stores and were focal points for communications to the front and therefore required no restrictions for The medium bombers of the IXth Air Force were to cratering. strike at the inner line of defences around Eschweiler, Marionweiler, Aldenhoven, Linnich, Luchen and Echtz. Fighter bombers of the IXth Air Force were to give vigorous close support.



II I/26 Effectiveness of Third Phase Tactical Air Ops. p.167.

II S/108/1 Effect of Air Power on Mil. Ops. W. Europe p.106.

VIIIth Air Force Summary of Ops. Nov. 1944.

R.A.F. Bomber Cmd. Files B.C./SH/T.S.43 and B.C./T.S.32192.

ReAsFe Bomber Cmds OsRsBe AppeAs Nov. 1944s

Great pains were taken to prevent a recurrence of the mishaps at St. Lo and south of Caen where a number of troops had become casualties to Allied bombs. As it was realised that, of necessity, the operation might have to be conducted in poor visibility, elaborate safety measures were initiated. The actual bombing was to be done either visually, if conditions permitted, or with the aid of G.H., Micro H and H2X equipment. The safety measures involving radar, radio and visual signals were as follows. A vertical beacon was placed a short distance behind the front line so as to indicate to the bomber crews their exact position with regard to the front line and the point from which they should Two marker beacons were to keep the release their bombs. aircraft on course on their approach to the vertical beacons. A ground control post was set up by IXth Tactical Air Command to maintain radio contact with the bombers. The crews were to be thoroughly briefed and told not to bomb if they were at all doubtful whether they had passed the safety line. Army also assisted in these precautions. Behind the front line anti aircraft artillery was to fire red bursts exploding 2,000 feet below flight level on instructions from the ground A little nearer to the front a line of silver control post. coloured barrage balloons were to mark the safety line. addition two large white ground panels were to be exposed, one 19 miles behind the forward positions near Liege and the other indicating the safety line near Aachen. panels of cerise and orange were to be placed at intervals for ten miles behind the front to mark the line of approach. The troops themselves had to be in position at a distance of two miles from the target areas.

D Day was at last fixed for 16 November. Flying conditions were far from perfect both over the U.K. and the Continent, 19 squadrons of the VIIIth Air Force being unable to take off while others were delayed. A total of 1,234 Liberators and Fortresses were despatched and from 1115-1245 hours 1,191 aircraft dropped 3,872.9 Short tons of fragmentation bombs. Altogether six target areas were bombed at Eschweiler, Langerwehe and Weisweiler in the valley of the River Inde, a tributary of the Roer. Strong escort was provided by VIIIth Fighter Command which also attacked ground targets over the area. Widespread cloud ofter 9/10ths necessitated the use of instruments causing an Widespread cloud often up to inaccurate attack and only about 16 per cent. of the bombs The safety precautions, however, fell in the correct areas. Most effective of all were the bursts proved satisfactory. of coloured anti-aircraft fire but the panels were not seen through the cloud and the barrage balloons were shot down by flak owing to their proximity to the front line. later ascertained that only five bombs fell behind the forward Allied positions but fortunately without incurring any casualties.

At 1445 hours the British aircraft began to attack. This was the first time that Bomber Command had supported an American Army operation. One thousand, one hundred and eighty nine aircraft left the U.K. with a strong escort Out of this total 1,124 airprovided by Fighter Command. craft bombed their targets and dropped 5,135 tons of high explosive. Four aircraft failed to return to base. heaviest concentration of bombs fell on Duren and Julich. The accuracy of the attack on both places was exceptional as the cloud and haze which handicapped the VIIIth Air Force At Duren markers were put down crews had by then dispersed. in the target area but soon became obscured in the bomb The Master Bomber directed his crews to bomb in explosions.

the right area and the object of the attack was fulfilled as the centre of the town was completely gutted, the roads made impassable and the marshalling yards severely damaged. Over Julich smoke rose to a height of 8,000 feet and crews were instructed to bomb up wind. Apart from some under-shooting great accuracy was achieved. Heinsberg was covered by haze but as the marker flares fell wide of the target crews dropped their bomb loads visually and observed a large explosion. No enemy aircraft interfered with any of the bombers over the target area while flak was rarely more than moderate in intensity.

II I/26 p.168.

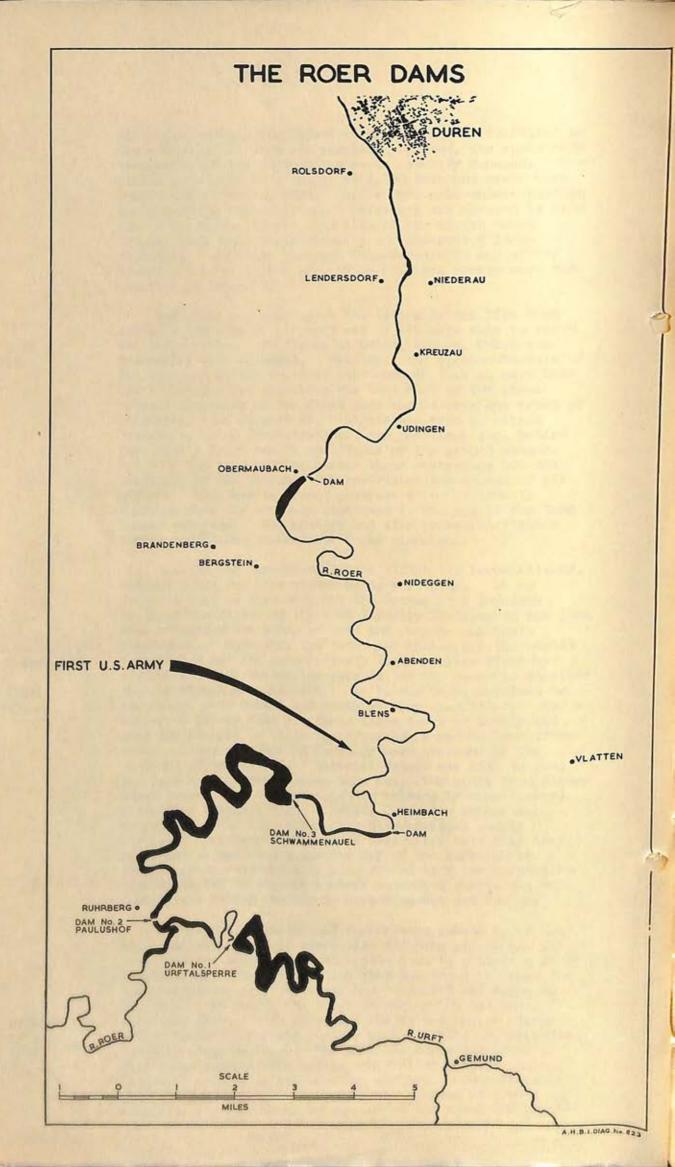
Low cloud and haze upset the attack by the IXth Bomb Division and only 80 aircraft out of 119 were able to reach Positions at Echtz, Luchen, Duren and tacked. Similarly the fighter-bombers of the target area. Eschweiler were attacked. the IXth and XXIXth Tactical Air Commands flew no more than 349 sorties, The intention was that each of the three assault divisions of the First Army should have one group of Thunderbolts to support it. Lightnings were to attack transport, troop concentrations, gun positions etc. behind the enemy's front and on the flanks of the ground attack. Not only did poor weather hinder these operations but the shortness of the November day restricted the amount of air This was in direct contrast to operations in Normandy when air activity continued to the end of the long summer evenings. Bad weather had also prevented fighter bomber operations planned for D Day minus one.

File D.S.C./T.S.100 Pt.8 Encl.33B and II L/26 p.173.

Despite the inaccuracy of the VIIIth Air Force attacks, confusion and surprise spread among the enemy. happened that on that very day the German 47th Infantry Division was relieving the 12th Infantry Division in the line thus occupying the minds of both the troops and their Moreover, the late hour chosen for the aerial bombardment and the comparatively light barrage fired by Allied artillery before the assault led the enemy to conclude that no attack was imminent. As it was units involved in the relief were bombed and suffered many casualties. number of troops this was their first taste of battle and they lay stunned in their fox holes for about an hour after-Even veterans of Normandy were overcome by the s of the attack. Material damage was done to guns violence of the attack. and land lines between units were cut; but apart from places where troops were bunched together waiting to come forward casualties were not high. Bomber Command's attack was especially effective, thoroughly disorganizing supply services; prisoners taken three days later said that they had eaten no hot food since the day of the bombardment. Amongst other evidence they also stated that few casualties were inflicted by fighter bombers attacking rear areas as troops were taking shelter in deep trenches and bunkers.

Unfortunately the ground forces were unable to exploit this confusion. Their start line had been placed too far away from the target areas to enable them to achieve a deep penetration. Thus by the time they had begun to break the inner defensive core the enemy had recovered and began to hit back. In short, the break through which had been expected, did not come about and the Allied troops slowly fought their way forward yard by yard clearing one defended locality after another. The IXth Air Force continued to give close support with medium and fighter bombers and delivered attacks on strongpoints and troop concentrations from 17-19 November. Thereafter the weather precluded extensive air operations to the end of the month and by that

II S/108/1 p.108 and II I/26 p.173.



time the two American Armies still had not reached the line of the River Roer.

The failure to break through at Eschweiler can in no way be attributed to the Air Forces. The heavy bombers accomplished all that was asked of them. Rather was it owing to the lack of confidence between ground and air staffs that full advantage was not taken of the ample safety precautions. Implicit trust in these arrangements would have permitted the Air Forces to have dropped their bombs much closer to the troops. The latter in their turn would have taken full advantage of the enemy's surprise and would have penetrated deeply and frustrated any attempt to make a counter-attack.

## Bomber Command's attempt to breach the Roer dams

All available American resources were thrown into the battle to reach the River Roer and at its height no less than 17 divisions were employed by the two Armies. Germans fought back stubbornly and confidently despite severe losses as the Sixth Panzer Army had assembled in the Cologne area behind their forward defences. By 3 December the Ninth U.S. Army was in a position to overlook the Roer east of Geilenkirchen but very slow progress was being made by the First U.S. Army battling in the densely wooded and hilly stretches of the Hurtgen Forest. Moreover the enemy held in his hands a card of great advantage in that he was able to control the waters of the Roer and Urft (a tributary of the Roer) by his possession of the dams across them, the most important of which were situated south of Schmidt in thick forest. General Bradley feared that when his troops crossed the Roer the enemy would open the sluices and flood the Roer valley and part of the Meuse as far down as Roermond and Venlo in the British sector. Trapped by the waters the Americans would then be met by the Panzers held in reserve.

This threat had been appreciated by General Bradley's staff early in November and requests to breach two of the five dams or weirs had been made to Bomber Command. (1) After a thorough examination of air photographs and other evidence the Commander-in-Chief, Bomber Command concluded that the water level was too low for an attack to have any At the same time vigilant air reconnaissance was to be maintained over the two most important dams on the river. The first (known as No.1 Dam) was the Urft dam, a concrete affair with a length of some 740 feet and 300 feet thick at its base. It had been erected at the western end of a large reservoir filled by the River Urft which joins the Roer at about a mile's distance. The second (known as No.3 Dam) was about four miles to the north east and was called the Schwammenauel Dam. By far the largest and most important, it was 160 feet high, about 1,150 feet in length, 1,100 feet thick at the base and constructed of earth with a hard concrete core.

See Map No.5.

File B.C./SH/T.S.42

<sup>(1)</sup> This was the second time that the ground forces had requested an attack on a dam. On 7 October Lancasters of No.5 Group attacked and damaged the sluice gates on the Kembs dam on the Rhine north of Basle in response to a request by Seventh U.S. Army. It was feared that the enemy might flood the Rhine up to Strasbourg and make crossings an impossibility. (See Bomber Cmd. File B.C./S.31490/1 Encls.8B-25A.)

D.S.C./T.S. 100/9 Pt.3. Encl.52A para.3.

File B.C./SH/T.S.42.

D.S.C./T.S. 100/9 Pt.3. Encl.59A para.2.

R.A.F. Bomber Cmd. O.R.B. App.A. Dec. 1944.

Thid

D.S.C./T.S. 100/9 Pt.3 Encl.60A. para.14.

R.A.F. Bomber Cmd. O.R.B. App. A. Dec. 1944.

H.A.F. Bomber Cml. File B.C./SH/T.S.42.

Although told that only by a lucky chance would the dams be breached General Bradley insisted that he would not cross the Roer until the dams had been put out of action by one means or another.(1) Their capture by a ground attack would require a corps and would delay the main advance across the Roer; at the same time the idea of dropping paratroops was condemned by General Brereton as there was not an airborne division available nor did he consider it to be a practical operation. On 29 November, therefore, Air Staff S.H.A.E.F. directed Bomber Command to breach the dams leaving the method of attack to the latter's discretion. By then the First U.S. Army had reached points little more than three to five miles away from the dams. The water level was still very low but had risen considerably at the Urft Dam. It was thought that 1,000 pound bombs followed by a number of Tallboys (12,000 pounders) might crack it though the inventor of the Tallboy, Mr. Wallis remained sceptical. Another possibility was that the enemy might have prepared the dams for demolition in which case the R.A.F. bombs would perhaps detonate the charges. A more likely view was that the enemy realising the defensive value of the dams would endeavour to keep them intact to the last. A low level raid was considered too dangerous because of flak.

The first attempt to breach the Urft dam was made by 207 Lancasters on 3 December but owing to thick cloud the mission had to be abandoned. On the next day a picked force of 30 Lancasters and Mosquitoes from No. 8 Pathfinder Group mission had to be abandoned. raided the same dam using Oboe technique, each aircraft attacking independently. Only 1,000 pound bombs were dropped, but as visibility continued to be bad no results The operation was unopposed by enemy aircraft were seen. The Schwammenauel dam was attacked next on and flak. 5 December despite the low-water level there; on this occasion only two aircraft dropped their bombs. Air Commanders Conference that day Air Chief Marshal Harris protested that it was futile to continue the operation. referred to the attack on the Sorpe dam in October when even Tallboys failed to break it. He did not believe that the flood-water released by the enemy would last for any length As General Bradley was still not satisfied, of time. Air Chief Marshal Tedder directed that the attacks should The next two operations were directed against the continue. On 8 and 11 December forces of over 200 bombers escorted by R.A.F. Fighter Command and the IXth Air Force attacked the dam in poor visibility. Less than 40 Tallboy bombs were dropped, the remainder being 1,000 pounders. both occasions the dam was hit but apart from the concrete being chipped and some damage caused to the controls no serious harm was done. There seems to be little doubt the an insufficient number of heavy bombs was used although it There seems to be little doubt that was felt even if a breach had been made the enemy might still have been able to control the flow of water. Nevertheless praise is due to the aircrews who delivered their attacks under such poor conditions and yet succeeded in hitting their target.

Plans were then made for a sixth attack, Air Chief Marshal Harris wanted to break one end of the dam to allow the water to erode the bank - provided that it was not solid rock but on 12 December Air Chief Marshal Tedder and

<sup>(1)</sup> A German map captured later in the campaign showing the extent of the proposed flooding justified General Bradley's refusal to cross the river. (See S.H.A.E.F. Air Hist. Record and Diary App. I.O. Jan. 1945)

D.S.C./T.S. 100/9 Pt.3 Enc1.68A. para.4. General Bedell Smith decided to abandon the air operation as it was diverting too much of the daily air effort. By then it was estimated that about 2,000 sorties had been flown in connection with the attacks. At last convinced that the breaching of the dams by air was impracticable, General Bradley began an attempt with four divisions to capture them on the following day and this operation was still in progress when the enemy launched his counter-offensive in the Ardennes on the 16th.

Movement of the enemy's armoured reserve west of the Rhine

In the meantime Von Rundstedt had been moving his strategic reserve (The Sixth S.S. Panzer Army) from their training grounds on the northern plains of Germany to west of the Rhine. Troop movements by rail had been discovered by S.H.A.E.F. Intelligence as early as 6 November, their destination being the front north of Luxembourg. In the next week these suspicions were confirmed and on 14 November General Strong (S.H.A.E.F. G.2) stated that he was fairly certain that three panzer divisions from the German armoured reserve had moved up to the Rhine. He believed that the troops were poorly equipped and under strength.

Measures were taken to delay this movement by air The VIIIth Air Force was ordered to destroy the attack. railway viaducts at Faderborn and Bielefeld; Bomber Command was to raid marshalling yards at Soest and Schwach in the Armed reconnaissance had already been planned Ruhr area. to take place between Paderborn and Dortmund but bad weather had put a stop to these operations. The familiar dispute over the priority of oil and transportation targets arose at the Air Staff Meetings but Air Chief Marshal Tedder insisted that special targets requested by the Army should be given first priority, in accordance with the current directive to the strategic bomber force. Headquarters Bomber Command made provisions for visual attacks by day or night or if the But on 21 November weather was bad with G.H. equipment. the commitment for the two marshalling yards was cancelled and these targets reverted to their normal strategic priority.(1) This was probably due to the fact that at the Air Commanders' Meeting that day the Deputy Chief of Air Staff had laid stress on the importance of not relaxing air attacks on oil targets although the Deputy Supreme Commander had warned his colleagues that there was an urgent need for attacks on communications.

However at the same conference a S.H.A.E.F. intelligence officer told the assembled commanders that air reconnaissance taking advantage of a break in the cloud and rain had identified rail movement, through the Ruhr to the Cologne - Dusseldorf district. The lines to Darmstadt and Frankfurt were also busy. He was of the opinion that four panzer divisions of Sixth S.S. Panzer Army were in reserve in the Cologne sector. So far none of these troops had come in contact with General Bradley's push towards the River Roer. R.A.F. Bomber Command was then detailed to attack marshalling yards at Aschaffenburg and Fulda; the former was attacked on the night of 21/22 November and the latter on 26 November.

In the course of the month the VIIIth Air Force had made a series of attacks on the Altenbeken and Bielefeld rail viaducts. Beginning on 2 November 151 aircraft struck at the

D.S.C./T.S. 100/9 Pt.3. Encl.30A para.2.

Ibid Encl.37A. para.1.

D.S.C./T.S./100 Pt.8 Encl.1A.

Thid Encl. 42A para. 2.

Ibid Encl.44A. para.13.

Thid para. 2.

See Chap. 3 p. 67.

(1) Soest was attacked by Bomber Command on 5/6 December.

Bielefeld Brake and Schildesche viaducts. Further attacks were made on 26 and 29 November and a third attempt on 6 December. The viaduct at Altenbeken was temporarily put out of action, thus cutting the route from Hanover to Soest. By 5 December it appeared that military rail transport was restricted to two main routes from Hanover to Frankfurt either via Goettingen and Fulda or via Giessen. Intelligence qualified this apparent success by their estimate that the German forces west of the Rhine did not Altogether these require more than 40 trains per day. attacks on troop movement into the Cologne - Frankfurt sector were little more than pin pricks; the bad flying weather and the continuing priority for oil targets(1) allowed Von Rundstedt to gather his forces for a counter-Nevertheless, there attack more or less according to plan. is some evidence from prisoners of war taken at the time that troop movement towards the western front suffered delays and re-routeing because of air attack and there were several cases in which trains were actually hit from the air. On 19 October Von Rundstedt complained that attacks on railways and bridges across the Rhine would delay the move of Sixth S.S. Panzer Army and on 10 December he reported that a number of bridges (presumably across the Ahr and Mosel) had been closed by air attack, but that the movement of formations was progressing without serious delay.

S.H.A.E.F. (G.2) Enemy Comms. and Supply Summary No. 26 Annex.

A.H.B.6 Transl. Von Schremm's Treatise on Ops. in the West. Pp. 6, 11,114.

D.S.C./T.S. 100/9 Pt.3 Encl. 49A para. 3.

S.H.A.E.F. (Air) Hist. Record and Diary Nov. 1944 App. 104 and 108. German army units were also being moved from Norway to the western front and by the end of November a division from this sector was already in action. The enemy took full advantage of the railway between Trondheim and Oslo when transporting troops, thereby avoiding the attentions of R.A.F. Coastal Command over Norwegian waters. He had, however, to cross the stretch of sea known as the Kattegat in order to reach Denmark. Counter measures against these troop movements were suggested in a paper issued by the Joint Intelligence Committee at S.H.A.E.F. on 25 November and, as a result, discussions took place between members of S.H.A.E.F. (Air) and the representative of R.A.F. Coastal Command at S.H.A.E.F.

It was agreed that it would be impolitic to divert aircraft employed in attacking communications behind the
western front at a time when they were beginning to show
results. The solution of the problem seemed to be that
R.A.F. Bomber and Coastal Commands should intensify their
mine-laying and anti-shipping strikes in Norwegian and
Danish waters. Sabotage by Special Operations Executive
and Mosquito attacks on key bridges in Norway were also
suggested. They decided that it would not be practical to
attack the Danish railway system for the following three
reasons. Firstly, shipping could easily be diverted to one
or other of the north German ports. Second, it was difficult to obtain early information of train movements which,
in turn, would only lead to a sustained air effort
detrimental to operations on the western front. Thirdly,
in any case it would not be possible for fighter bombers to
reach Dermark.

In the meantime the Commander in Chief R.A.F. Coastal Command had taken action. He requested that the Special

<sup>(1)</sup> During November R.A.F. Bomber Command dropped 13,747 tons of bombs on oil targets (24.6% of the total tonnage) compared with 4,888 tons dropped on transportation targets (9.2% of the total tonnage).

D.S.C./T.S.100/9 Pt.3 Encl. 51A para. 4. R.A.F. Coastal Command O.R.B. App. Nos.804-814 Dec. 1944

Ibid App. No. 875

A.M. War Room Summary of Ops. by Bomber Cmd. Nov.-Dec.1944 Operations Executive should sabotage the main line from Bergen to Oslo so as to compel the enemy to use the sea route.(1) He also obtained permission from the Air Ministry to re-equip three of his Mosquito squadrons with rocket projectiles and 100 gallon drop tanks so that they could strike against shipping in the Kattegat by day. Normal operations by R.A.F. Coastal Command over Norwegian and Danish waters continued in spite of the bad weather experienced during early December. By night two Halifax squadrons operated against important convoys sailing between Oslo and the Danish ports. They also attacked shipping in the anchorages at Aalsund, Kristiansund and Namsos. By daylight Beaufighters and Mosquitoes attacked shipping sheltering in the fjords along the Norwegian coast.

There was also an increase of activity by R.A.F. Bomber Command over this area. In the month of December the number of mines laid in Danish and Norwegian waters increased by 383 compared to the previous month. These areas included Oslo Harbour, the Skagerrack and Kattegat. Furthermore, three strikes against shipping in Oslo Fjord were made in December at night. They included an attack on the cruiser Koln. In these latter operations 138 aircraft made attacks and a total of 550 tons of bombs were dropped.

## The Saar Offensive December, 1944.

In contrast to the slogging battle being fought out in the central and northern sectors, advances of a more spectacular nature had taken place south of the Ardennes and on the Sixth Army Group front. By the first week in December the Third U.S. Army had reached the line of the River Saar south of Merzig and owing to strong defensive works beyond Plans were made for a set the river had come to a halt. piece attack (Operation Tink) in which the Strategic Air Force were to make an attack similar in conception to Operation Queen with area bombing by the VIIIth Air Force and the obliteration of communication centres and concen-The battle was to begin tration points by Bomber Command. on 19 December in conjunction with a supporting offensive by the Seventh U.S. Army. However, General Bradley's operations east of Aachen were to remain as first priority and in the event of General Patton's attack failing to get under The German way reserves were to be diverted to the north. offensive prevented this operation taking place.

On 14 December the First French Army began to break through the Belfort Gap. After a week's fighting it reached the Rhine and French armour swung north to capture Mulhouse. A little later the French in company with Seventh Army troops who had been fighting in the passes of the Vosges pushed through the Saverne Gap and reached Strasbourg on 23 November. The enemy defiantly held out west of the Rhine between Strasbourg and Mulhouse, an area which became known as the Colmar Pocket and for the time being the French, weak as they were in numbers, could not dislodge them. General Eisenhower seeking to take advantage of the situation directed the Seventh U.S. Army to break into the Saar basin in conjunction with the Third U.S. Army and this operation had the effect of drawing off 14 enemy divisions until events in the Ardennes brought the operation to a standstill.

<sup>(1)</sup> There is no record of any discussions on this proposal and no attempt was made to carry it out.

Air support to the Sixth Army Group was given by the First Allied (Provisional) Tactical Air Force formed at the close of October. Commanded by General Royce this force consisted of a mixture of U.S. and French units; the XIIth Tactical Air Command; the 42nd Bomb Wing; the French Western Air Force and the 1st French Air Force.

Proposals to defeat the enemy west of the Rhine in early December

The resolution with which the German Army defended the approaches to Cologne was dangerously lengthening the dead-lock in the west; once again the Combined Chiefs of Staff grew apprehensive over the slow progress of the European campaign. A quick victory was all the more urgent when so much remained to be accomplished in the Far East. The first step towards the end of the campaign was the rapid defeat of the enemy west of the Rhine. Discussions on the part to be played by the Strategic Air Forces in ending the impasse were held late in November(1) and the Combined Strategic Targets Committee was called upon to furnish the Air Commanders with a plan.

D.S.C./T.S. 100 Pt. 8 Encl. 330

The Committee concluded that the offensive against oil targets was still the most effective contribution which the Strategic Air Forces could make. It suggested that as the Ruhr synthetic oil plants were out of action for the time being, the heavy bombers should concentrate on the oil plants in central and eastern Germany. Attacks on communication centres would have to be confined to a restricted area east and south of the Ruhr from Osnabruck and Paderborn to Darmstadt and Aschaffenburg in the south if they were to assist the land battle effectively. The Committee was in fact delineating the area through which Von Rundstedt moved his troops for the Ardennes counter offensive. proposed that in view of the recent successes achieved with G.H. and Micro H equipment a series of experimental attacks might be made on the 22 road-rail bridges crossing the Rhine between Wesel and Coblenz. between Wesel and Coblenz. Finally the Committee advocated the employment of heavy bombers in further operations on the scale of Queen and to attack the large concentrations of troops between the Roer and the Rhine by day and night. (2)

D.S.C./T.S. 100/9 Pt.3 Encl.64A These recommendations were discussed at a special meeting held at S.H.A.E.F. on 5 December attended by the Supreme Allied Commander, all the Air Commanders and Air officers Commanding Tactical Groups. The necessity of maintaining attacks on oil and communication targets was not disputed. It was generally agreed that the bombing of villages and communication centres behind the enemy's front line was

10

<sup>(1)</sup> General Marshall had already written to the Supreme Commander asking him to consider an idea of General Quesada (IXth T.A.C.) whereby VIIIth Fighter Command should be moved to the continent and that wide-spread lowlevel fighter bomber attacks should be made by all air commands against targets of opportunity in Germany. General Eisenhower replied that the Strategic Bomber offensive and support to the land battle must have first priority. In fact VIIIth Fighter Command had attacked airfields and communication centres in the course of escort duties and when the heavy bombers were weatherbound (See D.S.C./T.S. 100 Pt.8 Encls.14A + 25A).

<sup>(2)</sup> Similar views were expressed by S.H.A.E.F. G.2.

wasted unless rapidly followed by a ground assault. Such operations were therefore to take place two or three days before the ground operation began and were to be followed up by night attacks on concentration areas in towns and villages. Although an area attack by heavy bombers to assist the offensive against the Roer dams was believed to be impractical, heavy bomber attacks similar in scale to Operation Queen were of great value, provided the target areas were close to the front line and quickly reached by the first wave of troops. This type of operation was to be developed by mutual discussions between Tactical Air Force Commanders and their opposite numbers in the Army.(1)

Meanwhile plans for future ground operations were set in motion at a meeting between the Supreme Allied Commander, Field Marshal Montgomery, General Bradley and Air Chief Marshal Tedder held at Maastricht on 7 December. The plan, in outline, was that Generals Patton and Patch should straightway mount their joint offensive against the Saar followed by a combined attack against the Ruhr by Twenty First Army Group and General Bradley's forces north of the Ardennes. All Commanders agreed that it was essential to keep on the offensive throughout the winter and if possible to clear the enemy from west of the Rhine. The Supreme Commander believed that the enemy could not continue to suffer such heavy casualties(2) and that combined with a Russian winter offensive a decision might soon be reached.

With regard to operations east of the Rhine there was the usual conflict of views between the Supreme Commander and Field Marshal Montgomery. While agreeing that the main attack should be north of the Ruhr (to be the responsibility of Twenty First Army Group with a U.S. Army under its command) and that the Ruhr should be isolated thus provoking a phase of mobile warfare, Field Marshal Montgomery was convinced that his operation should be conducted at the expense of the remaining U.S. Armies. General Eisenhower, on the other hand wanted to make a subsidiary thrust through Frankfurt and Kassel or alternatively through Bonn and he had no intention of halting the offensive in the Saar. He declared that there was no fundamental reason for disagreement with Field Marshal Montgomery but merely a difference of opinion as to which was the most suitable line of approach for the secondary offensive. There was also dissent about the exercise of command over the Army Groups in the west. Field Marshal Montgomery proposed that all operations north of the Ardennes should be controlled by one commander and those to General Eisenhower believed that the south under another. inter-Army boundaries should be decided by the area of operations to the front and not by natural features in the rear. He therefore directed that the Ruhr should form the boundary between the British and American Groups of Armies. (3)

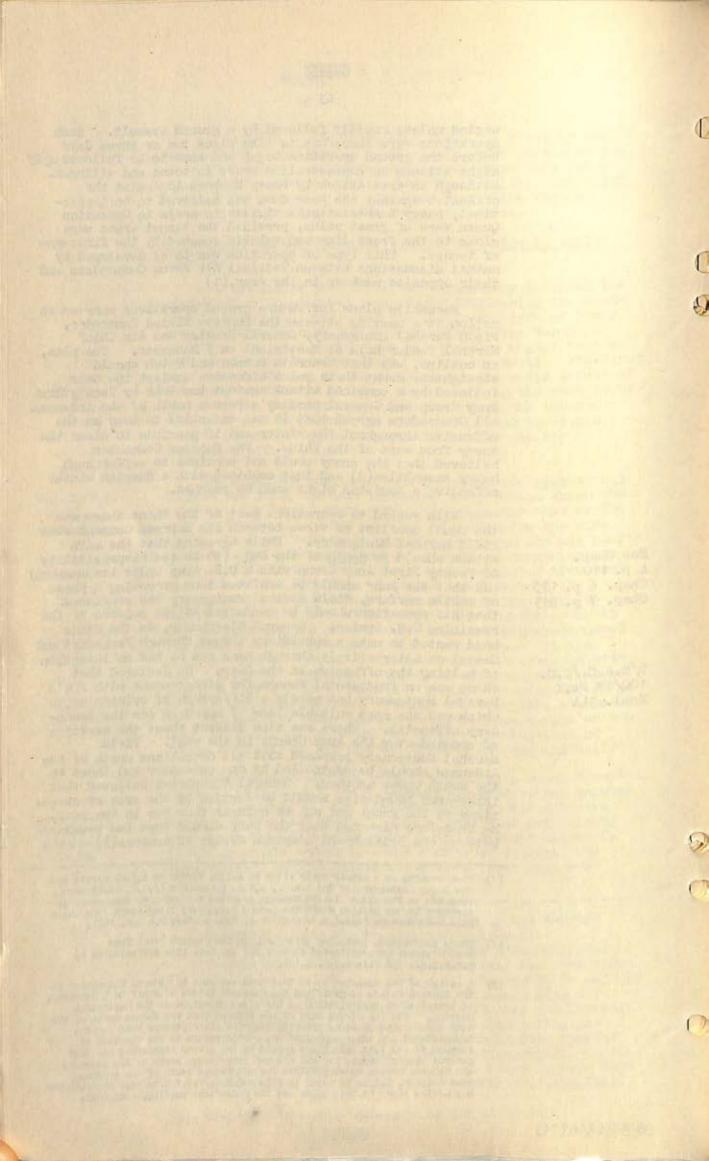
See Chap. 4 p. 110 Chap. 6 p. 175 Chap. 7 p. 213

D/S.A.C./T.S. 100/12 Pt.I Encl. 34A

<sup>(1)</sup> That evening at a dinner party given by A.C.M. Tedder to A.C.M. Harris and the Group Commanders of 2nd T.A.F., A.V.M. Broadhurst (A.O.C. No.83 Group) remarked on the close liaison between American Air and Army commanders in contrast to the British where the Ground Commanders lived apart from their Main Readquarters (S.H.A.E.F.(AIR) Hist. Rec. + Diary P.4 Dec. 144).

<sup>(2)</sup> Enemy casualties, including prisoners, on the Western Front from 8-26 November were estimated to be 9,000 per day. (See Appreciation by S.H.A.E.F., G.2 File D.S.C./H.12).

<sup>(3)</sup> A review of the campaign up to that date was sent by General Eisenhower to the British Chiefs of Staff and the Combined Chiefs of Staff on 3 December. It contained an emplification of his views expressed at the Manstricht meeting. The War Office were of the opinion that the thrust north of the Ruhr should have absolute priority over the other Sectors both for the breakthrough and later exploitation. With regard to the question of command it was felt that there should be two ground commanders and that General Bradley should control the two Army Groups north of the Ardannes and General Devers be responsible for the forces south of the Ardannes (See S.C.A.F. 141, to be found in File D/S.A.C./T.S.100/12 Pt.1 Encl.40B and War Office views on this paper and the Maastricht meeting, Encl.40A).



#### CHAPTER 3

#### THE BATTLE OF THE ARDENNES

### Hitler's last attack in the West

At 0530 hours in the rain and mist of Saturday 16 December, Von Rundstedt launched his long and carefully prepared counter offensive on a forty mile front stretching from Monschau, south of Aachen, to Echternach which stands just above the junction of the rivers Saar and Mosel, east There is no doubt that this was to have of Luxembourg. been the last desperate attempt to stave off the Allied invasion of Germany. The Fuehrer himself had conceived the idea of a strong counter attack as soon as the Allies had broken out across northern France and in orders given in November he revealed that his intention was not merely territorial gain, but the virtual destruction of the Allied Armies in the west. Hitler and his staff realised that such an operation was a gamble in the face of Allied superiority in men and material, but they were prepared to stake everything upon its success and they doubtless believed that at the worst it would delay the thrust to the Ruhr and gain time for the development of Germany's secret weapons and jet aircraft.

A.ii.B.6. Trans. Von Schramm's Treatise Operations in the West. pp. 1 - 6.

> Planning for the counter offensive, which was known by the code name Herbstnebel (Autumn Mist), began in the middle of October by which time a stalemate had been reached on the western front. Early in November the plan of attack had been formulated and top priority for supplies and equipment was given to the western front. Three Armies, consisting of some eight panzer divisions and 16 panzer grenadier and infantry divisions, were to be assembled within the sector of Army Group B (Roermond - Luxembourg) under the command of Field Marshal Model. This Army Group was given first priority in the west by order of the Fuehrer. The object of the attack according to the plan issued to the Commander-in-Chief West was to destroy the Allied Armies between Antwerp and Bastogne and to seize the vital supply bases of Antwerp, Liege and Brussels and thus choke the life line of the Allies. The Sixth S.S. Panzer Army, comprising the 1st and 2nd S.S. Panzer Corps under command of Sepp Dietrich, was given the most important role. It was to strike out towards Verviers from its assembly area in the Eifel on a narrow front supported by a short, but intense artillery bombardment and seize crossings over the Meuse It would then swing north and north and south of Liege. capture Antwerp. In the centre the Fifth Panzer Army under General Manteuffel, re-equipped after its mauling in Normandy, was to penetrate the weakly held Ardennes front on the axis Bastogne - Namur and hold the line of the Meuse around Dinant. Afterwards it was to extend northwards to cover Brussels and Antwerp and so protect the Sixth S.S. Panzer Army. Volks Grenadier divisions were to consolidate in the wake of the armour. The resuscitated Seventh Army was to strike towards the Meuse from Echternach, but its main task was to safeguard the flanks of the two Panzer Armies from the south and south-west and was to be liberally equipped with anti-tank weapons. A supplementary attack across the Maas from Holland was to be made by General Student's First Parachute Army.

The Ardennes operation was to be supported by airborne troops which were to be dropped in advance of the main attack to confuse the Allies. Another feature was the

Thid p. 13.

Ibid p. 10.

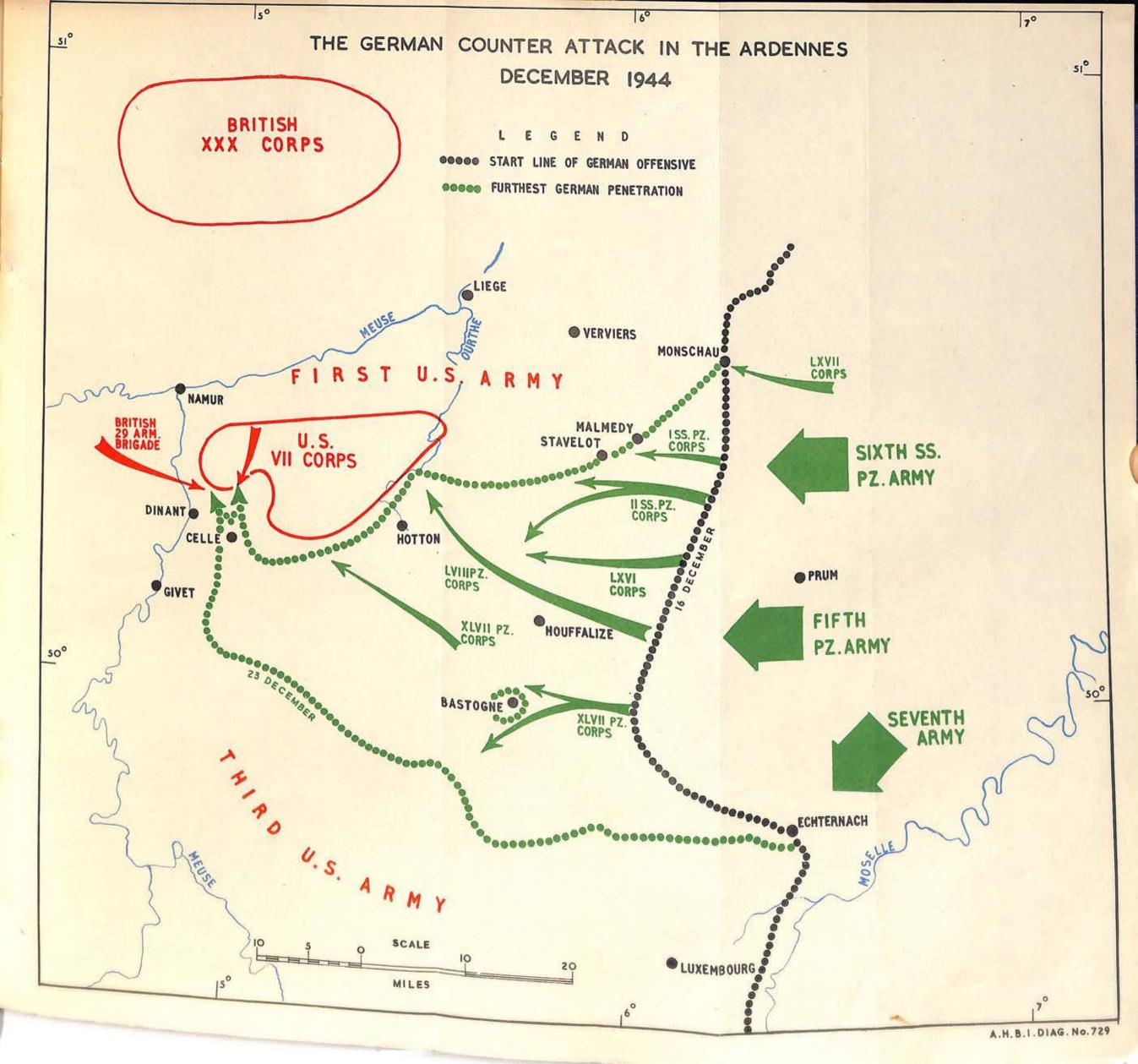
Thid p. 1.

Ibid p. 6. employment of a special group dressed in Allied uniforms and speaking English under command of the notorious Skorzeny (who had helped to kidnap Mussolini). Equipped with U.S. tanks and jeeps they were to gain a crossing over the Meuse in the van of the panzers and spread confusion behind the Allied front line. Deeper in France saboteurs were to descend and wreck communications, and it is believed that bands of assassins were to have eliminated the principal Allied military commanders. For two days after the start of the operation the Luftwaffe was to fly up to about 960 sorties including a number of jet aircraft in support of the ground forces. For this reason fuel was carefully husbanded throughout October and November. In the Channel U and E-boat activities were to be intensified.

The ground chosen for the attack might appear to be utterly impractical for operations by a mechanised force which would have to negotiate the steep hills and wooded valleys of the Eifel and Ardennes. Few suitable roads cross this region and are easily blooked by resolute forces in possession of the chief road junctions. Yet it was along this same route that the victorious German Armies advanced on Sedan under Von Rundstedt in the early summer of 1940, and plans for this early operation were dug out from records and consulted. This time the success of the operation depended entirely on being launched in bad weather so as to counter-Surprise, both balance the immense Allied air superiority. strategic and tactical, was also pre-requisite and it was stressed in the plan that the panzers must secure crossings over the Meuse within 24 hours from crossing the start line so as to prevent the arrival of Allied armoured reserves. Hitler personally concerned himself with the entire planning of the attack and was to decide upon the moment for it to be

Preparations for the offensive went ahead during The S.S. panzer divisions, rested and re-equipped, November. moved towards the front from Westphalia while divisions of the Fifth Panzer Army were unostentatiously withdrawn and rested in the quiet Ardennes sector. Strict orders were issued on secrecy. It was part of the enemy strategem to give the impression that a large force was being gathered into the Cologne district to resist an Allied thrust towards the Ruhr and there is no doubt that this deception proved fruitful assisted in poor weather which hindered air reconnaissance. The fact that these preparations were conducted more or less according to plan in spite of air attacks on communications and bridges in western Germany was considered a remarkable achievement by the German Supreme Command, but even so some delay resulted after such raids while the re-disposal of units and the extensive reorganisation at the front led to the postponement of the operation for several weeks. Moreover the American offensives around Aachen and in the Saar bit deeply into German man-power and led Rundstedt to try and induce the Fuehrer to launch a quick local attack south of Roermond to exploit American fatigue after Operation Queen. But the Fuehrer determined to abide by the original plan even if it meant loss of ground and positions, and the operation was fixed for 10 December.

The provision of sufficient fuel for such a large mechanized force was a major problem and O.K.W. estimated that it would require 1700 cubic metres of petrol together with about 50 ammunition trains. The static nature of operations during the autumn enabled stocks to be conserved but on the eve of the battle the Commander—in—Chief West informed the Fuehrer that in his opinion "double the time and



twice the amount of fuel would be required; prompt deliveries and ample supplies were of decisive importance".(1) Furthermore it was due to the necessity of replenishing fuel reserves just before the start of the offensive that D Day was postponed until 16 December. this date the Fuehrer deemed that all was ready and charged Field Marshal Model to 'carry out all orders to the letter and to the last man'.

# Allied Intelligence and the German Counter Attack

The enemy achieved tactical surprise in the timing and placing of his attack and made ample use of the mist and fog to cloak his movements and enable him to gain impetus before the Allied Air Force could strike. It would nevertheless be untrue to say that Allied Intelligence was unaware of his preparations for it was noted in the last chapter that air reconnaissance had shadowed the movement of enemy armour towards the western front from early in November onwards. On 6 December General Strong (S.H.A.E.F. G.2) reported the arrival of three fresh German divisions in the weakly held Eifel area but this information was not taken too seriously D.S.C./T.S.100/9 as it was known for some time that the region immediately to the west of Coblenz was being used as a training ground for raw troops before they were drafted into a more active This was not an unusual procedure either for the Allies or for the enemy and the continued arrival of troop trains and unloading of stores in this area did not arouse Such was the Allied Commander's preundue suspicion. occupation with the Aachen front that they believed implicitly that if the Germans were going to attack at all the blow would fall in this area where their reserve Panzer Divisions were gathered. Some evidence for this point of view came to light in a discussion on the failure of air reconnaissance to spot the enemy's concentrations in the Ardennes which took place during the Air Commanders Conference on 1 February. In answer to a criticism from Air Chief Marshal Tedder and General Spaatz that the Tactical Air Forces had been too closely tied to their Army Groups and were thus paying over much attention to local operations, General Vandenberg replied that in fact General Quesada (IXth Tactical Air Command) had warned General Hodges (First U.S. Army) of the presence of large armour and vehicle con-The latter, since all his attencentrations in the Eifel. tion was fixed on the Aachen battle, had evidently allowed this warning to go unheeded.

> At the beginning of the week in which Operation Herbstnebel was launched, General Strong, in an extremely accurate appreciation of the enemy's strength to the Supreme Commander reckoned that Rundstedt had in reserve eight panzer and about eleven infantry or parachute divisions although he believed them to be low in strength both in men and equip-Moreover the slackening of the battle in the Duren region had allowed the enemy to keep the Sixth S.S. Panzer Army intact and he had taken opportunity of the lull to withdraw the 10th S.S. Panzer Division for refitting.

General Bayerlein (Panzer Lehr Division) stated in an interrogation after his capture in April, 1945 that he had been promised fuel for 500 Km., but had received enough only for 200 Km. which he reckoned would be soon expended in the hilly country of the Eifel. A.P.W.I.U. (IXth Air Force) 63/1945.

Ibid p. 12.

Chap. 2 p. 59.

Pt. 3 Encl. 61A para. 2.

Thid pt. 4 Encl. 39A para. 8.

D./S.A.C./ T.S. 100/12 Pt. I Encl. 39A.

TO.

See Chap. 2 p. 57 et seq.

Thid Encl. 38A para. 3.

S.C.A.F. 179 20 Jan., 1945.

Crusade in Europe pp. 368 - 371.

S.H.A.E.F. (Air) Diary p. 9 Dec., 1944, and S.A.C's. report to C.C.S. p. 92.

'Out' Log D.S.C. pp. 20, 22, 24, 30 Dec., 1944.

Ibid 'In' Log D. 21 Dec., 1944.

sectors infantry divisions had been withdrawn for rest and Although two panzer divisions and six re-equipping. infantry and panzer grenadier divisions had recently been moved to the Saar the Germans appeared to him to be mostly concerned with the Dusseldorf - Cologne sector. General Strong saw no indication of any major German operation apart from possibly counter-attacking on a small scale in the Hurtgen Forest to safeguard the Roer Dams. Field Marshal Montgomery who issued a new directive to Twenty First Army Group on the day of the German attack was also confident that the enemy had neither the strength nor the means to pass over to the offensive.

It will be remembered that the bulk of the American Army on the western front was either committed in the Aachen sector or assembling for the thrust into the Saar. In the north Field Marshal Montgomery's troops were preparing for the long postponed drive into the Rhineland. The Ardennes sector was thus thinly held by four divisions of the VIIIth U.S. Corps. General Eisenhower in his report to the Combined Chiefs of Staff on the progress of operations from October to January has recorded his decision to take the risk of leaving a weak spot in the Ardennes in order to concentrate the maximum force opposite the Ruhr and in general to keep on the offensive during the winter. (1) In his book In his book 'Crusade in Europe' he recalls that both he and General Bradley agreed that in the event of a German push they must be prepared to withdraw to the line of the Meuse; the Allies should be able to crush such an offensive by attacking the enemy's flanks from the direction of Aachen in the north and from the Saar in the south where the bulk of the U.S. forces were poised for an attack. They believed that by the time the enemy reached the Meuse he would have overtaxed his supply line particularly if the Allied Air Forces had been able to operate in strength against communications.

## First moves on the ground and in the air

News of the counter offensive in the Ardennes reached Hist. Record and S.H.A.E.F. during the afternoon of 16 December. The Supreme Commander, sensing danger reacted promptly to the threat and instructed General Bradley, who happened to be with him, to move up at once two armoured divisions towards the flanks of the German penetration. On the evening of the 17th the XVIIIth U.S. Airborne Corps, then in reserve near Rheims, was placed under command of General Bradley and ordered to concentrate as soon as possible at the important road centre of Bastogne, while on the 18th General Brereton (First Allied Airborne Army) was instructed to move 17th U.S. Airborne Division from the U.K. to the Rheims area by air. 20 December 6th British Airborne Division was ordered to move to the continent by sea and about that time 11th U.S. Armoured Division, a recent arrival in Europe, began to assemble around Rheims, in the role of S.H.A.E.F. Reserve. Another measure which marked the gravity of the situation was the granting of permission by S.H.A.E.F. to Twelfth Army Group artillery to use the Variable Time Fuze. This had been advocated by General Marshall during the autumn when urging the employment of all means to bring about a rapid end to the war in Europe.

<sup>(1)</sup> He stated 'This was a calculated risk based on the absence of strategic objectives or large depots in the area, the relatively difficult terrain and my current estimate of the enemy's intentions'. (S.C.A.F. 179, para. 8.)

D.S.C./T.S.100/9 Pt. 43. Encl. 75A and Pt. 4. Encl. 1A.

S.H.A.E.F. Air Daily Summary of Ops No. 62 17 Dec., 1944.

2nd T.A.F. Daily Log Sheet No. 2254 - 2257.

DSC/T.S.100/9 Pt. 4 Encl. 2A and Pt. 2 Encl. 1A.

S.H.A.E.F. (Air) Daily Summary of Ops. No. 63 para. 5.

Air Staff S.H.A.E.F. Ops. Journal 17/18 Dec., 1944 Ser. No. 13.

Log Sheet No. 2261.

On 17 December the enemy continued to probe into the Allied line from west of Trier to Monschau. The deepest penetration was made by the Sixth S.S. Panzer Army which had covered about ten miles in the direction of Malmedy. Allied Command was, on the whole, confident of dealing with the situation; General Bradley was optimistic and staff officers at S.H.A.E.F. felt that the advent of a phase of mobile warfare might enable the Allies to strike a decisive blow against the Wehrmacht. Fairly thick cloud still obscured the battlefield but there was a strong southerly wind which cleared the mist a little and afforded a number of opportunities for the IXth Air Force to strike at the enemy. By the end of the day it had flown over 1200 sorties. The U.S. pilots attacked movement between Cologne and Trier but at once encountered the G.A.F. covering their ground forces in great strength. A number of aerial combats were fought in which the Americans claimed to have destroyed about 90 aircraft. East of the Rhine British fighter bombers kept to their familiar task of harassing transport round the Ruhr. A few skirmishes took place between 2nd T.A.F. and enemy fighters along the lower reaches of the Rhine and the British pilots claimed to have shot down eleven aircraft including one Me. 262 which was forced to fly at ground level and crashed into a house.

By the 18th the full implications of the German attack had been perceived at S.H.A.E.F. as more information came in from the U.S. front together with the apprisal of German intentions in captured operation orders. Both on the D.S.C./T.S.100/12 ground and in the air there was intensive enemy activity. The most dangerous German thrust was still in the district of Malmedy although attempts by enemy paratroops to spread panic had proved singularly ineffective. (1) A deterioration in the weather was the reason for a drop in the rate of effort by the Tactical Air Forces. In the face of it, however, lowflying Thunderbolts attacked transport on the roads to Malmedy and Stavelot, a town further to the west, claiming 230 motor vehicles destroyed; in the air over 40 aircraft were claimed to have been shot down.

On the 17th Air Marshal Coningham and General Vandenberg had already reached an agreement whereby all available aircraft from 2nd T.A.F. were to support the IXth Air Force on the following day, leaving behind the minimum number to protect the British sector. The two Commanders agreed that the U.S. aircraft should give close support to their respective Armies and that the British should provide cover and, in addition, operate east of a line decided upon by the IXth Air Force. But nearly all the Typhoons despatched on 18 December to assist the Americans made abortive missions because of low cloud. Elsewhere, armed reconnaissances were made over the plain west of Cologne, but here the G.A.F. 2nd T.A.F. Daily refused any inducement to come out and fight. On the night of 18/19 December a large number of Mosquitoes from 2nd T.A.F. were ordered to scour the roads running from the Rhine towards the front in an area stretching from Dusseldorf as

<sup>(1)</sup> In A German study of their airborne operations during the war, this operation was held to be a complete The airborne force was too small, training of failure. paratroops and troop carrier crews inadequate, the planning was sketchy, the weather was unfavourable and finally the ground plan miscarried. (See Airborne operations: A German Appraisal. Office of Chief of Mil. Hist. U.S. Army Dept., p. 31)

70

Toid Sheets Nos. 2264 to 5. far south as Trier. With the help of navigational aids the Mosquitoes bombed cross-roads, rail junctions and caught several motor convoys on the move.

petrol, ammunition for the Eifel was sent by rail from the Cologne district. In order to interrupt this flow the Allied

It was known that the bulk of supplies such as rations,

S.H.A.E.F. G.2 Weekly Int. Summ. No. 41 Pt. E.

Air Forces would have to bomb the marshalling yards at Cologne and Troisdorf east of the Rhine and at Neuss and Troop movements as a rule were Rheydt west of the river. made from north western and central Germany to towns on the Rhine such as Frankfurt, Bingen, Mainz and Coblenz. principle adopted by the enemy was to use railways as close to the front as possible so as to conserve petrol.

the Rhine the railways follow the river valleys in the hilly Eifel district; firstly there are the lines to the front which run beside the tributaries of the Rhine such as the Ahr in the north (beside which stands the railway centre of Ahrweiler) and in the south the Mosel which is crossed several

West of

See Map No. 11.

The big junction of Trier times by the railway from Coblenz. is also adjacent to the Mosel. Secondly, there are the rivers running parallel to the Rhine and the front. are the Our, the Prum and the Kyll; beside them run lines from north to south and the railway centres of Gemund, Kall,

Stadkyll, Gerolstein, Prum, Kyllburg, Waxweiler, Ehrang and Bitburg close behind the front were convenient detraining points for tanks, supplies and other heavy equipment for the German thrust into Belgium. West of the river Our the enemy used the main roads as far as possible, a procedure contrary to his usual practice, the reason being that he wanted to move speedily in addition to which the secondary roads were so poor in this district and detours were often impossible because of the nature of the ground. Study of the terrain on the map will show how admirable it was for attacks on communications. The position of mail was for attacks on communications.

The position of railways and rail and road bridges across the rivers was such that accurate attacks would stop movement westwards while the lack of good roads meant that the major ones might well be blocked at certain essential junctions.

VIIIth Air Force Summary of Ops Dec., 1944.

Bomber Comd. ORS Reports

Dec., 1944.

Dec., 1944.

At the request of S.H.A.E.F. the Strategic Air Forces were soon thrown in to disrupt troop movement and concentrations by attacking these key road and rail junctions. 18 December over 400 Liberators and Fortresses of the VIIIth Air Force attacked important railway centres immediately behind the front including the Kalk marshalling yard at Cologne, the Lutzel marshalling yard at Coblenz and railway facilities at Mainz, Bonn and Kaisers-Lautern. the night of 17/18 December some 1200 aircraft of Bomber Command flew east of the Rhine and attacked the town centres of Ulm, Munich, Duisburg and Hanau (near Frankfurt). night's operations met with great success and the marshalling yards of these towns, in particular, suffered severe damage. On the 19th the VIIIth Air Force despatched a total of 329 aircraft of which the majority bombed road junctions and choke points through which the panzers or their supply columns were passing. Such choke points were mainly in the Kyll valley at Glaadt, Schleiden, Kyllburg, Bitburg and Blankenheim. Railway targets included the railhead at Gemund on the Our VIIIth Air Force and the marshalling yard at Ehrang on the Mosel near Trier.

Summary of Ops. In the afternoon a force of 150 Lancasters were detailed to attack the railway centre of Trier, but in the gathering fog only 32 aircraft were able to take off. They pressed home their attack and returned to England where they experienced great difficulty in landing. This operation was, nevertheless, believed to have been extremely effective and

DSC/T.S.100

General Eisenhower and Air Chief Marshal Tedder combined in Pt. 9 Encl. 29A, sending a signal of congratulation to the Commander-in-Chief, and DSC/H42. Bomber Command.(1)

### Reorganisation of Command

Attempts by the Allies to stem the flood within the salient with their ground forces now began to assume more On 19 December the Supreme Commander held a solid shape. conference at Verdun which was attended by his deputy, Air Chief Marshal Tedder and Generals Bradley, Devers and The plan to which all the commanders agreed was that the forces south of the Moselle should at once pass to the defensive. While the American forces on the north side of the salient were to attempt to plug the gaps torn in their line, General Patton (whose front up to the Moselle was to be taken over by General Devers) was to launch an attack northwards towards Bastogne with the help of reserves from Sixth Army Group. The object of this attack was to stop the enemy penetrating into the weakest part of the Allied front east of Namur. Stress was also laid on the need for holding the Meuse crossings, if necessary using service troops to defend them. Their plan was communicated to Field Marshal Montgomery on the Supreme Commander's return from Verdun.

'Eyes Only' S.A.C. to F.M. Montgomery 20 Dec., 1944 D.S.C./ T.S.100/12 Pt. 2 Encl. 5A.

Further significant developments occurred on 20 December. On that day General Eisenhower resolved to divide the Allied Ground Command, since the wedge driven into the front by the enemy prevented General Bradley from exercising control over the whole of his Army Group. In the second place it was the whole of his Army Group. clear that the German thrust was aimed at Antwerp and Brussels in the British Sector and, thirdly, XXXth British Corps, at that moment pulling out from the Roermond sector prior to preparing for the advance by Twenty First Army Group into the Rhineland, was the only reserve of any size in the The Supreme Commander therefore decided that A.E.F. Field Marshal Montgomery was to command the forces to the Encls. 8A - 9A. north of the salient, including the whole of the First and
Ninth U.S. Armies and General Bradley was to command the
S.H.A.E.F. (Air) forces to the south.(2) This idea appears to have originated Hist. Record and with the Deputy Assistant Chief-of-Staff (General Whiteley), Journal App. 6A who had visited the Commander-in-Chief Twenty First Army Group Dec., 1944. on 16 December. (3)

D.S.C./ T.S./100/12 Pt. 2

Dec., 1944.

At the same time plans for a similar re-organisation of the Command of the Tactical Air Forces was agreed upon by Air Chief Marshal Tedder, General Spaatz and the Deputy Chief-of-Staff (Air), Air Marshal Robb. The IXth and XXIXth Tactical Air Commands (responsible for supporting the First

<sup>(1)</sup> F.I.D.O. (Fog Investigation and Dispersal Organisation) was then still in its infancy and was in any case intended only for emergency landings. The VIIIth Air Force airfields had not been equipped with this device.

<sup>(2)</sup> F.M. Montgomery's demand at the Maastricht Conference on 7 December for two Ground Commanders, one north and one south of the Ardennes, was thus fulfilled (see Chapter 2)

<sup>(3)</sup> Notes of this and other important meetings held at S.H.A.E.F. during the battle were kept by D/C.O.S. (Air).

Thid

and Ninth U.S. Armies) were to be placed immediately under the command of Air Marshal Coningham. The XIXth Tactical Air Command was to be reinforced by several fighter-bomber Groups from the above mentioned Air Commands to enable it to give adequate support to General Patton's offensive. As for the Strategic Air Forces, General Spaatz consented to place one of his Bombardment Divisions at the disposal of the IXth Air Force, in addition to two Groups of the VIIIth Fighter Command which were to operate from airfields on the continent. The remainder of the VIIIth Air Forge, together with Bomber Command, were to be available to attack targets in the battle A simple and speedy system of laying on operations Target information for the heavy bomber diviwas devised. sion operating with the IXth Air Force was to be passed directly between the Headquarters of the two Air Forces. Targets for the remainder of the VIIIth Air Force were to be passed through Air Staff S.H.A.E.F. so as to avoid any danger of duplication with Bomber Command.

The decisions to change air and ground commands were taken during the morning meetings at S.H.A.E.F. on the 20th between General Eisenhower and his staff and shortly after signals were sent out to the various commanders confirming

telephoned to Field Marshal Montgomery and both agreed that the boundary between them should be a line running through

Givet (on the Meuse) to Prum (roughly lying in rear of the centre of the salient) both places being inclusive to

bridges along the Meuse as far south as Givet.

action to General Eisenhower that evening

his control the latter began to make his dispositions. His first task was to assemble a reserve of four divisions in the area east of the Meuse between Durbuy and Marche which was to be commanded by the VIIth U.S. Corps. The XXXth British Corps which had been lining the Meuse north of Aachen and which was preparing to move to the Nijmegen area had already began to withdraw behind the Meuse and concentrate west of Maastricht. Troops were also sent forward to picquet the

U.S. Divisions in the St. Vith - Monschau were instructed to

future prospects and declared that he did not deem it neces-

sary to give up the ground which had been won by such hard

Field Marshal Montgomery appeared to be optimistic about

General Bradley who agreed to the new plan at once

With two American Armies under

The two

Reporting by signal on his

See Map No. 11.

'Eyes only' to S.A.C.

F. M. Montgomery 20 Dec., 1944.

The bad weather period

fighting east of Aachen.

Field Marshal Montgomery.

hold on for as long as possible.

From 20 - 22 December thick fog which enveloped the whole of north Europe provided cover to the enemy as he pressed on towards the Meuse. On 19 December 2nd T.A.F. could put no more than a handful of fighters in the sky. The IXth Air Force on that day flew less than 60 sorties and claimed to have destroyed some 60 odd vehicles. 22nd the Allied Tactical Air Forces were grounded. Strategic Air Forces based in England were affected almost The VIIIth Air Force did not fly again until as severely. 23 December. Bomber Command found it possible to operate once by day and once by night during this period. 21st it made a second attack on Trier. Navigational aids were used but apart from observing a column of smoke pilots were unable to ascertain what damage they had caused. the night of 21/22 December a force of 250 heavy bombers struck at Bonn and the Nippes marshalling yard at Cologne, but Little fresh damage appears to have been wrought as aircraft had to bomb through 10/10ths cloud.

A.M. War room Summary Bomber Command Ops. Dec., 1944. R.A.F. Bomber Cmd. O.R.S. Report Dec., 1944.

SECRET

DS 96326/1(80)

D.S.C./T.S.110/9 Pt. 4 Encls. 3A-5A.

At this stage units of the Fifth Panzer Army were nearest to the Meuse, having covered an average of about 20 kilometres By 22 December these spear-heads had reached St. Hubert and Moissy, less than 30 miles from the Meuse and small patrols were already even closer to the river. General Manteuffel had been forced to by-pass Bastogne which had been held by 101 U.S. Airborne Division since early on the 19th. In the north, Sepp Dietrich's S.S. Troops were beginning to lag behind and his chief spear-head, the 1st S.S. Panzer Division, which was trying to reach Liege, could Worst still it had run out not break through the U.S. line. of petrol and held insufficient stocks of ammunition. (1) Malmedy was still in the hands of the badly torn 106th U.S. Division and south of Monschau the 7th U.S. Division maintained The 11th Panzer Division a tenuous link with 1st U.S. Army. had been transferred from the south to the St. Vith area to try and break the obstinate American stand at that point.

S.H.A.E.F. G. 2 Weekly Int. Sums. Nos. 41 and 47 Pt. E and Effectiveness of 3rd Phase Tactical Ops. IIL/26 P. 186.

Thus von Rundstedt's intention of reaching the Meuse in one day had not been fulfilled. From the start the lack of fuel had been all too obvious and now the chances of capturing Allied supply dumps to keep his armour on the move were becoming remote. Troops taken prisoner at this time admitted that the lack of petrol spelt the difference between success and The delay in the arrival of supplies brought about failure. by the bombing of rail-heads and the strafing of convoys which began in earnest on 23 December, in addition to the inadequate road system, merely made the position worse.

S.H.A.E.F. AIR Dec., 1944.

During these critical days the battle situation was studied intently by the ground and air staffs at the Supreme Commander's headquarters at Versailles. From 21 December a slightly different procedure of command than hitherto was At the Chiof-of-Staff's conference a review of improvised. the ground, air and sea situation was made. Thereupon the Hist. Record and Air Staff began to work out further details of air opera-Journal App. 6B tions.(2) At the same time General Bedell-Smith in company with the Deputy Supreme Commander, the Deputy Chief-of-Staff (Air) and two or three other senior Army and Air Force officers deliberated further on the situation before report-ing to General Eisenhower. At the end of this meeting it became customary for the Deputy Chief-of-Staff (Air) to telephone to Air Marshal Coningham who by that time was in possession of the latest information from the Headquarters of Twenty First Army Group. He then joined the others who had assembled in the Supreme Commander's office. It was at these two meetings that the principal decisions of the day were taken after discussions with the Supreme Commander who was also in constant telephone communication with General Bradley at his headquarters in Luxembourg.

> The 22nd of December was the last day of the bad weather From fairly early in the morning the fog began to lift a little in the northern sector of the battle area. Fighters and fighter-bombers of 2nd T.A.F. became airborne for the first time for two days when Spitfires of No.83 Group took off for a sweep of the St. Vith - Malmedy district shortly after 1000 hours. No enemy aircraft were seen and the mission ended uneventfully. East of the Rhine Typhoons,

2nd T.A.F. Daily Log Sheets No. 2267 - 2269

<sup>(1)</sup> According to a P.O.W., tanks of this division carried 700 litres of petrol which were sufficient for 200 to 225 kilometres (S.H.A.E.F. G.2 Weekly Int. Summary No.41

<sup>(2)</sup> In place of the Daily Air Staff Meeting.

74

Spitfires and Tempests flew armed reconnaissances in the Enschede - Munster area north of the Ruhr where weather conditions were more stable. Further direct action on the north part of the salient was provided by Mitchells of No.2 Group which attacked a detraining point at Nideggen and a troop concentration at Heimbach both in the Roer valley. By nightfall 2nd T.A.F. had flown 316 sorties but the weather was still not good enough for many ground claims to be made.

S.H.A.E.F. (Air) Daily Summary of Ops. No.67 para. 5. Further south the fog was still very prevalent and kept the bulk of the IXth Air Force on the ground although Thunderbolts managed to fly 19 sorties against a panzer column north west of Malmedy. In the Sixth Army Group area the First T.A.F. flew just over 100 sorties.

R.A.F. Bomber Cmd. Night Raid Report No.798

2nd T.A.F. Daily Log Sheets No.2270 That night the air offensive was maintained by Bomber Command and No.2 Group. Both forces experienced better weather over the target area than had been forecast. Two hundred and seventy Lancasters and Mosquitoes attacked the marshalling yards of Coblenz and Bingen along the Rhine causing extensive damage to railway facilities at the latter place Enemy night fighters went into action but the counter measures of Bomber Command deceived them and no more than two of the bombers were attacked. No.2 Group only made 37 sorties but found many targets. Six trains were attacked including one containing ammunition which burned for two hours. Other aircraft harried a big convoy of lorries and armoured vehicles proceeding towards the front.

Stemming of the German attack - Operations 23 - 24 December

By 23 December the stubborn resistance made by the Americans in the key points within the salient had compelled the enemy to revise his plan of campaign. The Sixth S.S. Panzer Army, which for the past week had battered in vain against the northern shoulder of the salient (formed by the line Stavelot-Malmedy-Butgenbach-Monschau) held by Vth U.S. Corps, began to sheer off towards the south-west. It had suffered severe losses in the St. Vith area and seemed to have abandoned the idea of making a direct thrust on Liege. The Fifth Panzer Army advancing towards the Meuse similarly found Bastogne a source of embarrassment on its line of communication. It now appeared to be veering northwards towards Dinant south of Namur and began to tap against the First U.S. Army reserve (VIIth U.S. Corps) at that moment assembling in the area Durbuy - Marche.

D.S.C./T.S./ 100/9 Pt. 4 Encl. 4A para. 1.

S.H.A.E.F. Hist. Rec. and Diary App. 6C Dec., 1944.

'Eyes Only'
F. M. Montgomery
to S.A.C. M.389
22 Dec., 1944
and M.390
23 Dec., 1944.

On the Allied side Field Marshal Montgomery decided to straighten out the Allied line on the north side of the bulge and on the 22nd withdrew the 7th U.S. Armoured and the 106th U.S. Infantry Divisions from their exposed positions on the east of the salient. His strategy at this stage was to remain strictly on the defensive, husband his reserves, hold the Meuse bridges and it was made known that he would not attack until the enemy had reached the limit of their supply hine. He was, however, concerned about the converging move-ment of the Fifth Panzer Army against his reserve for it might either be enveloped by the panzers or its resources frittered away in minor counter attacks. Moreover the low strength of the infantry divisions in the First and Ninth U.S. Armies was causing him a good deal of disquiet. For reasons he disapproved of the early attack launched by General Patton towns of the early attack launched by General Patton towards the north and was frankly pessimistic about its chances of success. It appeared to him that the German Seventh Army might well be able to contain the Third U.S. Army thus allowing the two Panzer Armies to converge on

#### SECRET

75

his own forces. These doubts were partially borne out for General Patton's attack launched on 22 December made little headway. Enemy resistance was powerful and the road to Bastogne heavily mined. On the other hand the attack against the north-west corner of the bulge failed to develop. least General Patton's operation prevented the Germans from pushing too far to the west.

D.S.C./T.S./ 100/9 Pt.4 Encl. 4A para. 2.

On the morning of 23 December the weather showed encouraging signs of improvement with a cold easterly wind blowing away At the Chief-of-Staff's Meeting at S.H.A.E.F. it was the fog. stated that this fine spell would probably continue for the next three days. Although the weather would favour enemy air activity first, an opportunity for the Allied Air Forces to strike at the German Army had come at last. The problem facing the Air Commanders was how to maintain the maximum number of aircraft in attacking enemy communications immediately behind the front. With the Luftwaffe operating in such large numbers and in such a determined manner it might be necessary to divert a great part of the available force against the G.A.F. air bases. For the time being they agreed to watch the outcome of the day's operations for it might provoke large air battles and cause the destruction of many hostile aircraft.

Ibid para. 2.

Hist. Rec. and Diary App. 60 Dec., 1944.

2nd T.A.F. O.R.B. App. No.60 Dec., 1944.

The Air Staff of 2nd T.A.F. had already defined areas for the British and U.S. aircraft operating under its control. With regard to the changes in command the officers commanding the two U.S. Tactical Air Commands under 2nd T.A.F. had S.H.A.E.F. (Air) expressed general satisfaction over the arrangement to Air Marshal Coningham but in doing so complained of lack of The IXth Tactical Air co-operation from Twelfth Army Group. Command was to operate from the bombline in front of the First U.S. Army to a rectangular line formed by the towns of Houffalize, Prum and Monschau. The XXIXth Tactical Air Command was to operate from this area to the west bank of the Rhine bounded on the north by the line Monschau - Arhweiler and on the south by the line Prum - Andernach. No.83 Group was given two operational zones, one for fighter patrols and Fighter aircraft one for armed reconnaissance missions. were to give cover over the American zone as far south as the line Houffalize - Prum - Andernach and as far north as the Armed reconnaissance was to be made in line Julich - Neuss. Armed reconnaissance was to be made in a more limited area (Julich - Neuss - Monschau - Arhweiler). Spitfire pilots were warned to be on the look out for American Lightnings, Thunderbolts and Mustangs in their area. need to attack transport as close to the bombline as possible was also impressed on fighter-bomber pilots. No.84 Group was to assist No.83 Group in these operations and in addition was to provide cover over the British and Canadian Armies. Thirdly it was also to prevent the G.A.F. from interfering over the battle area by sweeping airfields north of the Ruhr. The direction of No.83 Group fighters over the salient and the provision of information about ground targets was to be arranged mutually between the British and American Groups and Commands.(1)

> Air operations on 23 December proved to be a series of great air battles with the G.A.F., out in very great strength,

<sup>(1)</sup> A detachment from No.83 Group Control Centre at Erp (Holland) was sent to Liege to deal with requests for close support from the U.S. Armies and to control British fighters and fighter bombers operating in the U.S. Sector.

2nd T.A.F. Daily Log Sheets Nos.2271 - 3.

See Map No. 12.

2nd T.A.F.O.R.S. Report No.34 p. 10. of which the brunt was borne by the American fighters. Armed reconnaissance missions of 2nd T.A.F. could not begin before 1300 hours because of the fog but from that time flying continued until 1618 hours. The only large target spotted by Typhoons was a column of 15 tanks moving towards the battle south of Duren; on the whole little transport was observed and claims for vehicles amounted to about 20 destroyed and 36 damaged. A few minutes before 1230 hours 72 medium bombers of No.2 Group took off from Belgian airfields to attack detraining points and troop concentration areas of the Sixth S.S. Panzer Army. These were situated at areas of the Sixth S.S. Panzer Army. Losheim, Darschied and Schmidtheim all three being south of The last named target received the the town of Schleiden. most accurate concentration of bombs; over the other two targets the bombs were more scattered. A prominent operation by No.84 Group was a low level attack on the barracks at Soesterburg airfield in north west Holland from which it was believed Ju's 52 were operating and which might possibly be used for emplaning paratroops. (1) The barracks were occup The barracks were occupied at the time and a direct hit was scored on one building.

Although the greater part of 2nd T.A.F's fighters were employed in seeking out the G.A.F., no enemy aircraft were claimed to have been shot down by them on the course of the day's operations. The only sightings were made by No.83 Group which pursued a few Me.262's east of the Rhine. A number of grounded aircraft, which might have been dummies, were seen on the Hangelar airfield at Bonn. West of the Rhine marks of jet aircraft were noted on the landing ground at Gymnich in the Aachen sector. Spitfires patrolling the St. Vith area had nothing to report save an attack on them by American Mustangs.

S.H.A.E.F. (Air) Daily Summary of Ops. No.68. Fighter bombers of the IXth Tactical Air Command sought out targets more in the centre of the bulge and was mainly occupied in the Malmedy sector; the XXIXth Tactical Air Command operated more to the east and south and made armed reconnaissance around Prum and swept the Cologne - Bonn airfields. The intentions of the G.A.F. on this occasion would appear to have been the destruction of the medium and heavy bomber forces rather than giving direct cover to the Army. The American Air Forces were thus fully occupied with fighter sweeps and escort duties which accounts for their ground claims being small in comparison with their rate of effort. By the end of the day about 200 motor vehicles had been claimed as destroyed. The IXth Tactical Air Command, however, claimed to have destroyed 42 enemy aircraft over the battle zone in the course of armed reconnaissance and escort duty to the medium and heavy bomber forces.

The medium bombers of the IXth Air Force performed similar tasks to No.2 Group and made 670 sorties. These included attacks on communication centres behind the salient. Such targets were at Kyllburg, Prum, Nuerburg, Waxweiler, Lunebach and rail or road bridges across the rivers Moscl, Saar, Erft and Ahr were bombed at Saarbourg, Mayen, Eller, Euskirchen and Ahrweiler. Results were reported as being from fair to excellent. The IXth Bombardment Division suffered heavy casualties losing 37 Marauders and an Invader.

The effort made by the heavy bombers was smaller than that of the Tactical Air Forces. Targets were for the most

IXth Air Force

Summary of Ops. Dec., 1944.

Ibid

<sup>(1)</sup> More paratroops had been dropped in the Stavelot area on 22/23 December.

A.M. War Room a small force of Summary of Bomber yard at Cologne. Command Ops. It was found poss accurate attacks

VIIIth Air Force Monthly Summary of Ops. Dec. 1944. part marshalling yards. Two forces were dispatched by Bomber Command, the biggest (153 aircraft) visited Trier and a small force of 34 Lancasters bombed the Gremburg marshalling Escort was provided by Fighter Command. It was found possible to bomb both targets visually and accurate attacks were made. The Cologne force became embroiled with the G.A.F. and lost six heavy bombers. VIIth Air Force sent out a force of 421 heavy bombers to attack the marshalling yards at Ehrang, Homburg, Kaiserslautern in the Moselle area and the road and rail centres of Ahrweiler, Junkerath and Dahlem as the supply line feeding the north of the salient. The VIIIth Fighter Command which provided an escort of 700 Mustangs and Thunderbolts had a particularly strenuous day and were kept fully engaged in beating off the enemy fighters. In this they were successful for none of the Fortresses and Liberators were lost and they claimed to have accounted for 76 of the enemy in aerial combat.

By the end of the first full day's air operations in the Ardennes battle 2nd T.A.F. and the IXth Air Force had flown a total of 2,182 sorties, had claimed 96 enemy aircraft destroyed together with 220 motor vehicles and 17 armoured To this total the VIIIth Air Force added fighting vehicles. the score of 80 enemy aircraft claimed as destroyed. G.A.F. had made a most determined effort to prevent the Allied medium and heavy bomber forces from reaching their objectives and if it was their intention to divert the Allied Tactical Air Forces from the battlefield they would appear to have Not since the succeeded but at great cost to themselves. summer had so many German fighters been seen in the sky and it was reckoned that altogether they must have flown well over 1,000 sorties on that day. Unfortunately German records for this period are extremely scanty and it has not so far been found possible to discover their daily rate of effort during the battle.

2nd T.A.F. Daily Log Sheets No. 2277 - 8.

The night of 23/24 December was remarkable for the activities of the British tactical aircraft both light bombers and night fighters. Two wings of No. 2 Group were sent out with orders to attack (a) enemy movement in the area Cologne - Coblenz - Duren - Stadkyll and (b) to harass and attack movement over the whole battle area from Cologne to Trier concentrating on rail movement, detraining points and The Mosquitoes began to take off at 1830 hours railheads. and the last aircraft returned to base at 0513 hours. intruder aircraft were sent to harass the airfields of Deelen and Soesterburg in Holland believed to be the base for troop carrying aircraft but no signs of activity were The attacks on transport were highly satisfactory. observed. One wing bombed five large convoys and strafed lights and Detraining points subjected to bombing were at railways. Blankenheim, Bittersborn and Prum, the latter attack being most effective. Filots gained the impression that enemy most effective. movement in the battle area was to the south-west.

Enemy night bombers continued to be very active, their task being to discover the extent of Allied movement south of Liege towards the salient and to harass troops on the move. Attempts were also made to supply leading panzer divisions by air. No. 85 Group being the major night fighter force was thus kept fully occupied. Its Mosquitoes were out in strength on 18/19 December patrolling the area from Nijmegen to Namur. No more night operations were possible until the

No. 2279 and No. 85 Group O.R.B. Dec. 1944. night of 22/23 December when one hostile aircraft was claimed destroyed. The night of 23/24 December was their most successful when the Group claimed to have destroyed or damaged 12 enemy aircraft including Ju's 188, 88 and an Me.410. On that night 59 sorties were flown by the Mosquitoes.

### Air Operations on 24 December

2nd T.A.F. O.R.B. 24 Dec. 1944.

D.S.C./T.S./ 100/9 Pt.4 Encl. 6A para. 2.

2nd T.A.F. 0.R.B. App. No. 61.

See Map No. 13.

2nd T.A.F.
Daily Log
Sheets No.
2280 - 6 and
No. 83 Group
O.R.B. Dec.
1944.

On the morning of 24 December the weather showed a much more marked improvement with sharp frost, sunshine and little cloud. The morning mist dispersed earlier than usual and later in the day visibility had reach a distance of five miles. At the Chief of Staff's conference at S.H.A.E.F. it was anticipated that these favourable conditions might last for another three days. The strong interference by the G.A.F. with Allied air attacks on communications in the battle area on the previous day led to the decision of the Air Commanders to divert a large proportion of the heavy bomber force to putting enemy airfields in the vicinity of the battle out of action. The remainder of the Air Forces were to continue their attacks on communications leading to the enemy salient. Typhoons were beginning to strafe transport before 0900 hours and this was the signal for the beginning of one of the greatest efforts made in one day by the Allied Air Forces to support the ground battle.

Air Marshal Coningham's orders to the British and
American fighters and fighter-bombers varied little from the
day before. In general the primary task of the U.S. Tactical
Air Commands was to support the ground forces while No. 83
Group assisted by No. 84 Group was to provide cover for the
U.S. Armies as far south as Houffalize. Fighter sweeps
were to be timed with the arrival of heavy and medium bomber
formations over their target areas.

Thus it was that the largest proportion of 2nd T.A.F. effort was expended on fighter operations and its claims for vehicles destroyed were consequently not large - about 70 being destroyed or damaged. A Typhoon Wing of No. 83 Group answered calls for close support from the First U.S. Army sector. One squadron was sent to attack a column of 100 vehicles and tanks near St. Vith but pilots discovered nothing except a convenience were left. nothing except a convoy of ambulances and these were left alone. During two other missions a handful of transport was damaged. In the battle zone enemy flak was extremely severe while the American anti-aircraft gunners did not appear to be over discriminating. Eleven Typhoons were Spitfire lost to flak on armed reconnaissance missions. and Tempests on patrol once again had few encounters with the G.A.F. for on this day the latter was completely preoccupied with heavy bomber operations against their air bases while their heavy losses on the previous day had reduced their rate of effort considerably. The only large concentration observed was one of about 45 F.W. 190's Two of them seen shortly after mid day south of Julich. were claimed to have been shot down. A number of Spitfires on tactical and photographic reconnaissance evidently attracted the attention of the G.A.F. and in several dog fights the British pilots claimed five Me. 109's. German aircraft had been claimed destroyed by 2nd T.A.F. at dusk.

#### SECRET

79

Ops. No. 69.

The two American Tactical Air Commands under British control did not make large claims either for transport or for aircraft. They claimed 162 motor vehicles, 87 armoured S.H.A.E.F. (Air) fighting vehicles and 18 aircraft. Highest scores went to Daily Summary of the XIXth Tactical Air Command, operating over the Third U.S. Army area, which claimed to have destroyed over 420 vehicles, 20 armoured fighting vehicles and 11 aircraft.

No. 2 Group 0. R. B. Dec. 1944. S.H.A.E.F. G.2. P.O.W's statements on Air attacks on 1 Jan. 1945.

Both British and American medium bombers were out in full force. No. 2 Group made 144 sorties and successfully attacked road and rail networks at Kall, Gemunde and Recht to the north of the bulge. At Recht 900 gallons of petrol for 9 S.S. Panzer Division were destroyed according to P.O.W's. Six Mitchells failing to identify their target bombed and hit a railway viaduct at Born, a few miles north of St. Vith. The IXth Bombardment Division attacked two railway centres, Niddegen and Julich (the former already attacked by No.2 Group) and two railway bridges across the Moselle at Konskarthaus and Trier in the south. Results reported ranged from good to excellent. On this occasion only nine bombers failed to return from the mission.

S. H. A. E. F. (Air) Daily Summary of Ops. No. 69.

> The VIIIth Air Force made the biggest individual effort of the day and over 90 per cent of its available strength set out to take part in the battle. A record total of 2,031 aircraft were despatched from which 1,880 aircraft made effective sorties and dropped 4,300 short tons of bombs. The majority of the Liberators and Fortresses were involved in bombing a chain of 12 airfields which surround Frankfurt. Strike photographs showed that extensive damage was done to runways and hangars. The remainder working in conjunction with the IXth Air Force bombed about 17 road and rail communication centres in the rear of the 'bulge' including Gerolstein, Bitburg, Ahrweiler, Mayen, Wittlich and Koblenz. An escort of 895 Mustangs and Thunderbolts accompanied the heavy bombers and this force kept the G.A.F. fully occupied and Eleven Fortresses and claimed 75 aircraft destroyed. Liberators were lost.

VIIIth Air Force Monthly Summary of Ops. Dec. 1944.

> The primary task for Bomber Command was also to attack airfields. During daylight 338 aircraft dropped 1,316 tons of H.E. on two airfields in the neighbourhood of Dusseldorf and Essen. At both places good concentrations were reported. Spitfires and Mustangs of Fighter Command provided escort but the G.A.F. did not attempt to interfere with the attack.

A.M. War Room Summary Bomber Cmd. Ops. Dec. 1944.

> By about 1700 hours when twilight stopped further operations Allied aircraft including heavy bombers and their fighter escorts and the three Tactical Air Forces had flown some 7,380 sorties in support of the battle. The intention of the Strategic Air Force which had been to blunt the offensive power of the Luftwaffe had been fulfilled. Fourteen airfields had been damaged or temporarily made unfit for use(1) and at the most about 130 German aircraft were shot down either by Strategic or Tactical Air Forces. After two days of heavy losses in the air together with a declining rate of serviceability the G.A.F. (apart from the

<sup>(1)</sup> Reconnaissance reports on the extent of damage showed that the length of time during which airfields were out of action varied from two to 13 days. Weekly Int. Summ. No. 43, para. 1).

S.H.A.E.F. Enemy Comms. and Supply Summary No. 26 Annexe.

raid on 2nd T.A.F. airfields on 1 January 1945) was never able to make such an intensive effort again. At the same time to make such an intensive effort again. this diversion of effort from the battle zone did not prevent fighter and medium bombers from multiplying the difficulties of the panzer forces, many units of which by then had practically exhausted their stocks of fuel and ammunition. More vehicles had been claimed put out of action than hitherto in the battle and the medium and heavy bomber operations against railheads and concentration areas behind the salient were proving extremely effective.

2nd T.A.F. Daily Log

Nor was the enemy given much respite during the hours of darkness for at 1730 hours on the evening of 24 December Mosquitoes of No. 2 Group began to take off from Continental airfields to attack movement into the salient. operations continued until 0847 hours on the following Sheets No. 2287 - morning. A total of 139 Mosquitoes took part and concentrated on bombing railways, roads and detraining points. Such road centres at St. Vith and Neuerburg were bombed accurately, two ammunition trains were hit and several road convoys were strafed. There appeared to be a good deal of movement towards the salient in progress and 75 vehicles and 20 goods wagons were claimed to have been destroyed.

R.A.F. Bomber Command Night Raid Report No. 800.

On the same night R.A.F. Bomber Command was out again east of the Rhine. One force of 164 aircraft attacked an airfield at Bonn and another force of 102 aircraft put the finishing touches of destruction on the Nippes marshalling The number of aircraft dispatched was yard at Cologne. smaller than had been planned owing to poor weather conditions over the United Kingdom airfields. Neverthis was a weefel airfield. Nevertheless this was a useful night's work. The Hangelar airfield at
Bonn was seen later to be covered with craters and the Nippes
marshalling years marshalling yard was made, in the words of the Bomber Command Operational Research Section Report, 100 per cent unserviceable. Further testimony of the effectiveness of the attacks on this restaurance of a German rail the attacks on this yard come from men of a German rail maintenance and repair unit who had been intended to follow up the German advances. up the German advance and which got no further than Cologne finding sufficient work there to keep them fully employed. If reports by these men are correct not a single track was undamaged and 2,000 wagons were put out of action. Thousands of displaced persons and Dutch impressed labour were also employed in the renair work. By 29 December two were also employed in the repair work. lines had been repaired after instructions had been issued that work was to continue until Allied aircraft were practically overhead.

S.H.A.E.F. Enemy Command and Supply Summary No. 26 Annexe.

> Mention should also be made of a minor operation by Bomber Command on the nights of 23rd/24th and 24th/25th December when 14 Stirlings dropped dummy parachutists in the vicinity of the communication centres of Prum, Bitburg, Trier and Ehrang with the and Ehrang with the object of causing confusion in the enemy's rear areas and in the rear areas and in the hope that he would possibly direct troops from the form These drops would appear to troops from the forward area. have been a substitute for harassing operations of Special. Air Service Troops behind the enemy front which were proposed about this time but it is unknown whether, or not, they had any effect. any effect.

File BC/SH/TS.12/1 Encls. 9 - 6.

The turning of the tide - Air Operations 25 - 27 December

On 25 December the situation on the ground continued to be critical. The ground staff at S.H.A.E.F. remained convinced that the convinced that the two objectives of the enemy were still Liege and Namur but for the time being the most dangerous

D.S.C./T.S. 100/9 Pt.4, Encl. 7A.

No. 83 Group O.R.B. Dec. 1944.

S.H.A.E.F. (Air) Hist. Record and Diary App. 6E, Dec. 1944.

S.H.A.E.F. Air Hist. Record and Diary App. 6E - 6G.

D.S.C./T.S. 100/12 Pt.2, Encl. 25A.

20

threat was undoubtedly in the north-west corner of the salient where the XLVII Panzer Corps (Fifth Panzer Army) encouraged by its success west of Rochefort, was infiltrating towards Dinant on the Meuse, presumably with the object of capturing This movement if it had been successful would have outflanked the VIIth U.S. Corps (First U.S. Army's reserve) and opened the way to Liege and Brussels. On 24 December a small mobile enemy patrol got within 400 yards of the Meuse At the same time, near Dinant but was soon taken prisoner. to the east, pressure on VII U.S. Corps was being exerted by II S.S. Panzer Corps which had broken off its attack in front British troops of Field Marshal Montgomery's of Stavelot. XXX Corps, covering the Meuse as far south as Givet, went into action against the spearheads and after the 26th no further westerly advances were made by the Panzer troops. not due so much to the opposition on the ground which was on a comparatively small scale but because the forward elements of Von Rundstedt's command had begun to flag owing to the shortage of supplies which must be attributed to the cumulative effort of the heavy air attacks on communications by the Strategic and Tactical Air Forces during the past General Hodges (First U.S. Army) stated at this three days. time that it was entirely due to the air support given him that he was able to meet the German attack.

The unabated pressure against Field Marshal Montgomery's American reserve made it difficult for him to concentrate for his counter attack, which was to link up with General Patton, although at that stage he refused to commit the bulk of XXX British Corps held back north of Liege. General Patton's attempt to link up with 101 U.S. Airborne Division had still not met with success and these troops were only able to hold out with the help of food supplies dropped by parachute and landed by gliders of IXth U.S. Troop Carrier Command on 23 and 24 December. (1) In these operations a total of 850 sorties were flown.

The thorny problem set before the Supreme Commander and his advisers was how to accumulate a reserve with which to They wanted moreover to counter attack on a decisive scale. strike a blow at the enemy while he was on the move but it was difficult to accomplish this without expending their meagre reserves such as 17 U.S. Airborne Division (which was then being brought over by air from the U.K.) and 11 U.S. Armoured Division, assembled along the Meuse, south of Givet. During the meetings on 25 and 26 December at S.H.A.E.F. plans were made to remedy the lack of troops behind the fighting On the 26th the Supreme Commander decided that he line. would withdraw the Sixth Army Group in the Strasbourg sector to the strong defensive line of the Vosges. In doing so it would be necessary for the French Army to evacuate the city of Strasbourg and this was soon to have grave repercussions on the general situation. A signal was also sent to the U.S. Chiefs of Staff requesting them to hasten the reequipment of a number of French divisions which had been proceeding tardily for several months.

<sup>(1)</sup> For details of these operations, the reader should consult Report on Operation Repulse by H.Q., IXth Troop Carrier Command Attempts to resupply an isolated U.S. unit at Marcouray in the salient were unsuccessful. (See A.H.B. IIF2/20/22).

Thid

In the meantime some of the Air and Ground Commanders, in particular Air Chief Marshal Tedder and General Spaatz, as well as General Bradley, were growing impatient of delays in launching a concerted ground attack. They took the view that the Army should at once follow up the confusion caused by the recent heavy air attacks and take full advantage of the spell of fine, cold weather which at the most would only last for another two or three days during which air operations could continue at maximum strength. They also pointed out that the effective air attacks on the supply lines feeding the troops in the salient must have blunted the enemy's striking power and decreased the mobility of his armoured divisions. General Bradley, who had met Field Marshal Montgomery on Christmas Day, was disturbed at the latter's determination to remain on the defensive for the time being and began to press General Eisenhower to allow him to resume command over the First and Ninth U.S. Armies. For the rest of that week at S.H.A.E.F. irritation was to grow over the Twenty-First Army Group Commander's slowness and this opinion was shared not only by American Army Officers but also by the British and U.S. Air Staff.

Toid

While the bulk of the ground forces remained on the defensive during the second week of the battle the Air Forces continued to hit hard at enemy communications west of the Rhine until the weather broke on 27 December. Visibility up to that date remained good on the whole although it was extremely cold and severe frosts made travel on the roads difficult. In the three day period from 25 - 27 December the fighter and medium bombers were the most active for the spreading of fog over air bases in England necessitated a slackening in the heavy bomber effort.

2nd T.A.F. O.R.B. App. No. 62 Dec. 1944.

See Map No. 12.

In view of the threat to Namur, in the north-west corner of the salient, Air Marshal Coningham directed that the maximum effort of his Tactical Air Force should take place in that area from east of the bomb line to St. Vith. fore shifted the operational areas of his three Groups or The IXth and Tactical Air Commands further to the west. XXIXth Tactical Air Commands were to make armed reconnaissances in the rectangular area, Malmedy - Durbuy - Rochefort -Houffalize. No. 83 Group was allocated the area from east of Malmedy to the west bank of the Rhine including the towns of Houffalize, Mayen and Ahrweiler. No. 84 Group was to continue to be responsible for covering the British and Canadian Armies and the area north of the Ruhr. As before the principal role of No. 83 Group was to provide cover over the northern part of the salient. This was now restricted to a line between Bullange and Beausaint (near Rochefort). Fighter sweeps were to be made in conjunction with the medium In addition and heavy bomber operations over the saliente this Group was to assist the two American Tactical Air Commands Another task of No. 84 in their area should the need arise. Group was to recommence rail interdiction north of the Ruhr and lastly continue to sweep airfields in the Dusseldorf -Bonn - Paderborn districts.

On Christmas Day a distinct decline was noted in the G.A.F. effort over the salient due to the recent air battles and attacks on airfields although the numbers of sorties which were flown was still above normal. This relaxing of pressure enabled the Allied fighter bombers to devote more attention to ground targets and with the enemy at the peak of his advance there was plenty of movement on the roads in the 'bulge'. In particular intensive activity was in

S.H.A.E.F. Air Hist. Record and Diary App. 6F Dec. 1944.

2nd T.A.F. Daily Log Sheets No. 2289 - 91.

Thid Sheets No. 2294 - 6.

S.H.A.E.F. Air Daily Summary of Ops. para. 5 No. 70 25 Dec. 1944.

2nd T.A.F. Daily Log Sheets No. 2298 - 2308.

O

progress on the routes leading towards the north of the salient between Schleiden and Prum. Medium bombers were ordered to strike at choke points and in conjunction with them, fighter bombers attacked armoured vehicles and 'soft' transport moving into the towns of Malmedy and St. Vith. These convoys belonged to 10 S.S. Panzer Division travelling westwards to reinforce the Marche - Hotton area.

Abandoning their Christmas festivities, the Typhoon pilots of 2nd T.A.F. were active over this area from about 1000 hours to 1400 hours. The first squadron on the scene attacked a convoy of about 80 vehicles travelling west of Munstereifel and claimed 30 of them destroyed or damaged. Three tanks were claimed damaged or put out of action. Later in the morning the Forward Control Post in the First U.S. Army area directed Typhoons on to a tank concentration in the wooded and hilly country around Stadkyll (one of the main detraining points for Sixth S.S. Panzer Army). Groups of tanks and vehicles were discovered at the villages of Hillesheim and Kronenburg and one tank was claimed to have been damaged. A clash between the Typhoons and Mustangs of the IXth Air Force occurred while the British fighter bombers were circling round their target but fortunately casualties were avoided. In the afternoon No. 83 Group joined the American Thunderbolts in attacking transport near St. Vith and to the south of this town. By the end of the day 2nd T.A.F. claimed to have accounted for 137 motor vehicles of various types. Spitfires and Tempests were busy over the American front and besides constant patrols escorted the IXth Bombardment Division on its raid on communication centres. They claimed to have destroyed five enemy aircraft including an Me. 262 shot down by a pilot of No. 83 Group.

The IXth Tactical Air Command was given better opportunities of crippling the armour near St. Vith and divided its missions between armed reconnaissances and fighter escorts. The XXIXth Tactical Air Command covered a wider area from Stavelot to Bitburg and fighters strafed the airfields at Bonn claiming to have destroyed four enemy aircraft on the ground. A total of 25 enemy aircraft had been claimed by the IXth Air Force at the end of the day. Its ground claims amounted to 813 lorries and 99 armoured vehicles.

In the cold, frosty weather of the next two days 2nd T.A.F. flew many sorties over the 'bulge'. Useful work was done by Typhoon squadrons on the roads in the area Schleiden - St. Vith - Houffalize about 95 vehicles being claimed put out of action and 161 damaged. The air became congested with Typhoons, Tempests, Spitfires, Lightnings, Thunderbolts and Mustangs and perhaps it was inevitable that mistakes in identification should frequently occur. On the ground the enemy convoys moved to and from the front but it is interesting to note that on 26 December the general trend of movement seemed to be eastwards.

Several air actions by 2nd T.A.F. on the 26th are of special interest. No. 181 Squadron in answer to a call from the forward Control Post located and attacked a column of tanks approaching the village of Celle close to the Meuse which formed the most westerly tip of the salient. After attacking them with rocket projectiles, the pilots claimed to have destroyed or damaged four tanks in addition to inflicting casualties on the crews as they ran for cover.

#### SECRET

84

No. 181 Sqdn.

No. 83 Group O.R.B. Dec. 1944.

S.H.A.E.F. (Air) Hist. Records and Diary App. 6G Dec. 1944.

See Map No. 12.

No. 2 Group 0.R.B. Dec. 1944.

S.H.A.E.F. Air Daily Summary of Ops. No. 71 - 72. Dec. 1944.

2nd T.A.F. O.R.S. Report No. 19 p.7. and App. D.

No. 181 Sqdn. Shortly afterwards the Army confirmed that the Typhoons had O.R.B. Dec. 1944. in fact knocked out four heavy and three light tanks. (1) At the important rail junction at Euskirchen other Typhoons of No. 83 Group attacked an assembly of locomotives in the station yard and claimed eight destroyed or damaged. existence of the locomotives had been discovered from photographs taken by No. 39 Wing on the day before. At the same time a high rate of effort was maintained by the U.S. squadrons under command of 2nd T.A.F. and more large claims were made for both 'soft' and armoured vehicles in addition to about 30 enemy aircraft shot down in combat. On the 26th the panzer forces suffered a serious loss when U.S. fighter bombers destroyed a petrol convoy of some 70 vehicles.

> Medium bombers played perhaps an even more decisive part in frustrating the enemy's offensive since they caused so much confusion at his supply distribution points. 25th to 27th December the IXth Bombardment Division was the Mention of its activities on 25 December in most active. attacking focal points in Sixth S.S. Panzer Army area has already been made. Nine communication centres in the 'bulge' were bombed by Marauders on that day including Munster, Eifel, Irrel, Bitburg, Wengerohe, Vianden, St. Vith, Ahrdorf, Ahutte, Hillesheim. Two bridges were bombed at Taben Rodt and Keuchingen. (2) On the same day No. 2 Group effectively bombed the road network at Stadkyll and the rail junction at Glaadt nearby and during the following night Mosquitoes continued these harassing operations by bombing vehicle concentrations near Kyllburg. On 26 and 27 December road centres in the west of the 'bulge' were bombed by the Americans such as Laroche, Houffalize, (both bombed on successive days), the railheads of Konzkarthaus, Pronsfeld and Kall. Other formations attacked bridges at Bad Munster, Ahrweiler (twice bombed), Eller, Nonweiler, good to excellent results being reported by aircrews.

The first raid on Houffalize, according to civilians interrogated after the battle, caused about 24 hours delay in movement as the attack killed a number of troops and destroyed vehicles passing through the town but the craters were soon filled in by the Germans. At Laroche the air attacks resulted in heavy damage to the one bridge in the town which the First U.S. Army had left unblown when it retreated on 21 December. From 22 to 25 December much German transport passed through Laroche but after the raid

- (1) On the previous day a Thunderbolt had claimed to have destroyed a tank with two Napalm fire bombs on the same A check made by 2nd T.A.F. Operational Research Section afterwards revealed the presence of a Panther with damage to a turret hatch and a Mark IV which had been completely burnt out and had also been penetrated by armour piercing shells fired by ground artillery. In the vicinity three armoured troop carriers had been 2nd T.A.F. O.R.S. Report No. 19, abandoned undamaged. p. 10.
- (2) The daily programme of operations for the U.S. medium bombers was made up of two plans 'A' and 'B'. One was composed of targets to be bombed visually and the other was a programme for bad weather when radar aids were to be employed.

on the 26th motor vehicles could not cross the bridge. Another two attacks were made on the town although the raid on 27 December appears to have been most effective and no real effort was made to clear the debris in the streets after that date.

Bomber Command attacked two targets in the period 25 - 27 December but no night operations were possible. Its most important mission was to block the roads leading through the town of St. Vith. Roads to Vielsalm, Laroche, Recht and Houffalize passed through St. Vith and made it the most important road junction on the Sixth S.S. Panzer Army front. On 25 December Marauders had visited St. Vith and, according to prisoners of war, had demolished a large part of the town. Frantic efforts were made to clear the streets of rubble during the night and by the morning a little one-way traffic was possible.

At 1500 hours that afternoon the town was bombed by 294 Lancasters which dropped 1,138 tons of high explosive. Huge craters in the roads made all routes through the town utterly impassable. German sappers who had to repair the St. Vith-Malmedy road stated that it was beyond repair for a distance of from two to three kilometres beyond the town. On the following day the town was placed out of bounds to both troops and civilians and military traffic used secondary roads as by-pass routes, a distance of about two miles north and south of the town. One small by-pass in the town itself was made through the railway yard on the 27th. There is no doubt that through the railway yard on the 27th. of all the attacks on choke points in the Ardennes battle this was the most effective. Clearance work did not begin until 29 December and by 3 January the roads through the town still could not be negotiated by traffic. More German engineers arrived in the town on the 8th but their efforts were directed to keeping open the by-pass north of St. Vith. Attacks by fighter bombers constantly interrupted repair work while long range American artillery intermittently shelled the area. By 11 January, 16 days after the last air bombardment roads running through the town remained blocked apart from two highways leading to Malmedy and Monschau which form a junction on the northern outskirts of the town.

The effectiveness of these attacks on road networks was later examined by the Operational Research Section of It came to the conclusion that in the adverse 2ad T.A.F. circumstances of the battle such as the poor weather for bombing and photo-reconnaissance and the number of targets which required attacking urgently, movement was, on the whole, delayed by air attacks. It felt, however, that this type of operation would have been more economical, more delay would have been imposed, and that friendly civilian casualties would have been minimised, if roads around the choke point could have been cut in preference to dropping a great weight of bombs on the choke point itself. In hilly country such as the Ardennes where roads run through defiles or follow the contours of steep hillsides, there were many suitable places at which to make road blocks. The report also specified targets for heavy and medium bombers; the former were more suitable for dealing with an open road-net such as St. Vith, while the latter were more effective against roads which converge on a point (Houffalize). Such attacks it was thought might profitably be followed up by fighter-bombers bombing approach roads at vulnerable points.

S.H.A.E.F. Enemy Comms. Summary No. 23 Annexe p. 3.

A.M. War Room Summary of B. Cmd Ops. Dec. 1944.

2nd T.A.F. O.R.S. Report No. 19 App. D and S.H.A.E.F. Enemy Comms. Summary No. 23 Annexe p. 3,

2nd T.A.F. Report O.R.S. No. 19 pp. 6-8. A.M. War Room Summary of Bomber Command Ops. Dec. 1944.

The next Bomber Command target was a marshalling yard west of the Rhine - at Rheydt near Dusseldorf - which was bombed by 211 aircraft (1,169 tons) on 27 December. crews easily identified their target; the attack was well concentrated and large explosions were seen. Escort was provided by 50 fighters of 2nd T.A.F. On the night of 27/28 December a force of over 300 heavy bombers effectively attacked the marshalling yards and workshops at Opladen near Cologne.

S.H.A.E.F. (Air) Diary App. 6J, Dec. 1944.

VIIIth Air Force Summary of Ops. Dec. 1944.

Operations by the VIIIth Air Force were also handicapped by morning and evening fog over its bases in East Anglia which made taking off and landing extremely hazardous; number of aircraft and crews were lost in this manner. Hist. Record and extensive list of road and rail centres between the battle front and the Rhine had been drawn up for attack on the 25th but only eight targets were actually bombed by small They were the road/rail forces of 30 aircraft each. junctions west of the Rhine at Wahlem, Pelm, Hallschlag, Murlenbach, Waxweiler, Pronsfeld, Prum and Musch. Forces of the same size attacked bridges at Kaiserslautern, Bad Munster, Morscheid, Ahrweiler and Eller. On 26 December not more than 150 aircraft left the U.K. and attacked two bridges and two marshalling yards. On the 27th there was a slight improvement, 632 aircraft were dispatched to The heaviest attacks marshalling yards and railway bridges. made by forces of between 70 and 140 aircraft were mostly west of the Rhine at Euskirchen, Gerolstein, Fulda, Andernach and Homburg. Bridges were bombed at Bullay (on the Moselle midway between Trier and Koblenz, Altenahr (on the Ahr west of Remagen) and November 1 of Remagen) and Neuwied (above Koblenz).

> Two Groups of VIII Fighter Command (the 352nd and 361st) became attached to the IXth Air Force from 25 December and assisted it by giving cover and close support until the end of the month. They were controlled by the IXth Tactical
> Air Command. The remainder of the Command continued to operate from England and escorted the Liberators and Fortresses on their missions east and west of the Rhine.

> These persistent attacks on rail-road centres and bridges had the effect of pushing back the enemy's rail-heads situated immediately behind the front as far as the Rhine This doubled and, in some cases, to east of the river. the strain on motor transport which in turn ate up more quickly the meagre stocks of fuel. The state of the roads in the wintry weather, together with the poor condition of many of the vehicles, aggravated transport difficulties. Thus at a stage in the battle when the forward elements were most dependent on rail-heads close to the front, the latter were disputed and this latter were disputed and this stage is to the forward. were disrupted and this fact caused supplies to the forward areas to be seriously delayed. The attacks on bridges west of the Rhine (largely the work of U.S. heavy and medium bombers), such as those across the rivers Ahr and Mosel, had by the end of December also effectively assisted in interrupting railway traffic proceeding to the front. Among the damage ware the interest behind the front to suffer severe damage were the important junction of Bitburg, which by the end of December was prohibited to traffic, and Gerolstein, which could only be prohibited to traffic. At Prum. motor which could only be approached by one road. At Prum, motor transport was unable to pass through the town and detours had been constructed so as to by-pass it.

S.H.A.E.F. Enemy Comms. and Supply Summaries Nos. 23, 26. Annexe.

Secondly, the bombing of rail centres along the Rhine from Cologne to Coblenz forced traffic from the river valley as far east as Karssel and Wurzburg and this served to increase delays and re-routeings. Finally, the general effect of these air attacks was such that by day rail travel west of Giessen was virtually impossible except when bad weather prohibited flying. This ban sometimes extended as deep as Hamm and Nuremburg.

Not only was the flow of supplies interrupted but reinforcements took days to reach the front after the start of the battle, just as they had done in Normandy, and, after detraining east of the Rhine, had to make their way to the front as best as they could. On about 28 December, for example, reinforcements for 9 Panzer Division had to detrain near Siegburg (south of Cologne) and then proceed on foot via Bonn for a distance little short of 100 miles. At about the same date reinforcements for 104 Panzer Grenadier Division travelled for six nights to make the rail journey from Siegen to Bendorf, near Coblenz, and from that point had to march to Mayen, west of the Rhine. Reinforcements for the Volks Grenadier divisions, backing up the panzer formations were held up for days because of bomb damage at Cologne.

#### Reconnaissance work 16 - 27 December

The part played by the strategic and tactical reconnaissance squadrons during the period of the battle when the enemy held the initiative was perhaps almost as important as the air attacks on communications. Much valuable information was presented to the Army commanders on the movement of enemy divisions directly behind the front and reports were made on communication targets which were of inestimable value in planning day to day air operations. In 2nd T.A.F. No. 39 Reconnaissance Wing of No. 83 Group had a most arduous task to fulfil for not only did it have to cover the front of the Second British Army from the Reichwald Forest to Aachen but also that of First U.S. Army as far south as Givet on the Meuse; from these points reconnaissances were flown up to the Rhine. The tasks of this Wing were firstly to investigate the traffic in marshalling yards along important stretches of railway line, secondly, to search for concentrations of armour in densely wooded countryside such as the Monschau Forest and, thirdly, to report on the progress of the enemy spearheads infiltrating towards the Meuse. A smaller number of artillery and photographic reconnaissances were flown but results from the latter type of mission were often disappointing owing to the frequent cloud and low haze.

No. 35 Reconnaissance Wing of No. 84 Group, although working over a much smaller area, had no less important a task for it had to report any extraordinary enemy activity in Holland which might denote a diversionary attack upon the weakly held British-Canadian sector along the lower Maas. Daylight reconnaissances were made over the airfields of Deelen and Soesterburg and a watch was kept on naval activity, in particular on the midget submarines and E-boats which had intensified their operations from the occupied islands of the Dutch coast.

Valuable work was done by No. 34 Wing. The Mosquito squadron took photographs by day and by night of marshalling yards north and west of the Ruhr and special attention was paid to rail activity in the Rhineland towns of Rheydt, Krefeld, Heinsberg, Munchen-Gladbach and east of the Rhine, Minster. This assisted Intelligence Officers at Twenty-First

No. 39 Wing O.R.B. Dec. 1944.

No. 35 Wing O.R.B. Dec. 1944.

O

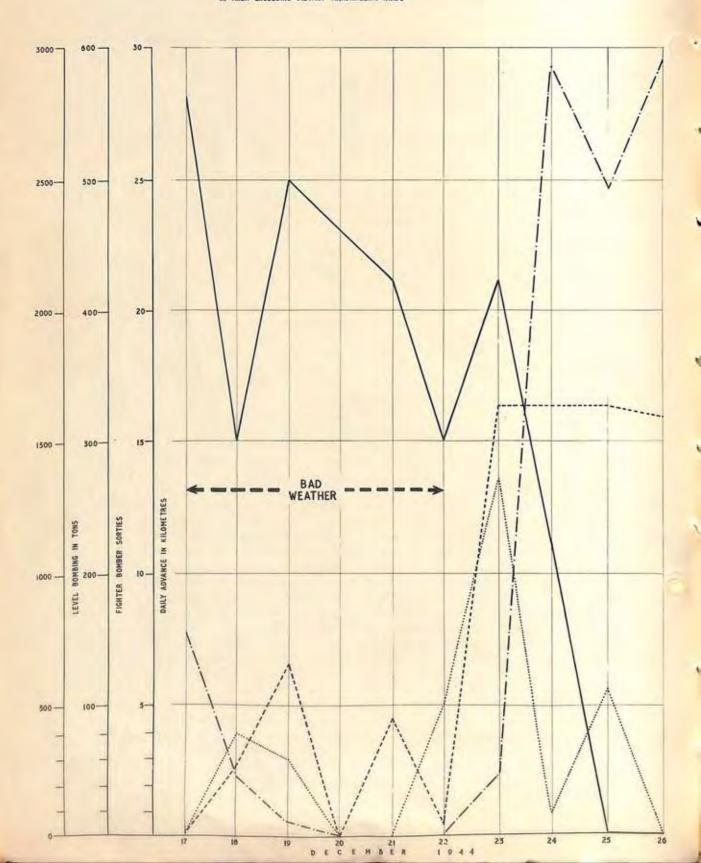
Army Group in estimating the movement of German formations from the north towards the 'bulge'. Wellingtons and Mosquitoes of No. 34 Wing made both visual and photographic reconnaissances over Dutch airfields and specified roads opposite the Second British Army which might be used by reinforcements to reach the front. Long range strategic reconnaissance missions deep into Germany were most necessary for it was essential for the Allied Supreme Command to know what reserves were being transferred from other fronts to the west. Reconnaissance aircraft of the XVth U.S. Air Force based in Italy were enlisted for this purpose and kept a watch on all railway lines from Italy and eastern Germany as far north as Dresden.

# Summary of air operations 17 - 27 December

At this stage of the battle it is necessary to pause and review the great effort which had been made in the air. After four days of foul weather in which all the Air Forces on the Continent and the majority of aircraft in the United Kingdom were grounded, a period of five days, from 23 - 27 December ensued when the whole of the Allied Air Forces, Strategic and Tactical, were thrown into the battle to halt the westward advance of Von Rundstedt's armour. The close harmony which distinguished the British and U.S. Air Forces combined operations before and after the landings in Normandy was never more apparent than during this crisis. The transference of a large part of the IXth Air Force to the control of Air Officer Commanding 2nd T.A.F. was accomplished without friction as was the redistribution of U.S. fighter bomber units to south of the salient. In like manner the Strategic Air Forces put all their weighty resources at the disposal of the Supreme Commander. One bombardment division of the VIIIth Air Force came under direct command of General Vandenberg (IXth Air Force) for the purpose of striking at tactical targets while the rest of the VIIIth Air Force was to undertake the bombing of targets in the base of the salient. In addition the resources of the IXth Air Force were strengthened by two groups of Mustangs and Thunderbolts of VIIIth Fighter Bomber Command Command which became based on the continent. was to concentrate on attacking marshalling yards along the There was no time to Rhine from Cologne to Coblenz. consider or evolve a complex air plan. The task of the Air Force was thus to delay as far as possible the thrust into Belgium while sufficient forces were assembled on the The role of the heavy and ground to drive back the enemy. medium bombers was to attack communication centres and bridges stretching from directly behind the front to the The task of the fighter bombers was to Rhine and beyond. harass movement in the salient so as to delay the road convoys supplying the forward troops from the rail-heads and secondly to blunt the enemy's spear-heads by attacking his When the enemy force had stretched itself to its fullest extent, both heavy and medium bombers attempted to create choke points inside the salient to delay movement to and from the forward area.

The effort made by the G.A.F. to secure temporary superiority in the air west of the Rhine was frustrated by the fighter aircraft of the Strategic and Tactical Air Forces. While it was able to fly about 600 sorties per day the G.A.F. exercised little influence on the course of the battle and although successful in diverting Allied fighter/fighter bomber aircraft from attacking ground targets for

# ALLIED AIR EFFORT AND THE GERMAN RATE OF ADVANCE 17-27 DECEMBER 1944



several days it had, on the other hand, to postpone the attack on airfields until 1 January 1945 when too late to be of any assistance to the ground offensive. It has been reckoned that in this ten day period, over 700 aircraft were lost by the enemy and after the severe losses experienced on New Year's Day the final decline of the G.A.F. set in.

Another aspect of air power during this period was demonstrated in the operations accomplished by troop carrier aircraft. This was the successful resupply by air of the beleaguered garrison of Bastogne in the face of very poor weather conditions and strong enemy opposition. Further, the fact that the Supreme Commander was able to concentrate reserve divisions speedily was due in no small measure to the transporting of an entire division by air from the U.K. to the continent. This operation was completed by 29 December. (1)

Even during the bad weather of the first week of the offensive a substantial air effort was achieved. In that period R.A.F. Bomber Command, operating by day and night, flew over 2,000 sorties against communication targets, while the VIIIth Air Force flew over 1,700 sorties against road and rail centres. Limited though they were by poor visibility, 2nd T.A.F. flew about 2,280 sorties and the IXth Air Force, 3,970 sorties during this week. (2) By 27 December the armoured thrust to the Meuse had been halted and the German operation to seize Antwerp which depended entirely on speed This was before the Allied ground and surprise had failed. forces had had time to launch any large scale offensive. By that date the Allied Air Forces had flown a total of 34,042 sorties of which the majority were directed to crush Sorties and tonnages were as follows:the German attack.

	Sorties	Tons (Short)
Bomber Command	4,193	15,702
VIIIth Air Force(3)	8,404	10,302
IXth Air Force	11,316	6,643
2nd T.A.F.	5,971	550
1st (Prov.) T.A.F.	3,119	1,511
R.A.F. Fighter Command	1,039	-
Total	34,042	34,708
		-

<sup>(1)</sup> See Operations 'Repulse'. Supply by Air, Belgium Dec. 1944. (2F2/20/22).

<sup>(2)</sup> It will be seen that A.C.M. Harris was not strictly correct when he wrote: "Bomber Command, and Bomber Command alone, was able to operate against communications used for the counter offensive on 4 nights and 2 days." (See "Bomber Offensive" Page 253).

<sup>(3)</sup> Includes fighter aircraft.

Out of the total weight of bombs dropped, about 23,831 tons were dropped on railway and other types of communication targets together with cities on the lines of communication used by the Germans for the offensive. The Operational Research Section of 2nd T.A.F. estimated that the fighter bombers caused about one day's delay in the transmission of supplies to the forward troops while the effect of the rearward medium and heavy bomber operations were felt after two days had elapsed. By 24 December the enemy's advance was considerably reduced after fighter bombers had resumed their normal rate of effort on the previous day. 2nd T.A.F. O.R.S. 26th the heavy bomber attacks had taken effect and combined with the fighter bombers increasing efforts the advance came to a standstill. The Air Forces, therefore, fulfilled their role in the battle and this was evidently appreciated by the Supreme Commander when, in a signal to the C.C.S., he stated that the Air Forces constituted his 'main strategic reserve'.

Report No. 19.

S.C.A.F. 168 7 Jan. 1945.

Stalemate - Air and Ground operations 28 December - 3 January

A stalemate, which continued from the middle of the second week of the battle until the launching of Field Marshal Montgomery's attack from the north on 3 January, now existed within the bulge. After a five day siege the garrison of Bastogne was relieved by Third U.S. Army on 26 December and on the same date a large number of prisoners and equipment were taken in the Rochefort district. Volks Grenadier divisions had meanwhile consolidated in the wake of the panzers along the northern shoulder of the salient thus allowing II S.S. Panzer Corps to assemble along the River Salm. The left flank of this Corps was protected by the northward push of LVIII Corps (Fifth Penzer Army). 27 December Headquarters Twenty-First Army Group was certain that Sixth S.S. Panzer Army was about to make another attempt to break through to Liege, this time by making a wider flanking movement west of Stavelot (where a week before it had met with a rebuff) and crossing the River Ourthe in the region of Durbury. Its chances of success were, however, remote as the First U.S. Army had recaptured the important crossroads of Monhay (near Grandmesnil) and held securely the rail junction of Marche to the west. Moreover, the improvement of the Americans position at Bastogne forced Field Marshal Model to move 1 S.S. Panzer Corps to the south to protect his communications. By the end of the last week of December 2 S.S. Panzer Division had moved to the Bastogne area where it was joined by 10 Panzer Division. The enemy's reserves intended to follow up a break through. 9 Panzer Division and 15 Panzer Grenadier Division, were also committed to action at Bastogne presumably with the object of frustrating an American attack into the centre of the 'bulge'.

Hist. Record and Diary App. 6H. Dec. 1944.

The planning and discussion of Allied ground operations at this time revealed a distinct rift between the commanders S.H.A.E.F. (Air) of Twenty-First and Twelfth Army Groups. General Eisenhower made a long delayed visit to Field Marshal Montgomery at Hasselt, near Liege, on 28 December and the two commanders discussed policy for future operations. The Supreme Commander had understood the Field Marshal to say that he would attack with First U.S. Army no later than 1 January or

Tbid App. 6J. Dec. 1944. as soon as the German threat in the Vielsalm area had been eliminated. (1) However, this statement was contradicted by the Chief of Staff, Twenty-First Army Group who attended the meetings held by General Eisenhower and his Chief of Staff on 31 December. Defending Field Marshal Montgomery's policy, General de Guingand explained that the plan was still to let the enemy exhaust himself by running from one part of the salient to another and secondly that a proper fire plan and suchlike preparations must be worked out before the troops were launched into the attack.

Thid App. 6I. Dec. 1944. General Bradley on the other hand held that Von Rundstedt was taking advantage of the lack of pressure in the north to shift divisions to meet the American threat from the south. Thus it was that growing impatient of Field Marshal Montgomery's apparent slowness and hearing from the Supreme Commander that the target date for the northern thrust had been fixed for 1 January, General Bradley ordered the Third U.S. Army to attack northeast of Bastogne on 30 December. These operations were, of course, unco-ordinated with Twenty-First Army Group Headquarters.

Tbid App. 6H, 6I. Dec. 1944. General Bradley's plan of attack had also been the subject of controversy at S.H.A.E.F. for General Patton in company with General Bedell Smith and Air Chief Marshal Tedder wanted the offensive to be launched as far east as possible so as to cause a greater threat to the enemy's communications. General Bradley, however, favoured a more direct thrust into the centre of the 'bulge' along the axis Houffalize - St. Vith and this plan was finally adopted for the reason that it would threaten the bulk of the enemy strength which was concentrated in the north of the salient.

Thid App. 6T, 6J. Dec. 1944. It was the opinion of the ground and air staffs at S.H.A.E.F. that in spite of the set back which the enemy had experienced over Christmas he was able to withdraw divisions from the salient and could make good use of his limited but still passable interior lines of communication by shifting forces to any threatened spot. This was a very different point of view from that taken by Headquarters Twenty-First Army Group. The Supreme Commander, his Deputy, (2) and the Chief of Staff (Air) felt that while Field Marshal Montgomery had retrieved the dangerous situation in the north during the early stages of the battle he was now missing an opportunity of striking the enemy while the attack was at its crest. The Supreme Commander therefore decided that General Bradley should resume command of First U.S. Army when it joined hands with Third U.S. Army in the salient.

<sup>(1)</sup> In his book 'Normandy to the Baltic'
Field Marshal Montgomery states that XXX British Corps
reliefs were to be concluded by 2 January so that
General Collins' VII U.S. Corps could begin to attack on
3 January (see page 178). This date had been put forward
by one day after consultation with General Hodges, First
U.S. Army. (Eyes only Signal F.M. Montgomery to S.A.C.
31 December 1944.)

<sup>(2)</sup> A.C.M. Tedder expressed similar views after the Battle of El Alemoin.

Ibid App. 6K. Dec. 1944.

This was one of the points incorporated into an outline plan issued by General Eisenhower on 31 December to his Army Group Commanders. Briefly it was that south of the Moselle the Allies were to continue to remain on the defensive, Sixth Army Group forming the source of a S.H.A.E.F. reserve. The operation to clear the salient was to be conducted by First and Third U.S. Armies converging towards Houffalize and bringing the main body of the enemy to battle. after the Allied axis of advance was to be north eastwards (Prum - Bonn). Once the Americans had reached the Rhine tired divisions were to be rehabilitated and Twenty-First Army Group was to launch Operation Veritable (the clearing of the Rhineland west of the Ruhr) as soon as possible. emergency measure which it might be necessary to make in the coming weeks was to be effected by Field Marshal Montgomery and General Bradley with the power of decision resting in the former person.

Air operations were to continue along the same lines as before with the bulk of the Air Forces attacking communications. Taking advantage of the dislocation of the enemy's railway system west of the Rhine, Air Staff S.H.A.E.F. began to choose railway targets east of the Rhine such as Fulda and Kassel where air reconnaissance had located congested marshalling yards. This was taken by the Air Ministry to be an infringement of the authority to decide upon strategic targets held by the Deputy Chief of Air Staff and Commanding General United States Strategic Air Forces in Europe. The Deputy Chief of Staff (Air) S.H.A.E.F. felt that he should impress upon Air Marshal Bottomley the impossibility of distinguishing between tactical and strategic targets at that juncture and put this view before him in a telephone conversation on 27 December.

S.H.A.E.F. (Air) Europe. Hist. Record and Diary pp. 15, 16. Dec. 1944.

App. 6G. Dec. 1944.

Thid p. 15.

Thid App. 7B, 70. Dec. 1944.

Thid App. 6H. Dec. 19440

Summary of Ops. Dec. 1944.

The problem of deciding the priority of oil and transportation targets also arose. After the successful attacks on airfields and communication targets General Spaatz showed himself desirous of returning to the attack of oil targets when weather conditions were suitable over Germany. Deputy Supreme Commander and the Chief of Staff to the Supreme Commander condemned the idea emphatically but their opinion was not shared by the Deputy Chief of Staff (Air) who, after due consideration, realised that the destruction of Germany's remaining oil supplies might soon bear decisive results in the battle area itself. In the week ending 23 December the XVth U.S. Air Force had made a series of effective attacks upon oil refineries in Eastern Germany and Czecho Slovakia at Blechhammer, Oswiecem, Brux and Politz. On the night of the 21st R.A.F. Bomber Command had also attacked the oil refinery at Politz. The enemy was now restricted to the Leipzig area for his principle requirements of fuel for the Wehrmacht and if six to eight targets in this area could be put out of action it was possible that a most oritical fuel crisis would confront the enemy. This might well prove disastrous should the Russians begin their long expected winter offensive in the east. On 29 December, therefore, the VIIIth Air Force made two plans for the day's operations; (a) the support of the tactical battle together with attacks on oil refineries in the Leipzig area, and (b) attacks on tactical targets only. Weather conditions enforced adherence to the second alternative on that day but on the following night R.A.F. Bomber Command sent 337 aircraft VIIIth Air Force to bomb the oil refinery at Buer. On 31 December U.S. heavy bembers despatched a small force to attack an oil target, but the Supreme Commander insisted that targets in the battle area D.S.C./T.S. 100/9 Pt.4, Encl.11A, para.15 See Chap.4, p.120.

should have first priority for visual bombing and it was not until the second week in January when the salient had been eliminated that powerful attacks could be recommenced on the oil industry.

Attacks on rail traffic north of the Ruhr

2nd T.A.F. Daily Log Sheet Nos. 2313 -2318.

After 27 December the weather ceased to favour operations of the Tactical Air Forces and fog and mist covered the Ardennes salient which on the 31st turned to sleet or snow. Fighters and fighter bombers of 2nd T.A.F. were therefore switched to the familiar interdiction area north of the Ruhr where their role was to disrupt rail traffic travelling southwards to the Cologne - Frankfurt sector. On 29 December 2nd T.A.F. was able, for the first time since the battle began, to make large claims for rail transport and enemy aircraft. Typhoons and Tempests out on armed reconnaissance at about 0830 hours found the railways in the Munster - Enschede district crowded with trains, evidently carrying reinforcements and supplies for the Ardennes as many of the wagons obviously contained ammunition, gun carriers and other kinds of military equipment. Their importance may be assessed by the fact that the G.A.F. was providing cover over them in some strength. Nos. 83 and 84 Groups claimed to have destroyed or damaged 47 locomotives and 222 goods wagons - a record score. in this total were two ammunition trains attacked at a small station near Enschede by No.174 Squadron. Orange and yellow flames were caused by the rocket projectiles hitting the wagons and overshoots ignited stores in a shed adjoining the station yard.

The G.A.F. being in an aggressive mood, took part in a number of combats with 2nd T.A.F. and by the end of the day the latter claimed to have destroyed 32 aircraft and damaged 14. British losses amounted to 16 aircraft (15 pilots lost). Although the enemy was keen to fight, in the opinion of some of 2nd T.A.F. pilots, they displayed lack of training by their The biggest score was claimed by No. 331 inexperience. (Norwegian) Squadron which at about 1045 hours engaged five F.W. 190s in the Rheine area. Four were destroyed but at the same time the enemy accounted for four Norwegian pilots. same squadron was in action again during the afternoon sweeping the area between Arnhem and Enschede and met a superior force of about 25 Me. 109s. At once going into the attack, the squadron claimed 12 destroyed and two damaged - a notable Four aircraft and their pilots were lost. effort for one day. Other squadrons which claimed large scores were No.411 (eight other squadred destroyed), No.401 (two claimed destroyed, aircraft claimed no.56 Squadron (one claimed destroyed and one All combats took place in the Rheine - Enschede probable). area.

No.331 Sqdn. O.R.B. Dec., 1944.

Low cloud and mist made flying impossible on 30 December but a break in the weather enabled 2nd T.A.F. to make further attacks on rail traffic in north-west Germany on 31 December and 1 January. During these two days pilots claimed to have destroyed 30 locomotives and over 80 goods wagons, damaging a large number of both. The Rheine - Munster - Paderborn - Osnabruck lines continued to be busy carrying military traffic including on one train, a number of 88 mm guns. The biggest claims for rail traffic were made on 1 January, the day which the G.A.F. had chosen for its large scale attack on 2nd T.A.F. airfields in Belgium and Holland, and which was, in fact, a wain attempt to hamstring the marauding fighter-bombers activities. The extent of Allied air operations that day in the Ruhr area proved that the Luftwaffe had failed dismally in its object.

2nd T.A.F. Daily Log Sheet No.2325 -2328 and 2335 -2339.

#### The threat from north-west Holland

Meanwhile about 70 per cent of No. 84 Group was being detained for operations on the First Canadian Army front on account of a threatened German attack on Antwerp and its approaches from north of the Maas. The Air Officer Commanding 2nd T.A.F. had instructed that the requirements of the Ardennes battle must take first priority and No. 84 Group's principal contribution had been to provide escorts for British and American medium bombers. At Christmas, however, it was learnt that the enemy ground forces in the Gorinchem area (near the mouth of the Maas) had been reinforced for the purpose of advancing south of the river. was also suspected that paratroops would be employed to support this attack, No. 84 Group reconnaissance aircraft having confirmed that repairs had recently been made to Soesterburg airfield in the Utrecht area. Certain squadrons of No. 84 Group therefore reverted to the cutting of rail routes leading into north-west Holland.

No. 84. Group 0.R.B. Dec., 1944.

Hist. Record and Diary App. 1A Jan., 1945 and D.S. C. /T.S. 100/9 Pt.4 encl. 8A.

S.H.A.E.F. (Air) become greatly concerned over the weakness of his front, (1) in particular the Scheldt estuary, which the enemy could threaten from the island of Schouwen which lies to the north of Walcheren, and he requested assistance both from the Navy and the R.A.F. S.H.A.E.F. was at that time unable to spare any ground reserves as all its available forces were committed to the Ardennes sector. In addition enemy pressure was increasing in Alsace on the southern flank.

No. 84 Group 0.R.B. Dec., 1944 -Jan., 1945.

Reconnaissance missions along the Maas were followed up by attacks on bridges, headquarters and gun positions on 29 and 31 December and again on 1 January by 2nd T.A.F. fighter and medium bombers while on 3 January support was given to an operation (Trojan) undertaken by the Polish Armoured Division to discover the strength of the enemy between Gertruidenberg (on the Maas) and Gorinchem. Here a dyke intersected island is formed by the two rivers Waal and Maas proceeding to the sea and on which a small bridgehead had been established by General Student's First Parachute Army, and attached troops. This island is connected to the north bank of the Maas by a road and rail bridge which crosses the Waal (or Merwede as it is called along that stretch) at Zaltbommel and by a ferry at Gorinchem besides which there is an important road bridge at Giessen on the island itself.

2nd T.A.F. 0.R.S. Report No.34 pp. 8, 9.

No. 84 Group 0.R.B. Dec. 1944.

In connection with these operations General Student's headquarters near Hilversum and the main headquarters of IXXXVIII German Corps were again attacked with rockets and bombs on 29 December. Two houses in which Student and his staff were believed to be living were destroyed but later were discovered to have been unoccupied at the time of attack. Similarly at the Corps headquarters only one of the buildings listed among the targets was occupied at the time but severe demage was caused to all the houses around. On 31 December No. 84 Group in response to Canadian Army requests flew nearly 200 sorties over south-west Holland. This time the Typhoons raided the Tactical Headquarters of LXXXVIII Corps outside Zaltbommel. Other Typhcons carrying one thousand pound bombs attempted to destroy two railway bridges on the Utrecht-Zaltbommel line at Tricht and Culenberg, but failed to hit them. Another squadron attacked a vehicle repair depot at

<sup>(1)</sup> There were only two divisions in the line along the Lower Maas.

2nd T.A.F. O.R.S. Report No.34 P.9.

2nd T.A.F. Daily Log Sheet No.2338

Ibid Daily Log Sheet No.2360

2nd T.A.F. 0.R.S. Report No.33 Para.4, P.2 and 2nd T.A.F. 0.R.B. App. No.32A Feb., 1945.

Report No. 173 Hist. Sect. Cdn. Mil. H.Q. Paras. 133, 141 155 - 156.

No.84 Group O.R.B. Jan., 1945.

2nd T.A.F. O.R.B. App. 67 Dec., 1944. Doorn, but, once again, it was subsequently learnt that the building had been unoccupied by the enemy.

On the morning of 1 January, fighter bombers attacked two bridges on the road to Zaltbommel from the north, claiming hits on both of them. The ferries across the Merwede east and west of Gorinchem were bombed at the same time. In the afternoon Mitchells of No.2 Group bombed the big road bridge at Zaltbommel but were met with intense flak and the attack was consequently inaccurate. On the 5th, No.84 Group succeeded in cutting the road bridge across the Lek at Vinanen, thus severing communications between Utrecht and Zaltbommel. It inflicted further damage on the bridge at Culenberg.

During the night of 5/6 January photographs were taken of the ferry at Gorinchem which showed German transport moving eastwards across the Maas and thus confirmed agents' reports that a withdrawal was imminent. Just over an hour after the development of the photographs and the passing of this important information to 2nd T.A.F. Reconnaissance Centre, Mosquitoes, then operating over the Ardennes, were diverted to Gorinchem. Nothing was seen by the aircrews but they dropped bombs on the crossing place and hit a jetty. Despite this evidence First Canadian Army Intelligence still confessed to be in the dark about the position on the Maas and, while it was more worried about a threat from Schouwen Island, came upon evidence that two fresh divisions had moved into the Gorinchem area. But, by 12 January, it considered that, of the two threats, the greater was at Schouwen.

Reports had reached Headquarters, First Canadian Army that the garrison of Schouwen had recently been reinforced and its total brought up to 6,000 men. Many reconnaissances were flown over the island by No.35 Wing but they revealed barely any activity and villages supposed to be sheltering troops were in fact seen to be inundated. The Army, however, continued to be anxious over a possible attack on the Scheldt from this direction and consequently Typhoons attacked supposed assembly areas on the island. During the following weeks a precautionary watch was kept by No.84 Group over Schouwen and the neighbouring island of Overflakee. Meanwhile the interdiction of railways to western Holland continued to be one of the principal tasks of this Group.

Air Operations in the Ardennes 28 December - 3 January

Although, during the turn of the year, the centre of interest from the R.A.F. point of view was mainly north of the Ruhr, 2nd T.A.F. was still making a valuable contribution to the Ardennes battle particularly north of the River Ourthe and east of the Salm where the S.S. panzer divisions were gathering for a new attack. A re-arrangement in operational boundaries was ordered by Headquarters 2nd T.A.F. on 30 December and the inter-Army Group boundary line was chosen so that from henceforward the IXth Tactical Air Command was responsible for controlling tactical operations north of this line and XIXth Tactical Air Command those to the south. Otherwise the areas allocated for armed reconnaissance remained much the same as before. The two U.S. Tactical Air Commands operated over the western end of the salient and No. 83 Group to the east; at the same time the latter was to maintain continuous fighter cover along the entire length of the northern rim of the salient. As before the Americans could call upon the resources of No.83 Group for support. Similarly No. 84 Group was to assist No. 83 Group when required.

No. 83 Group 0.R.B. Jan. 1945.

Two Wings of 2nd T.A.F. were moved in bitterly cold weather to airfields more adjacent to the battle area on 30 December in order to support Field Marshal Montgomery's offensive in the early New Year. Two squadrons and the Headquarters of No. 125 Wing (Spitfires) were transferred to Ophoven west of Roermond in the American sector and No. 123 Wing (Typhoens) of No. 84 Group moved to Chievres south of Brussels. (1) These squadrons were controlled by the Advanced Headquarters IXth Tactical Air Command at Liege where there was also an advanced command post of No. 85 Group. The wintry weather experienced during the first fortnight of January prevented many sorties being flown by this force.

Most active participators in the battle from 2nd T.A.F. were the light and medium bombers of No. 2 Group. Mosquitoes were unable to operate on the nights of 29 and 30 December but on the 28/29th and on New Year's Eve a large number of successful sorties were flown. Their object was to harass the panzer divisions lying up in the forest covered hills between Laroche and Vielsalm and they concentrated on attacking crossroads using their navigational aids. inability of the G.A.F. to give cover by day forced the enemy to revert to major moves by night which afforded many opportunities to the roving Mosquitoes.

During New Year's Eve and the early hours of the following day railways just behind the salient were seen to be extremely active mainly in the Euskirchen - Gemund and Koblenz - Wengerohr areas. No. 2 Group attacked 14 lengths of train and about 600 wagons. In the salient they covered the area between Monschau and Prum and road convoys and trains were strafed. Two flying bombs were shot down in the course of the operations. During the early part of the night there was 10/10ths cloud and in some areas mist covered the hilltops, but after midnight visibility improved and full advantage was taken of it by the Mosquitoes then arriving over the battle zone. On the following night many lorries and armoured vehicles were located and attacked and fires were started in the road and rail junctions of Euskirchen,

Enemy bombers were out in strength on 31 December/ 1 January over the northern sector and were intercepted by No. 85 Group. The destruction of five enemy aircraft was claimed. On the following night another five were reported to have been shot down.

In daylight Mitchells and Bostons raided the choke point at Vielsalm on 29 and 31 December through which panzer troops were known to be passing. According to investigations C.R.B. Dec. 1944 conducted after the battle the first raid was judged to have been the most effective as it cut the road south of the town. This was largely nullified by the fact that the enemy was able to use a more westerly road as a by-pass. Some of the mediums bembed the adjoining village of Bech and killed a number of German troops. On New Year's Day No. 2 Group bombed the road centre of Dasburg on the River Our about 12 miles east of Bastogne. Low cloud over the target area prevented results being observed and some aircraft unable to locate the primary target bombed a group of villages four miles to the east of the town.

21d T.A.F. Daily Log, Sheet Nos. 2333 - 4.

Ibid Sheet No. 2343.

No. 2 Group and 2nd T.A.F. C.R.S. Report No. 19 p. 16.

No. 2 Group 0.R.B. Jan. 1945.

St. Vith, Mayen and Prum.

<sup>(1)</sup> Where it came under control of No. 83 Group.

S.H.A.E.F. Air Daily Summary of Ops. No. 77 - 78 Jan. 1945.

The IXth Bombardment Division which had been unable to operate during the last week of December returned on 1 and 2 January to the interdiction of routes leading into the The road centres of Laroche, Salm Chateau, St. Vith, Gouvy, Stadkyll were bombed in the north; in the south it concentrated on bridges at Bullay, the important rail crossing of the Moselle, Simmern and Bad Munster.

of the absence of the Luftwaffe. which in the past week had made such big claims, encounter the G.A.F. in any strength and was thus able to devote itself to attacking ground targets. A quantity of tanks and armoured vehicles were claimed by it on 29 and 30 December, generally around Bastogne. A few support calls were answered by No. 83 Group from the Forward Control Post at Liege and some armed reconnaissances were flown around St. Vith, most movement being observed on 31 December when Typhoons claimed to have destroyed or damaged three tanks. An interesting feature of this operation was that a number of vehicles were seen drawn up by the side of the road and although struck by cannon shells and bullets were not set alight, from which it might be inferred that they had run out of petrol. Enemy flak was still vigorous and caused not a few Typhoons to fail to return from their mission.

Fighter patrols over the salient were uneventful because

Nor did the IXth Air Force,

2nd T.A.F. Daily Log Sheet No. 2328.

A.M. War Room Monthly Summary of Ops. Bomber Command Dec. 1944 -Jan. 1945.

D.S.C./T.S. 100/9 pt. 4. Encl. 11A para. 13.

R.A.F. Bomber Command and the VIIIth Air Force continued to devote a large proportion of their daily effort to targets in the rear of the front but morning and evening mist over airfields in the U.K. made these missions hazardous. 28 December to 3 January Bomber Command attacked in daylight the Gremburg marshalling yard at Cologne, two marshalling yards at Coblenz and the railway centre of Vohwinkel (between Dortmund and Cologne). A more unusual type of operation took place on 1 January when 17 Mosquitoes of Bomber Command each carrying one 4,000 pound bomb attacked 14 railway tunnels in the base of the salient between Bonn and Trier. Snow covered the targets making them hard to identify and apart from four tunnels reported to be blocked, results were disappointing.

Night raids were made in strength against Troisdorf, Bonn and Munchen Gladbach marshalling yards, Frankfurt city, the Kalk marshalling yard at Cologne and the road centre of Houffalize in the salient. In general the raids on railway targets continued the destruction which had already been inflicted on these targets although better weather conditions would have greatly increased their efficacy. At Houffalize (previously bombed by the IXth Air Force) the main road from Bastogne was cut and a delay of about four hours was imposed on traffic through the town while the enemy quickly filled in A second raid by Lancasters on the night of 5/6 January caused more damage to the town than to the highway. Strictly outside the tactical area but nevertheless important as lines of communication were the Dortmund-Ems and Mitteland canals which had been repaired after R.A.F. Bomber Command's attacks in the autumn. They were revisited by day and night in the first week of January and recommaissance afterwards revealed the presence of much fresh damage.

While R.A.F. Bomber Command tended to seek targets farther away from the battle (in the first week of January it was attacking such targets as a chemical works at Ludwigshaven, was attacked of Berlin, Nuremberg and Hanover) the VIIIth Air Force, apart from a few attacks on oil targets was still Air Force, the bulk of its daily effort to targets west of the devoting the bulk of its daily effort to targets west of the Rhine. Attacks were repeated with good effect on Rhine.

2nd T.A.F. 0.R.S. Report No. 19 pp. 15, 16.

DS 96326/1(105)

VIIIth Air Force Summary of Ops. Dec.

communication centres as Prum, Daun, Bitburg, Lunebach, Euskirchen, Gerolstein, Wittlich, Stadkyll, Koblenz, Homburg, These missions were supported by Bingen, Neunkirchen etc. 1944 - Jan. 1945, large forces of Thunderbolts and Mustangs from VIIIth Fighter A number of sorties were flown against road and Command. railway bridges across the Rhine in answer to requests from the Army. Such precision attacks required good visibility which was so rare at this time, furthermore by the beginning of January snow blanketed the targets and reconnaissance aircraft found it difficult to ascertain the extent of the damage. However, air photographs showed that at least some damage was done to bridges across the Rhine at Remagen, Coblenz and at Neuweid above Coblenz.

D.S.C./T.S.100/9 Pt.4 Encl. 11A para. 15.

From 28 December, the VIIIth Air Force had flown well over 4,000 sorties (1) and Bomber Command over 1,800 sorties against tactical targets and it was evident that the Strategic Air Forces had almost completed their task of interdiction west of the Phine. Rail movement by day: Rail movement by day in this area had practically ceased and G.2, S.H.A.E.F. reported that of 41 targets in Western Germany 29 per cent had by 4 January been suspended from attack and 41 per cent either suspended or heavily damaged. Railway traffic east of the Rhine had also been severely affected. Out of 65 targets 25 per cent had been suspended from further attack. 4 January the general opinion at the Air Commander's conference was that the Strategic Air Forces had accomplished their task of disrupting communications immediately behind the German front in the Eifel. General Vandenberg told the meeting that he felt there was no need for such a large scale diversion of heavy bombers and that the effort had already created a shortage of targets. He considered that the one bombardment division placed under his command was quite adequate a force to deal with the large marshalling yards alongside and west of the Rhine. These could be bombed by Pathfinder Force aircraft while his medium bombers would take on smaller transportation targets. The remainder of the Strategic Air Forces would thus be in a position to make their routine attacks on oil targets or take part in large scale raids on communications deeper in Germany. This point of view was supported by General Schlatter (Assistant Chief of Staff (Air)) and the representative of Bomber Command at S.H.A.E.F. (Air Vice Marshal Oxland) who said that his Commander-in-Chief was also anxious to return to targets in Germany. At the same time General Thatcher, Assistant Chief of Staff, (Air Intelligence), drew the attention of the Air Commanders to the critical position of oil in Germany and urged attacks on the refineries in the Leipzig district.

S.H.A.E.F. (Air) Hist. Record and Diary. App. IE, Jan. 1945.

Two days later the heavy bomber question was presented to the Supreme Commander for consideration by his Chief of Staff, General Bedell Smith, who had by that time been convinced of the necessity to return to the attack of strategic targets such as jet aircraft and tank production. Supporting him General Spaatz requested that while the division equipped with radar aids should continue its bombing of tactical targets, the remainder of the VIIIth Air Force should be free to make visual attacks on the (to him) more vital industrial targets. He stressed the point that it was

The U.S. heavy bomber casualties were not light. Between 28 December and 2 January, 49 had been lost.

See Chap. 4 P. 111 essential to delay the German jet aircraft industry for another three months until U.S. jet production got under way. General Eisenhower agreed to these proposals, but owing to the enemy's diversionary attack in Alsace in early January and the poor weather, the return to strategic targets was still further delayed.

# The New Year's Day Attack 1945

Although it had suffered a serious blow in the air battles of 23 and 24 December the G.A.F. continued to maintain a high rate of effort when the weather permitted. (1) So far its role in the Ardennes battle had been by and large a defensive one, and until the end of the month most sorties were flown against Liberators and Fortresses attacking communications west of the Rhine. A particularly powerful effort to intercept the Americans was made on 31 December and the usual large numbers of enemy aircraft were claimed by the VIIIth Fighter Command.

The prospect of fine weather for the first of January gave Luftwaffe Command West its long awaited opportunity to launch the meticulously planned attack on the congested Allied airfields in Belgium and Holland which proved to be the last major G.A.F. operation of any importance in the west. Goering had for some time intended that the Luftwaffe should recover its tarnished prestige by a spectacular attack and for this reason placed Major General Peltz, well known as a pugnacious and daring airman, in control of Jagdkorps II, the fighter command for the western front.

Planning of the operation took place on the eve of
Von Rundstedt's attack on 16 December when group commanders
were addressed by Peltz and informed of their respective
tasks while the routes to each airfield were carefully plotted
on the map. Scrupulous secrecy was observed and not until
New Year's Eve were the pilots told that the attack would take
place on the following morning. (2) In at least one unit
briefing was held just before aircraft took off with the
result that there was confusion in the minds of some pilots
as to their objective. Despite these hasty preparations
great stress was laid by briefing officers on the importance
of dealing a heavy blow against Allied air power and each
pilot was given a map with his route marked on it.

VIIIth Air Force Summary of Ops. Jan. 1945.

ADI (K) Report No. 158/1945.

S.H.A.E.F. Air Int. Summary No. 44 Pt. II Jan. 1945.

<sup>(1)</sup> Only a monthly summary of G.A.F. operations during
December 1944 is so far available, but some idea can be
obtained of the increase of effort when it is remembered
that most sorties were flown during the last two weeks
of the month. In daylight 7,365 fighter, 627 bomber
and fighter-bomber and 455 reconnaissance sorties were
flown. 640 fighters, 16 bombers and fighter-bombers
and 19 reconnaissance aircraft were lost or reported
missing. By night there were 2,233 bomber and fighterbomber and 164 transport aircraft sorties. 137 of
the former and 130 of the latter were lost or missing.
(A.H.B.6 Trans. of Luftwaffe Command West Statistics
of Ops.)

<sup>(2)</sup> On the same day the Germans began to attack in north Alsace to relieve pressure in the Ardennes salient.

ADI (K) Report No. 158/1945.

Altogether it is believed that eight separate attacks were planned mainly against the British airfields round Brussels, Antwerp and Eindhoven. A few airfields in the U.S. sector such as Ophoven and Asch, east of Brussels, and Metz were also attacked from the Frankfurt and Stuttgart bases. majority of the enemy force flew from the Rheine - Paderborn chain of airfields.

Ibid and Jan. 1945.

Estimates of the numbers of aircraft involved vary considerably and while at first it was believed that about 350 aircraft made the attack, on the basis of further investigations, it would appear that from 700 to 800 fighter bombers including a handful of Me 262's took off on the operation. These were drawn from about four Geschwaders and included one training formation which shows that all available aircraft had been impressed. Great pains were taken to ensure that all the aircraft reached their targets. Int. App. No. 2 taken to ensure that all the aircraft reached their targets. 2nd T.A.F. O.R.B. As the formations took off in semi darkness they were guided to the front line by Junkers 88 which then broke off for Turning points on the course such as Spaakenburg on the south side of the Zuider Zee (the route taken by aircraft attacking Brussels and Antwerp) were marked by coloured flares and 'golden rain' rockets were fired as the aircraft orossed the front line so as to give warning to the German ground forces.

See Map No. 15.

During the approach to the airfields by circuitous routes complete wireless silence was observed and all aircraft flew at treetop height to evade the Allied radar organization. These precautions afforded the G.A.F. complete surprise and British aircrews and ground personnel first became conscious of the raid when F.W.190's and Me.109's flew low across the landing strips at about 0900 hours.

Nos. 439, 440 Sqdn. 0.R.Bs. Jan. 1945.

Once over their targets the German pilots strafed aircraft on the runways, vehicles, dispersal huts with cannon and machine guns and after about twenty minutes made off independently for home. The Me. 262's dropped a few bombs of a 500 and 1,000 pound calibre. On the ground everyone found what cover he could in waterlogged trenches, culverts and behind vehicles. At Eindhoven the dispersal but of one squadron was demolished but fortunately it was unoccupied by any pilots at the time. In a few minutes airfields were ocvered with clouds of smoke from burning aircraft and petrol dumps and bombs loaded on aircraft exploded in the heat for about an hour afterwards. On the whole the attacks were pressed home with determination but one case of an aircraft colliding with another was reported and there was a good deal of poor shooting. Several allotted targets such airfield south of Brussels were missed altogether and the Several allotted targets such as Le Culot aircraft intended to attack them joined up with other formations. A few aircraft attacked Antwerp docks and machine gunned roads in the vicinity but this was probably not intended in the original plan.

The following 13 British occupied airfields were attacked: Heesch, Maldegem, Grimberghen, Antwerp/Dourne Woensdrecht, Gilze-Riejen, Eindhoven, Volkel, Brussels Melsbroek and Evere Knocks U.S. Evere, Knocke, Ursel and St. Denis Westram. In the U.S. sector four airfields at St. Trond, Asch, Ophoven and Metz were attacked. The greatest damage to British aircraft was caused at Eindhoven where two Typhoon squadrons of No. 143 Wing were taking off for an operation as the Germans appeared. No. 440 Squadron on the runway was the worst to suffer losing

2nd T.A.F. O.R.B. Jan. 1945.

D.S.C./T.S.100/9 Pt.4, Encl. 11A. para. 9. nearly all its aircraft but fortunately the pilots escaped with their lives. (1) At Brussels Evere a Spitfire squadron was also caught bunched on the runway and lost five aircraft. In the U.S. zone the heaviest loss was suffered at Metz where 20 Thunderbolts were destroyed.

2nd T.A.F. Daily Log Sheets No. 2335 - 2342.

Owing to the lack of any warning only a limited number of interceptions were made by 2nd T.A.F. fighter aircraft. Luckily a number of fighter and fighter-bombers were in the air at the time and were diverted by radio to engage the enemy while a few fighters managed to take off during the Two squadrons of No. 131 (Polish) Wing (No. 84 Group) had just completed an attack on ferries across the Lower Maas and intercepted about 50 of the enemy over their airfield at St. Denis Westram. The Poles, having already expended most of their ammunition, forced down the enemy to ground level and claimed to have destroyed 18 and damaged five for the loss of one of their own pilots. In this action two German aircraft dived into a hut and a tree. No. 126 (Canadian) Wing out on armed reconnaissance east of the Rhine in the Osnabruck - Lingen area was ordered to intercept the enemy Squadron claims were 17 aircraft destroyed and over Venlo. three damaged, again for the loss of one Canadian pilot. Tempests of No. 122 Wing destroyed seven and Spitfires of No. 127 (Canadian) Wing destroyed eight enemy aircraft over the airfields of Heesch, Brussels and Eindhoven in Holland. Typhoons and Spitfires of 2nd T.A.F. on reconnaissance claimed to have destroyed seven of the enemy.

2nd T.A.F. 0.R.B. 1 Jan. 1945 and File 2nd T.A.F./ 30457/Ops. The low flying tactics of the Germans made them exceedingly vulnerable to the anti-aircraft guns of Twenty-First Army Group and the R.A.F. Regiment which went into action with alacrity and claimed 122 and 43 aircraft respectively. American ground forces, too, made large claims for aircraft destroyed.

D.C.A.S. File ID4/95A. The losses to aircraft of 2nd T.A.F. and IXth Air Force were not inconsiderable. A total of 138 operational aircraft were destroyed and 111 damaged; 17 non-operational aircraft were destroyed and 24 damaged. Damage to aircraft of other R.A.F. Commands which happened to be on the landing grounds amounted to 12 operational aircraft and five non-operational aircraft. Casualties to R.A.F. personnel came to 40 killed and 145 injured, in addition to which, six pilots were killed in air combat.

Losses to enemy aircraft have been calculated from the G.A.F. squadron records for 1 January. (2) They are as follows:

Aircraft destroyed	Aircraft damaged
Missing 165	Flak 4
Flak 6	Fighter 14
Fighter 22	
Total 193	Total 18

<sup>(1)</sup> This squadron was on operations again after two days.

<sup>(2)</sup> General Galland, German Chief of Fighter Operations stated that their losses were some 220 aircraft and an almost equal number of pilots (see Rise and Fall of G.A.F. (ACAS(I)) p.380.

102

The final claims by Allied air and ground forces make an interesting comparison. Those by the Air Forces were:

2nd T.A.F. 57

IXth Air Force 35

Total 92

Claims by the anti-aircraft gumers were naturally considerably higher. In assessing them the aircraft must have been seen to be hit and subsequently to have either crashed into the ground, disintegrated in the air or fallen into the sea.

Twenty-First Army Group	122
Twelfth Army Group (including Ninth U.S. Army)	194
Sixth Army Group	2
R.A.F. Regiment	43
IXth Air Defence Command	2
Total	363

S.H.A.E.F. (Air) Hist. Record and Journal App. 2B Jan. 1945.

File 2nd T.A.F./30457/

Ops.

About 45 enemy pilots were taken prisoner by the British and about 20 by the Americans. From this Air Marshal Coningham deduced that the proportion of killed to prisoners was approximately two to one because pilots would not have had time to bale out owing to the low altitude at which the action took place and he believed that the Luftwaffe had lost upwards of 180 pilots. (1)

An enquiry as to why dispersion had not been more effectively enforced on 2nd T.A.F. airfields was set in motion by the Prime Minister but Air Marshal Coningham was able personally to convince Mr. Churchill, who was on the continent shortly after the attack, that the risk had been necessary in order to provide the utmost support to the Allied Armies from airfields close to the front line, just as on the roads and in the ports behind the front dispersion was no longer observed in view of the undisputed fact of Allied air superiority. It was the principle of the 2nd T.A.F. that there should be no more than one wing per airfield but this rule could not be adhered to on the watery fields of the low Countries where hard standings and concrete runways were so scarce. However, orders for the protection of airfields were reviewed. More suitable airfields to contain two wings were chosen, dispersion drill was to be more rigidly supervised and additional anti aircraft batteries were brought in.

TD4/95A and 2nd T.A.F. 0.R.B. Apps. No. 40 and 43. Jan. 1945.

A.C.A.S. File

These additional precautionary methods were to prove unnecessary for in spite of the loss of life and the destruction of aircraft the raid did not succeed in its

<sup>(1)</sup> Apart from this operation, VIIIth Air Force fighters claimed to have shot down 41 aircraft in escort duties. R.A.F. Bomber Command made a daylight attack on the Dortmund-Ems Canal that morning but did not experience any opposition from hostile aircraft.

object and was never followed up by another, for it was in any case too late to assist Von Rundstedt who had by then reverted to the defensive. It has already been shown that Allied fighter bomber operations continued at full pressure throughout 1 January and on that day 2nd T.A.F., which had been the main target, flew a total of 1,084 sorties. The ground defences did not fail although it was the first time since the summer that such a large force of enemy aircraft had crossed into Allied territory. The operation, in fact, proved to be too costly for the Luftwaffe which could not afford to lose so many pilots, including experienced formation leaders. No more than desultory air attacks west of the Rhine were made after this date and it was not long before the organizer of the operation Major General Peltz was moved to another command. (1)

# The German diversionary attack in Alsace-Lorraine

On 1 January the enemy launched a small attack south of Saarbrucken from the wooded country around Bitche and Saareguimines, his object being to divert attention from the Salient where Von Rundstedt had decided to begin an ordered withdrawal. This thrust made mainly by infantry but with the backing of two panzer divisions aroused some anxiety at S.H.A.E.F. and was the cause for animosity between this headquarters and the French represented by their Chief of Staff, General Juin. The Supreme Commander's intention had been to withdraw General Dever's VI U.S. Corps from the exposed position on the plain north of Strasbourg to the line of the Vosges leaving behind a light armoured screen to protect the French city. This move would, he felt, strengthen his southern flank and provide him with additional reserves for the Ardennes. Unfortunately General Eisenhower underestimated the political and historic significance of Strasbourg in the eyes of the French who at once threatened to withdraw their Army from S.H.A.E.F. control. This and the possibility that the evacuation of Strasbourg might provoke grave unrest along the lengthy British-American lines of communication led General Eisenhower to compromise, and only the left flank of VI U.S. Corps was withdrawn to the Vosges, Strasbourg being covered by the right flank. This decision This decision was made after conversations with General de Gaulle on 3 January, at which the Prime Minister, Mr. Churchill, was also present.

S.H.A.E.F. (Air) Hist. Record & Diary. Apps. 1A.

1C.

1I. 1K.

IM.

S.C.A.F. 167 7 Jan. 1945.

D.C.A.S. File

(1) Eye witness descriptions of the raid may be found in Squadron O.R.B's (all differing in amount of detail) in particular Nos. 439 and 440 Squadrons stationed at Eindhoven and Nos. 403 and 416 Squadrons at Brussels/ Evere. Longer accounts were entered in the O.R.B's of Nos. 83 and 84 Groups and Main Headquarters 2nd T.A.F. The latter produced a report 'Attack on Airfields by the G.A.F. 1 January 1945' to be found in Intelligence Appendix No. 2, 2nd T.A.F. O.R.B. January 1945. Claims and casualties were amended later in the month and may be found in A.O.C.-in-C. 2nd T.A.F's letter to Air Ministry. They were again amended by S.H.A.E.F. on 19 February (See File 2nd T.A.F./30457/Ops. Encl. 27A). Probably the most accurate assessment of German losses are those in G.A.F. Records.

The enemy meanwhile exerted strong pressure around Bitche attempting to force his way towards the Saverne Gap. On 6 January a small bridgehead was made at Gambsheim on the west bank of the Rhine a few miles north of Strasbourg with-In conjunction with this out incurring Allied opposition. sally the enemy attempted to break out from the Colmar These converging attacks led S.H.A.E.F. to despatch one armoured and one infantry division to strengthen the Sixth Army Group sector for a limited number of days - a move it was loathe to implement when so much effort was required to drive the enemy from the Eifel.

During this time there was much dissatisfaction at S.H.A.E.F. over General Dever's conduct of the battle and General Eisenhower and his Chief of Staff criticised the former's inability to hold the initiative in spite of numerical superiority while they were irritated at the tendency of a number of French units not to co-operate. This pre-occupation with affairs in the southern sector led the Supreme Commander and his Chief of Staff to devote too much attention to moves which were really the affair of the Army Group Commander on the spot. In sharp contrast to this procedure there was little communication with the headquarters of Twenty-First Army Group apart from conversations between General de Guingand and General Whiteley (S.H.A.E.F. G2) (1) Nevertheless in spite of initial set backs the front in Alsace-Lorraine remained unbroken. Nevertheless in spite of initial set-

The fighting in this sector was naturally outside the given by Bomber Command by attacks on railway centres in the Upper Rhine district which reconnaissance aircraft had found congested with traffic. Such raids were made on Ludwigshaven on the night of 3/4 January and beginning on 13 January two The night attack proved to be the explosive were dropped.

province of British tactical air forces but support was daylight attacks and one night attack took place on the marshalling yard at Searbrucken; some 1760 tons of high most effective and photographs revealed that all the lines were out and railway activity was believed to be extinct. (2)

This criticism was made by A. M. Robb who attended the Supreme Commanders Conferences at S.H.A.E.F. and included it in his daily notes on meetings to be found in S.H.A.E.F. Air Hist. Record and Diary Dec. 1944 - Jan. 1945.

(2) On the night of 2/3 January several British heavy bombers were shot down and others damaged by U.S. anti-aircraft fire from an Inner Artillery Zone near Metz and Luxembourg. An inquiry into the affair was held at S.H.A.E.F. following upon a stiff protest from C.-in-C. Bomber The chief reasons for the mishap were found to have been faulty communications between XIXth Tactical Air Command Control Centre (whose duty it was to inform anti-aircraft units) and the Movement Liaison Station at Starmore added to which some of the bombers were flying off their course. A number of recommendations were made by the investigating committee including the rebroadcast of flight plans to Tactical Control Centres from Le Bourget which were to be acknowledged by the former Bomber crews were to switch on I.F.F. when doubtful about their course and it was proposed that the height limit of Inner Artillery Zones be lowered to 8,000 feet to assist aircraft operating in bad weather (See D.S.C./T.S.100/9 Pt. 4 Encl. 11A, para, 14; Encl. 12A para. 3 and S.H.A.E.F. (Air Hist. Record and Diary App. 5A, Jan. 45)

Ibid.

A.M. War Room Summary of Bomber land Ops. Jan. 1945.

R.A.F. Bomber Cmd. O.R.S. Night Raid Report No. 815.

The elimination of the Salient - Air Operations 3 - 16 Jan.

In the salient Third U.S. Army held its ground against counter attacking German armour in the vicinity of Bastogne and by the first of January there was no doubt that the crisis had passed. The German withdrawal from the nose of the salient was conducted with great skill for although suffering severe losses in armour and vehicles (the majority of the former from anti-tank weapons) the armoured force were withdrawn more or less intact, it being Rundstedt's policy to withdraw the S.S. panzer divisions at the expense of the other two Armies.

> The First U.S. Army's attack in the direction of Houffalize began on 3 January and two days later the Laroche-Vielsalm road - the enemy's main northern supply General Patton's attack north of Bastogne route was cut. was mounted on the 9th. Heavy fighting ensued in the slush and snowdrifts on the wooded hills in this district where the Germans had concentrated their armour. On the 16th the two Armies met at Houffalize which was found to have been deserted by the enemy. On that evening Field Marshal Montgomery informed General Eisenhower that he had accomplished the task given him in the Ardennes and 'that tactical victory in the salient had been achieved. The First U.S. Army was returned to the command of General Bradley at midnight on 17/18 January and the IXth Tactical Air Command returned to the control of General Vandenberg.

> Throughout this period heavy snow falls and severe icing prevented extensive support being given to the Armies by the Tactical Air Forces, particularly during the second week of January when all the tactical aircraft were grounded for five days. When flying was possible 2nd T.A.F. continued to direct its fighter bombers to north of the Ruhr where the weather was less inclement and routine attacks on locomotives and goods wagons were maintained. A handful of close support missions were flown over the Ardennes, one of these being on 13 January when a long infantry column moving northeastwards Spitfires from St. Vith was machine gunned by Typhoons. giving cover to Marauders joined in in this affray. By night No. 2 Group attacked transport, bombed cross-roads, road centres and in general harassed all movement in the northern area of the 'bulge'. Low cloud often hampered the pilot's vision and icing frequently prevented aircraft taking off. On 7/8 January, for example, only 11 aircraft became airborne because of icing yet when conditions were favourable a big effort was invariably made such as on the night of 5/6 January when 117 sorties were flown.

> Movement of enemy transport in the salient began to increase as it was laboriously pinched out by the Americans and Allied airborne troops and the IXth Air Force was presented with a situation not dissimilar to that which 2nd T.A.F. exploited during the closing of the Falaise Pocket only with the difference that weather conditions were against In this first fortnight of January the most intensive air operations took place on the 14th when the low cloud was blown away and good visibility prevailed for most of the day. As usual the commitments of 2nd T.A.F. were north of the Ruhr and a strike against communications leading to a rocket firing site in Holland was organized. The G.A.F. also took advantage of the weather on this day and made its biggest effort since the disastrous New Years Day Raid. No. 126 Wing on armed reconnaissance was lucky enough to catch fighters taking off from Twente airfield and claimed to have shot

D.S.C./T.S.100/9 Pt.4 Encl.20A para. 1 and Encl.23A para. 1.

'Eyes only' Field Marshal Montgomery to S.A.C. M44 16 Jan. 1945.

S.C.A.F. 175 16 Jan. 1945.

2nd T.A.F. Daily Log Sheet Nos. 2375, 2379.

Toid Sheet No. 2371 -Thid Sheet No. 2364 - 5.

2nd T.A.F. Daily Log Sheets No. 2381 - 2389. S.H.A.E.F. (Air) Summary of Ops. No. 90 para. 5. down 13 of the enemy. Other squadrons on armed reconnaissance and fighter patrols operating between Rheine and Osnabruck brought this total up to 28 aircraft. A total of 846 sorties was flown altogether by 2nd T.A.F. and 10 pilots and eight aircraft were lost. The IXth Air Force on the same day flew over 1100 fighter and fighter bomber sorties mainly against motor transport withdrawing from the salient and claimed to have destroyed 300 vehicles.

R.A.F. Bomber Cmd. O.R.S. Night Raid Report No. 810.

2nd T.A.F. Daily Log Sheets No. 2346, 2348.

Tbid. Sheet No. 2377.

S.H.A.E.F. (Air) Daily Summary of Ops. Nos. 79 -92.

S.H.A.E.F. (Air) Hist. Record and Diary App. 1E Jan. 1945.

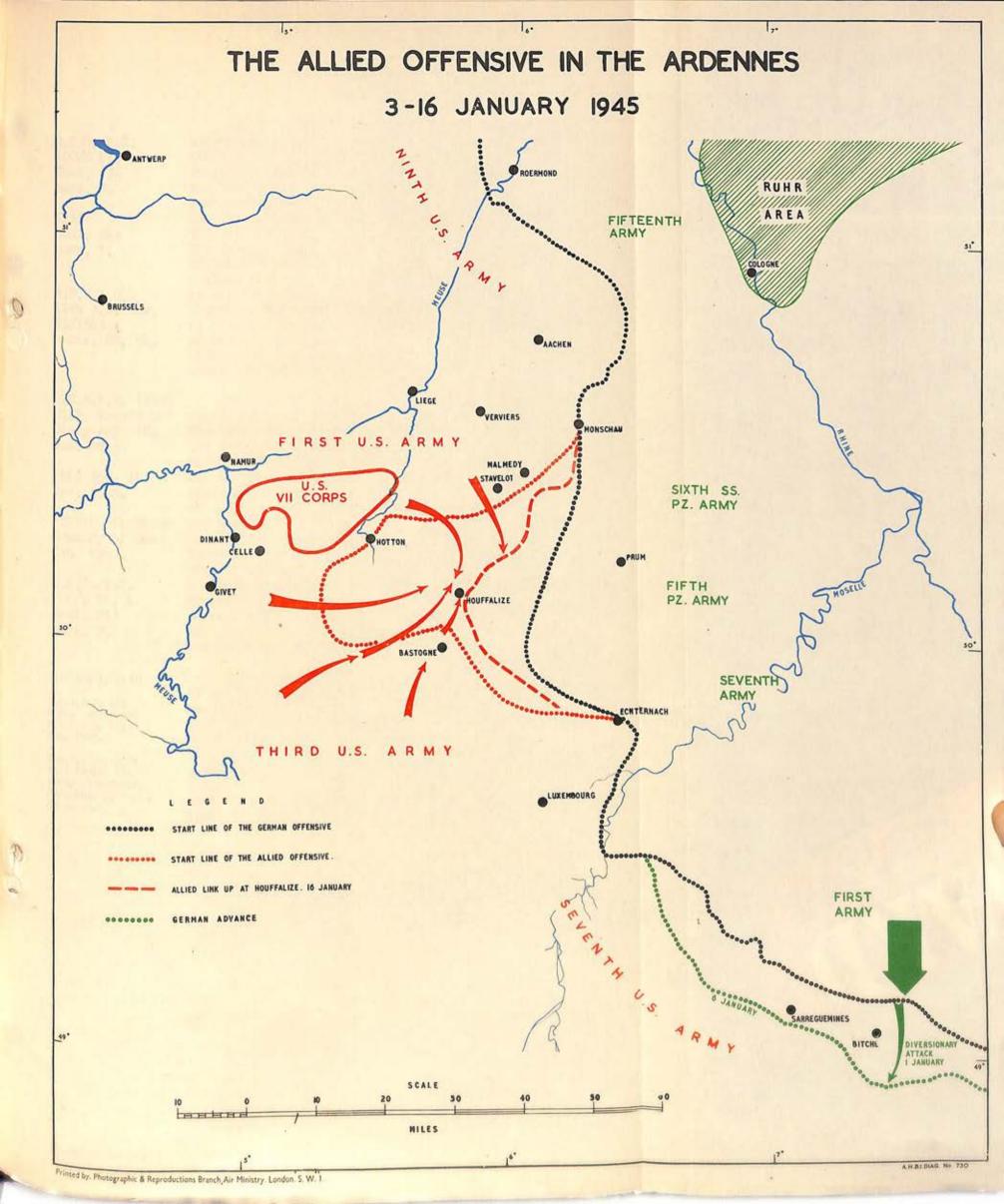
D.S.C.T./T.S. 100/9 Pt.4 Encl. 17A. paras. 6, 7.

VIIIth Air Force Summary of Ops. Jan. 1945 & D.S.C./T.S. 100/9 Pt. Encl. 24A. para. 8.

British medium and heavy bomber attacks over the salient became much more infrequent. Bomber Command's attack on Houffalize on 5/6 January caused severe damage to the town and was the last occasion on which British heavy bombers were used for close support in this battle. No. 2 Group bombed Houffalize on 3 January which was followed up by Mosquito attacks both on this town and St. Vith during the night. Mitchells and Bostons attacked Manderfeldt, a road centre south of Gerolstein north east of the salient on 13 January but bombing had to be done through 10/10ths cloud. Marauders and Bostons continued to attack road rail centres and bridges, their most important targets being Houffalize, St. Vith, Clervaux, Gouvy, Bitburg, Schleiden and Rodt and the bridges of Bullay, Simmern, Dasburg (over the Our) and Poor visibility was the reason for many of Steinbruch. these attacks being unsuccessful but good results were reported at Clervaux (also on the Our, east of Bastogne) where a road defile was accurately bombed while excellent results were reported on the frequently attacked Bullay bridge over the Mosel. (1)

It was not until 14 January that the British and U.S. Strategic Air Forces went back to unrestricted bombing of oil and industrial targets. Although the Supreme Commander had given his approval to the diversion of the VIIIth Air Force away from the battle area (apart from the division under General Vandenberg) this in fact did not materialise owing to the enemy's pressure north and south of Strasbourg and the now familiar road and rail centres west of the Rhine continued to be battered. Bomber Command attacked the railway centres of Hanau, News and Grevenbroich, all targets well away from the Salient. By 11 January Generals Bradle and Vandenberg agreed that to continue attacks west of the By 11 January Generals Bradley Rhine would be a waste of time. The IXth Air Force Commander, no doubt at the instigation of Twelfth Army Group, then suggested at the Air Commanders Conference on that date that their next task should be the destruction of bridges to prevent the enemy withdrawing his equipment across the Rhine in spite of the fact that earlier in the meeting General Doolittle (VIIIth Air Force) had pointed out that this type of operation was futile in view of the poor weather and the vast amount of effort which it would entail. Such attacks were nevertheless pursued during the second week of January to give the utmost support to the Army when U.S. heavy bombers including aircraft of the Pathfinder Force attacked road and rail bridges across the Rhine at Karlsruhe, Mannheim, Worms, Mainz and Cologne. The best results would appear to have been obtained on two bridges at Oologne, in particular the Hohenzollern bridge which, in air photographs, was revealed to be severely damaged,

<sup>(1)</sup> But General Vandenberg reported that the bridge was still unbroken at the Air Commanders Conference on 18 January.



D.S.C./T.S. 100/9 Pt. 4 Encl. 17A para. 9.

Toid Encl. 24A para. 1.

A.P.W.I.U. IXth A.F. Adv. 63/1945. paras. 88, 94.

S.H.A.E.F. (Air) Hist. Record and Diary App. 1H. Jan. 1945.

Thid App. 1L Jan. 1945.

VIIIth Air Force Summary of Ops. Jan. 1945.

D.S.C./T.S. 100/9 Pt. 4 Encl. 21A para. 7.

See Chap 4, p. 111

SeH.A.E.F. Air Hist. Record and Diary App. 1H, Jan. 1945.

D.S.C./T.S.100/9 pt.4 Encls. 17A para. 13 & Encls. 20A. 24A. 5. para. 12. There is little doubt that this constant bombing of communications although not always of great accuracy (1) had kept the German railway system between Cologne and Frankfurt thoroughly paralysed and as January wore on both the Panzer Armies, in particular the Fifth, were strictly rationed for fuel and ammunition. It has already been told how all supplies for the front were unloaded at the Rhine thereby involving a long road haul often by unreliable vehicles. For example General Bayerlein, commander of the Panzer Lehr Division operating in the Bastogne-Dasburg area stated on capture that all the petrol for his division had to be brought by road from Troisdorf, east of the Rhine in the Cologne district, while between 11 and 15 January he was compelled to abandon 53 armoured vehicles by the roadside through lack of fuel, spare parts, etc. In the final stages of their withdrawal from the salient the General's panzer troops were actually forced to march on foot to take up new positions.

Another distraction for the heavy bomber forces was the necessity to make another attack on airfields. At this time the renovation of certain airfields in the vicinity of Cologne led the Intelligence Division of S.H.A.E.F. (Air) to give warning of another large scale operation by the G.A.F. which was to divert the attention of the Allied Tactical Air Forces from the offensive in Alsace. When this threat was discussed at S.H.A.E.F. meetings, the Deputy Chief of Staff (Air), Air Marshal Robb (2) pointed out that the enemy must have realised by now that each Army Group was supported by its own Tactical Air Force and that large rows of Allied air units Tactical Air Force and that large moves of Allied air units However, on were unnecessary for such eventualities. 10 January four airfields in the vicinity of Cologne were By 15 January this cratered by Fortresses and Liberators. assumed threat was still being discussed at S.H.A.E.F. but it was agreed that the best way in which to destroy the G.A.F. was in the course of air battles.

Meanwhile General Spaatz and his Deputy, General Anderson of U.S.S.T.A.F., continued to press for the redirection of the heavy bomber forces to long term objectives. Both believed that the strategic effort was suffering owing to the prolonged heavy bomber operations in support of the Army. Apart from oil, the U.S. commanders were especially concerned over the growth of the German jet fighter force which they believed would be in a position by the beginning of summer to curtail their long range daylight penetrations into Germany. Other types of targets which they considered should assume higher

<sup>(1)</sup> There had been a number of incidents in which the VIIIth Air Force had bombed American troops when visibility was poor. At the Air Staff Meeting on 9 Jan. doubts were cast on the value of a directive to stop ground troops retaliating by fire. (D.S.C./T.S.100/9 Pt. 4 Encl. 16A para. 6) At the Air Commanders Conference on 11 Jan. General Doolittle advised that aircraft should not bomb so close to the troops in over-cast conditions.

<sup>(2)</sup> Air Marshal Robb was at this time deputising for A.C.M. Tedder who left London for Moscow on 1 Jan. in company with other members of S.H.A.E.F. to discover Stalin's plans for the next offensive on the Eastern Front (see S.H.A.E.F. (Air) Hist. Record and Diary p.2 Jan. 1945 and D.S.C./T.S.100/12 Pt. 2 Encls. 10A, 13A, 17A and 18A and also Chap. 4, p. 110 of this narrative).

S.H.A.E.F. (Air) Ops. Journal 15 Jan. 1945. Serial No. 1. priority were tank and U-boat factories. (1) Prominent British Air Commanders were absent at the meetings at which these matters were discussed (11 and 18 January), but the Deputy Chief of Staff (Air) continued to stress the importance of keeping oil as first priority. From 14 January onwards the Strategic Air Force struck increasingly powerful blows at oil and industrial targets. (2) On the evening of the 15th S.H.A.E.F. Air informed General Spaatz's headquarters that there were no tactical targets to be bombed.

Report by S.A.C. to C.C.S. p. 96 and S.C.A.F. 179 20 Jan. 1945. The sixteenth of January is a convenient date at which to conclude this account of the operations in the Ardennes salient for, although heavy fighting was to continue until the end of the month, the attempt to split the British - U.S. Armies and cut off their supply line had been frustrated; the Allied Commanders were already looking forward to the next phase, the advance to the Rhine. General Eisenhower estimated that the German counter-attack had delayed these operations by 'at least six weeks'. Casualties to U.S. troops (excluding Sixth Army Group) amounted to 75,685 killed, wounded and missing. At the same time the heavy bomber force had been diverted from its normal tasks in Germany - oil, aircraft and other industrial targets - to support the land battle for about a month.

On the credit side to the Allies, the enemy had suffered heavily in men and material after this all out effort. 16 December to 16 January he had sustained about 120,000 serious casualties, lost 600 tanks and self-propelled guns and well nigh exhausted his laboriously accumulated stocks of By the end of January the total number of casualties had increased to 220,000 men and 110,000 had been taken The Tactical Air Forces had once again struck a prisoner. hard blow and claimed some 6,000 motor ventures 550 locomotives in the critical period of the battle, while Worse, in the air over 1,000 aircraft had been destroyed. Worse, was the indisputable fact that no objective of any importance had been gained and the disillusionment which followed such a great effort was extremely damaging to the spirit of the Wehrmacht. Meantime a more dangerous crisis had arisen on the eastern front. On 12 January the Russians had launched their long awaited offensive along the Upper Vistula and, from that moment, the policy of O.K.W. with its dwindling resources was to try and stem the sweeping movement across Poland towards the Elbe; this permitted no more than a delaying action in the west.

- (1) At the Air Staff Meeting on 12 January General Spaatz stated that the Supreme Commander had agreed to oil and jet aircraft factories being placed on first priority. S.H.A.E.F. (Air) was to decide between the relative importance of communications and tank factories. (D.S.C./T.S.100/9 Pt.4 Encl. 18).
- (2) On 14 Jan. an VIIIth Air Force attack on oil targets at Magdeburg and Derben (on the Elbe) met with strong opposition from the G.A.F. and 17 heavy bombers were lost. A useful contribution was made during this period by Bomber Command, which raided refineries and other installations at Brux, Politz and the Benzol plant at Wanne Eikel in the Ruhr. (A.M. War Room Summary of Bomber Command Ops. and VIIIth Air Force Monthly Summary of Ops. for Jan. 1945).

109

#### CHAPTER 4

## STRATEGY FOR THE SPRING CAMPAIGN 1945 AND OPERATIONS PRECEDING IT

# The Supreme Commander's appreciation and plan

When the First and Third U.S. Armies had joined hands at Houffalize the battle of the Ardennes was virtually ended although mopping up operations were to continue until the end of January. The time had come for the Allies to regain the strategic initiative and resume their advance into Germany. On 11 January the Combined Chiefs of Staff had requested the Supreme Commander to submit his appreciation and plan of operations for that winter and the coming spring by the 28th of the month. The general strategy for the invasion of Germany had already been discussed and agreed upon but it was left to the Supreme Commander to make a decision regarding the proper time and place. He submitted his appreciation and plan on 20 January in time for a conference held by the Combined Chiefs of Staff at Malta ten days later.

General Eisenhower had decided that future operations in the west would fall into three phases:- one, the destruction of enemy forces west of the Rhine and an advance to the line of that river; two, operations to secure bridgeheads across the Rhine from where an advance into Germany could be developed; three, the destruction of enemy forces east of the Rhine and the advance into Germany. The first phase was to begin as soon as possible and it was hoped that operations in Germany proper would be simplified by the sound defeat of the German armies west of the Rhine.

The nature of operations west of the Rhine depended largely upon the subsequent advance into Germany. There had been much discussion as to the most suitable axis of advance. Two approaches were possible. The first was a thrust across the north German plains on Berlin by mobile columns while the Ruhr valley would be enveloped by forces converging from north and south. The second was an advance across the Thuringian plateau from Frankfurt through Kassel aimed at the industrial area of Dresden and Leipzic second to the Ruhr in importance.

It was agreed that the most suitable approach for the main advance into Germany lay north of the Ruhr. It was the most direct route to the centre of Germany; it provided the most favourable terrain for mobile operations; an advance in that area would quickly cut off the Ruhr industries from the rest of the Reich. On the other hand it would naturally be more strongly held by the enemy than elsewhere because of its importance.

There were two suitable areas for the forming of bridgeheads across the Rhine, between Emmerich and Wesel in the north and between Mainz and Karlsruhe in the south. The assault crossing in the northern sector would have to take place on a very narrow front for geographical reasons and it was certain to be powerfully opposed by the enemy. It would therefore be necessary to divert enemy forces by closing to the Rhine near Frankfurt and possibly making a diversionary crossing. In the southern sector crossings would take place on a wider front and would not meet with such heavy opposition. Above all it was essential that before a major crossing of the Rhine took place the Allies should hold the left bank of the Rhine securely.

D.S.C./T.S. 100/12 Pt.2 Encl.36A

D.S.C's Log S.C.A.F. 78 9 Sept. 1944

D.S.C./T.S. 100/12 Pt.2 Encl.54A The plan of the Supreme Commander was as follows:-

- (a) To destroy the enemy north of the Moselle and to close to the Rhine north of Dusseldorf.
- (b) To destroy other enemy forces still remaining west of the Rhine.
- (c) To seize bridgeheads over the Rhine in the north and the south.
- (d) To deploy some 35 divisions east of the Rhine and north of the Ruhr (the maximum force which could be maintained beyond the river). This force would isolate the Ruhr valley.
- (e) To deploy a force east of the Rhine on the axis Frankfurt-Kassel which would distract the enemy from the major effort in the north.

General Eisenhower stressed the difficulties of crossing the Rhine in the north because it would take place on such a narrow front. Airborne forces and Strategic air support would be used on a large scale as well as a large number of amphibious vehicles of all types. Finally an essential element of the plan was flexibility so that in the event of the crossing in the north proving a failure it would be possible to shift the main effort from north to south.

The British Chiefs of Staff did not, at that time, agree to the Supreme Commander's strategy. They believed that he should concentrate the maximum forces north of the Ruhr while the troops along the remainder of the front west of the Rhine should remain on the defensive. During the first week of Jamuary for instance, they expressed concern over the fact that General Eisenhower had concentrated more divisions in the Saar area than in the north although he had declared that it was in the north that the main assault would take place. (1) The Supreme Commander determined to abide by his plan. He also opposed the idea of an overall ground commander who could operate under S.H.A.E.F. (2) In all this he had the support of the Chief of Staff of the United States Army, General Marshall. On his way to Malta for the Combined Chiefs of Staff Conference, General Marshall travelled apart from his colleagues and met the Supreme Commander at a secret rendezvous near Marseilles. He gave full approval to the strategy for the invasion of Germany.

C.O.S.(W) 564 6 Jan. 1945

Biennial Report of C.O.S. U.S. Army 1 July 1943 -30 June. 1945 p.46

# The Deputy Supreme Commander's mission to Moscow

Another important factor which had to be considered when plans were drawn up for the Spring was the intentions of the Russian High Command for it was essential that the

- (1) The reason for this concentration in the Saar was the German diversionary attack north of Strasbourg described in Chapter 3 and referred to by General Eisenhower as 'the running sore in the south'. Four extra divisions had been sent to assist General Dever's operations by 25 January. (S.H.A.E.F. Hist. Rec. and Diary Jan. 1945).
- (2) Reference was made to this argument at the end of Chapter 2 of this volume. General Eisenhower's views on this matter are outlined in his Report to the C.C.S. on page 105.

D.S.C./T.S. 100/12 Pt.2 Encl.10A

Ibid Encl. 18A

D/S.A.C. Folder Notes on Moscow Visit Jan. 1945

See Chap. 3

D.S.C./T.S.100 Pt.9 Encl.33A Supreme Commander should co-ordinate his plans with those of Marshal Stalin. President Roosevelt and Mr. Churchill therefore proposed to Marshal Stalin that he should receive a representative from S.H.A.E.F. who would explain to him the situation on the western front and arrange an exchange of information concerning future operations. Marshal Stalin concurred and on 27 December the Supreme Commander delegated his Deputy, Air Chief Marshal Tedder, accompanied by Major General Bull, Chief of Operations and Brigadier General Betts, Assistant to the G2, to visit Moscow.

Air Chief Marshal Tedder arrived in Moscow on 14 January after a long drawn out journey, and he had an interview with Marshal Stalin on the following day. immediate purpose of his mission had been to discover whether or not the Russians were going to launch a winter offensive but this had, of course, already begun by the time he had reached Moscow. Marshal Stalin informed him that the ultimate objective of this offensive was the line of the At this meeting Air Chief Marshal Tedder unfolded Oder. the general plan of Allied operations for the coming spring and dwelt on the effort being made by the Air Forces to disorganise the oil industry and to paralyse communications In answer to his inquiries as to whether the in Germany. Russians would be able to maintain offensive operations during the thaw period from mid March to the end of May, (the time when the Allies would be engaged in crossing the Rhine) he was assured by Marshal Stalin that local offensives would be made. The Marshal then went on to say that he believed that Germany would eventually be compelled to surrender because of famine but that that would not come about before the summer. He did not think that they could resist the great weight of the Soviet offensive in the east to which he referred as the 'decisive theatre of operations'. The talk ended after a mutual exchange of questions concerning various military problems in which General Bull and Air Chief Marshal Tedder and his General Betts took part. party arrived back in London on 19 January.

Air plans. Revision of the directive to the Strategic Air Forces

Air strategy for spring operations also underwent revision. It was noted in the last chapter how concerned the U.S. Strategic Air Force commanders were over the growth of the German jet fighter force. They believed that it would not only interfere with strategic air operations over the heart of Germany but the Tactical Air Forces might encounter difficulties in providing cover for the Armies in the forward areas especially as the enemy was employing jet propelled aircraft for reconnaissance and ground attack. On 15 January, therefore, the third directive to the Strategic Air Forces was issued by Air Marshal Bottomley and Operations against the G.A.F. were to be General Spaatz. one of the primary objectives and were to include the bombing of jet aircraft production and training and operational The first two priorities, the petroleum establishments. industry and the enemy's lines of communication, were to remain the same as hitherto. Heavy bomber units based in the United Kingdom were to concentrate on attacking the Ruhr, because of its increased importance to German economy. the event of bad weather blind bombing technique was to be used in raids on important industrial targets. Commander could, as before, call upon the Strategic Air Forces to provide his Armies with direct support and this remained an over-riding commitment.

112

R.A.F.
Bomber Cmd.
O.R.B.
Supplement to
June Record
1945
pp.86 - 88

The procedure for requests by S.H.A.E.F. for heavy bomber support was vigorously criticised by R.A.F. Bomber Command. During January S.H.A.E.F. (Air) had been in the habit of forwarding a number of requests for attacks on communications targets as top priority for the ground forces. This meant that R.A.F. Bomber Command was bound to attack the target when it might, on occasion, have been possible to make a successful attack on an important oil target (top priority in the directive to the Strategic Air Forces). On the other hand the VIIIth Air Force was attacking Army support targets on a high priority which did not conflict with its attacks on visual targets.

Minutes of Meetings C.S.T.C. Jan. 1945

This matter was discussed at a meeting of the Combined Strategic Targets Committee on 24 January. At its conclusion the Committee recommended to the Deputy Chief of Air Staff that requests from S.H.A.E.F. should state clearly whether an attack was required as an emergency priority overriding oil targets. Such requests, it held, should only be made when far-reaching Strategic issues were at stake. Requests for attacks on a lower priority should be made as infrequently as possible to enable the strategic targets programme to be fulfilled. A decision was taken on this controversial point at the Air Commanders Conference at S.H.A.E.F. on 1 February, when Air Chief Marshal Tedder stated that the Supreme Commander could pass top priority requests only if he was certain that a heavy bomber attack would affect the immediate battle. He asked that this principle should be observed in future. (1)

D.S.C./T.S. 100/9 Pt.12

D.S.C./T.S.100 Pt.9 Encl.56A

A further amendment to the Directive to the Strategic Air Forces was made early in February. It concerned attacks In view of the heavy losses in armoured on tank production. vehicles suffered by the enemy during his push in the Ardennes, and since he had made determined efforts to replace his losses, the Ground Staff of S.H.A.E.F. felt that tank production centres might prove a decisive and economical target. It recognised, however, that air attacks on communications in the Ruhr would have a more widespread effect on German armament production than the singling out of specialized General Strong (G2) therefore recommended that targets. tank production should be rated as a 'filler' target and should not be placed on a higher priority than oil and transportation targets in the Ruhr.(2) But the War Office and the Joint Intelligence Committee were both anxious that attacks on armoured fighting vehicle production should be raised to the level of second priority in the current strategic directive and because of their pressure the Combined Chiefs of Staff decided at the Malta Conference that tank factories should rank with communications as second On 11 February the directive was amended priority. A target list was drawn up by the Combined accordingly. Strategic Targets Committee which included armoured fighting vehicle plants at Berlin, Muremburg and Friedrichshaven. The Deputy Supreme Commander, as well as General Strong and

Ibid Encl. 57A

D.S.C./T.S. 109/9 Pt.4 Encl.47A para.13

<sup>(1)</sup> See also in connection with attacks on Rhine bridges p.17.

<sup>(2)</sup> S.H.A.E.F's point of view had changed since 13 Jan. when attacks on armoured fighting vehicle plants had been urgently requested. It was recommended that these attacks should be on a level with and above communication targets but below oil and jet aircraft. (S.H.A.E.F. (Air) Hist. Record. App. 9A, Jan. 1945).

# 113

his assistants, expressed his disapproval of the new amendment when it was discussed at the Air Commanders Meeting on 8 February.

# Effect of the Russian winter offensive on air strategy

By the end of January East Prussia, Poland and Silesia had been occupied by the Russians and they had reached a point some 50 miles from Berlin and Stettin. The loss of Silesia made the position of the enemy well nigh disastrous. He had relied increasingly on its coal mines and steel producing plants as they were not subject to air attacks in the way that the Ruhr zone was battered daily and nightly by the Allied Air Force. Allied intelligence then estimated that as a result of the loss of Silesia, German coal supplies would be reduced by about one third, steel production would be cut by a further 25 per cent and it was reckoned that during that year there would be an output of ten million tons as compared with 36.37 million tons in the middle of 1944. The readjustment of the Ruhr to being the main productive centre in Germany would have the effect of thoroughly disorganising German economy and communications. The latter, in turn, would be aggravated by troop movements from west to east to meet the Russian threat.

In Poland oil plants, aircraft component and armament factories had been put out of action. Worst of all was the loss of the three synthetic oil plants in eastern Germany which had been producing 20 per cent of the current output of petrol. This weakened drastically the mobility of the German air and ground forces. A redoubling of the air effort against oil plants and the transport system leading to the Ruhr was clearly indicated.

#### Operation Thunderclap

The situation on the eastern front made certain of the Air Commanders believe that the time had come to begin large scale attacks on the morale of the civil population. From early in the campaign a plan had been evolved for mass attacks on enemy morale known by the code name of Operation Thunderclap. Its object was simply to produce a state of terror by heavy bomber raids and to convince the German civilian that if he were involved in such a raid his chances of escaping death or serious injury were very remote. Suggestions as to whether it should be put into effect after the German collapse in France had been made in the previous August but the movement was then considered Operation Thunderclap was reviewed at the inopportune. Air Commanders Conference on 25 January. Both Air Chief Marshal Tedder and General Spaatz agreed that the operation should be carried out at a favourable moment but they did not believe that this would occur until the Russians either held the line of the River Oder in strength or until they were actually across it. The operation was again discussed by the Chief of Air Staff, the Deputy Chief of Air Staff and General Spaatz at the Air Ministry before the former left for the Malta Conference and also by Air Chief Marshal Tedder and Air Marshal Bottomley at S.H.A.E.F.

After this latter discussion on 31 January the Deputy Chief of Air Staff sent a signal to the Chief of Air Staff, who had arrived at Malta for the Combined Chiefs of Staff Conference, in which he defined a revised order of priorities for the Strategic Air Forces to meet the changed situation in Germany. First priority was to continue to

S.H.A.E.F. (Air) Hist. Rec. and Diary App. 10F Jan. 1945

D.S.C./T.S.100 Pt.9 Encl.38A

D.S.C./T.S. 100/9 Pt.4 Encl.31A Para.7

D.S.C./T.S.100 Pt.9 Encl.44A

## 114

be the main synthetic oil plants which were to be attacked whenever visual conditions permitted. The second priority was significant as it gave approval to raids on German morale, which were to take the form of attacks on Berlin, Leipzig and Dresden and associated cities by the Air Forces operating from The intention was firstly to spread confusion and panic amongst the civilian population then fleeing from the Russian advance and secondly to impede any movement of reinforcements towards the east from other fronts.(1) priority was the attack of communications with particular Third reference to the 'assembly, entraining and movement of reinforcements for the eastern front.' The Strategic Air Forces based in the U.K. were to concentrate their attacks against targets in the Ruhr - Cologne - Kassel area. The Fifteenth U.S. Air Force was to impede suspected movements of troops by attacking the appropriate communication centres. priority was to be the attack of jet aircraft production and communications in southern Germany. Marginal effort was to be devoted to tank and submarine production.

S.H.A.E.F. (Air) Hist. Rec. and Diary. App. 9C Jan. 1943 Fighter escorts to the Strategic Air Forces were to attack rail movement on the main routes used by reinforcements travelling from the western to the eastern fronts. General Spaatz had already defined areas of operations for the VIIIth Fighter Command in a signal to General Doolittle, Commanding General VIIIth Air Force, on 25 January. It was to operate to the east of the British and U.S. Tactical Air Forces in an area extending southwards from Borkum Island through Hanover to Gottingen, then to Juterbog east of the Elbe and northwards, excluding Berlin to Straslund on the Baltic. The following railway lines were considered to be most worthy of attack:-

- (a) Bremen Uelzen Stendal Wittenberge Blankensee.
- (b) Hanover Stendal Berlin.
- (c) Hameln Elze Hildesheim Magdeburg Berlin.

The Deputy Chief of Air Staff requested that both he and General Spaatz should be kept informed of the rapid progress of the Russian Armies so that they could re-adjust the bomb line for the Strategic Air Forces when necessary.

D.S.C./T.S. 100/9 Pt.4 Encl.39A Para. 8. VIIIth A.F. Summary of Ops. Feb. 1944 See p. 122. This signal was read out to the Air Commanders by General Spaatz at their meeting at S.H.A.E.F. on 1 February. It was first put into action on 3 February when about 980 heavy bombers of the VIIIth Air Force bombed the Templehof marshalling yard in the heart of Berlin. Later that month further raids were made by both British as well as U.S. heavy bombers on Chemnitz and Dresden. Details of these operations will be related in due course.

Additional air and ground forces required for the coming offensive in the west

S.H.A.E.F. (Air) Hist. Rec. and Diary App. 6B Jan. 1945 On 15 January the Supreme Commander had sent General Marshall a request for the additional resources which he required to bring the war in northwest Europe to a swift conclusion. He asked for an additional ten divisions for his ground forces together with the necessary supporting arms and services in order to give weight to the subsidiary thrust

<sup>(1)</sup> General Spaatz had already ordered the VIIIth Air Force to make daylight attacks on Berlin whenever weather conditions were favourable.

into Germany which was to take place simultaneously with the major offensive north of the Ruhr. With regard to the Air Forces, General Eisenhower demanded an increase in the U.S. tactical air units and suggested that the XIIth Air Force in Italy should be transferred to the Sixth Army Group front less its medium and light bombers together with units employed for protective purposes and the Spitfire squadrons attached to that Air Force. Other requests were as The strength of each U.S. Fighter Group, including those in the XIIth Air Force, should be raised to 100 aircraft on unit establishment and an additional Reconnaissance Group should be allocated to the XIIth Air Force. At the same time the fighter squadrons of the Strategic Air Forces should be increased to 100 aircraft on unit establishment but addition to these units should rank as second priority to the reinforcements destined for the Tactical Air Forces.

General Spaatz, Commanding General United States
Strategic Air Forces in Europe, had already written to
General Arnold proposing to him that in view of the Russian
advance towards the industrial zone of eastern Germany, part
of the XVth Air Force, hitherto reserved for attacks on
synthetic oil plants, such as Blechammer, should be transferred from the Mediterranean theatre to the U.K. This
force would comprise six heavy bomber groups and two Groups
of fighter aircraft. Six fighter groups of the VIIth Air
Force would be moved to the Continent to make room for these
extra units. In the event of the XIIth Air Force moving to
France, he suggested that the XVth Air Force might command
the remainder of the American Air Forces in Italy. This
idea, however, proved to be unacceptable to the Combined
Chiefs of Staff.

Conferences held by the Combined Chiefs of Staff and Heads of Allied governments

Air and ground strategy was discussed and defined at a Combined Chiefs of Staff Conference held at Malta in the last week of January. (1) This preceded a meeting of Mr. Churchill, President Roosevelt and Marshal Stalin which took place at Yalta in the Crimea during the first week of February. S.H.A.E.F. was represented at Malta by the Chief of Staff, General Bedell Smith and the Deputy Chief of Staff (Air), Air Marshal Robb. General F. L. Anderson represented the United States Strategic Air Forces in Europe. The Supreme Commander's plans for the crossing of the Rhine were fully discussed at these conferences and were eventually approved by the Combined Chiefs of Staff.

Build up of air and ground forces on the western front

Instructions to transfer air and ground units from
Italy to the western front were contained in a directive by
the Combined Chiefs of Staff to Field Marshal Alexander,
Supreme Allied Commander in the Mediterranean theatre on
3 February. They disclosed that it was their intention to
decide the war in Europe on the western front. The
instructions regarding the Air Forces in the Mediterranean
were that two fighter groups of the XIIth Air Force were
immediately to procede to France. Thereafter as much as
possible of the XIIth Air Forces was to move to France

Ibid App.1, 2 Jan. 1945

D.S.C's Log F.A.C.S. 130 22 Jan. 1945. S.H.A.E.F (Air) Hist. Rec. and Diary App. 1, V Jan. 1945.

C.C.S./776/3 9 Feb. 1945

S.H.A.E.F. (Air) Hist. Rec. and Diary App. 1A Feb. 1945

<sup>(1)</sup> Known by the codename Cricket.

<sup>(2)</sup> Known by the codename Argonaut.

without compromising General Alexander's future operations in Italy. Three days later, on 6 February, the implications of this order were discussed at a conference held at Cannes and attended by commanders of the Mediterranean Allied Air Force and by General Spaatz, Air Marshal Robb and General Thatcher, Assistant Chief of Staff (Air). On 20 February the XXVIIth and IXXXVIth Fighter Groups were transferred from Italy to France.

In addition, plans were made to bring troops from the Italian front to France to reinforce the Northern Group of Armies. These movements, known as Operation Goldflake, began in the middle of February and, by the second week in April, a corps headquarters, four infantry divisions and one armoured division had travelled across France and taken up positions on the western front.

Move of S.H.A.E.F. Forward and the location of Principal air headquarters at the beginning of the spring campaign

Since early November the Supreme Commander had been anxious to move his Forward Headquarters away from the Paris area, more for political than for military reasons, and, after possible sites had been reconnoitred in Luxembourg and Spa, the city of Reims was chosen as being the most central place for the Western Front. Arrangements for the move were made during that month and it was planned to take place on or about 1 January, 1945.

Senior air officers at S.H.A.E.F. were concerned lest the Air Staff be split and the major part detailed to remain at the Main Headquarters in Versailles.(1) Moreover, investigation of the Headquarters site at Reims revealed that signal communications were entirely inadequate for an effective Air Staff to be located alongside the Ground Staff. When the proposed move was discussed at the Air Staff conference on 13 December, the Personal Assistant to the Deputy Supreme Commander explained the latter's opinion, which was that the move must be delayed until a strong Air Staff could be maintained at S.H.A.E.F. Forward. A postponement was agreed upon until adequate signal communications were installed at Reims but it was not until after the battle of the Ardennes that the date of the move was fixed for 20 February.

S.H.A.E.F.(Air) Hist. Rec. and Diary, P.7, Feb. 1945

File D/S.A.C./

Encl. 64 et. seq.

T.S.108/12

On that date S.H.A.E.F. forward, including the Ground and Air Staffs and a Liaison Detachment from R.A.F. Bomber Command, moved from Versailles to Reims where it was located in a large school. Here it was to remain until the close of hostilities.

The other Allied Air Headquarters were located as

follows. The Main Headquarters of 2nd T.A.F. remained in the Residence Palace, Brussels, until after the crossing of the Rhine. The Main Headquarters of the IXth Air Force was located at Chantilly with an Advanced Headquarters at Namur. The Main Headquarters of the 1st Tactical Air Force was at Vittel in south eastern France.

S.H.A.E.F. Orders of Battle Feb. 1945

<sup>(1)</sup> It was anticipated that the Supreme Commander and his deputy might be unduly influenced by members of U.S.St.A. should the bulk of the Air Staff remain at Versailles.

Air plans of a tactical nature. Attacks on the Rhine Bridges

In the latter half of January the primary task of the Tactical Air Forces was to harass and delay the enemy's withdrawal from the Ardennes 'bulge' and in the second place to halt his offensive activities in the area of the Saar. The Sixth Army Group and the IXth Air Force were in favour of heavy bomber attacks on all the main Rhine bridges so as to prevent the Germans withdrawing their heavy equipment. On 13 January Advanced Headquarters, IXth Air Force suggested to S.H.A.E.F. that, as there was a fair weather forecast for the following 72 hours, Bomber Command should attack bridges north of Cologne and the VIIIth Air Force should be responsible for destroying the bridges in Cologne and those to the south of it. The total number of bridges selected for attack amounted to twenty-two.

S.H.A.E.F. (Air) Hist. Rec. and Diary App. 9A and 1M Jan. 1945

See Map. No. 10

D.S.C./T.S. 100/9 Pt.4 Encl.21A. Para.5

A lengthy discussion as to whether or not the Rhine bridges were a suitable target system took place at the S.H.A.E.F. (Air) Meeting on 15 January. It was generally agreed that it was impossible to destroy all the bridges in a limited period of time. Furthermore the Air Forces had already dislocated rail traffic west of the river and there would be little point in bombing bridges to prevent the enemy withdrawing at a time when the Allied ground forces were not in a position to force them to do so. A suggestion was then made that the attack of railway communications east of the Rhine in the Cologne and Frankfurt areas combined with the bombing of armoured fighting vehicle factories would be more practical. General Schlatter (Deputy Chief of Air Staff, S.H.A.E.F. alone opposed this point of view and said that it would be wrong not to attack bridges when strikes against them earlier in the campaign had been so effective. General Thatcher (S.H.A.E.F. Aj) struck a note of compromise by pointing out that interdiction could be achieved either by putting specific bridges out of action or by bombing marshalling yards.

S.H.A.E.F. (Air) Hist. Rec. and Diary App. 90 Jan. 1945. Following upon this meeting Air Staff S.H.AE.F. defined a policy which was circulated among the Army Groups. It made it quite clear that the bombing of all the Rhine bridges would divert too much effort from raids on oil targets and jet aircraft production. But certain key bridges on rivers which had been turned into a line of interdiction would be attacked when weather did not allow operations against high priority targets in other areas.(1)

Ibid

A little later in the month when the enemy's withdrawal to the Rhine was in full swing, Twelfth Army Group demanded that rail and road bridges across the Rhine from Bonn to Dusseldorf should be attacked. Twenty First Army Group, concerned about the protection of its left flank exposed towards the Rhine during Operation Veritable, asked that the road and rail bridges at Wesel should be bombed. At the Air Commanders Meeting on 1 February a further discussion on bridge attacks was instigated by General Spaatz who enquiried whether medium bombers would not be better than heavy bombers for such a task. General Schramm (Chief of Staff to General Royce, the Commander of First (Provisional) Tactical Air Force) said that they were useless against well

D.S.C./T.S. 100/9 Pt.4. Engl. 39A Para.8.

<sup>(1)</sup> They were the Cologne (Hohenzollern) rail and road bridge, the Dusseldorf/Neuss rail bridge, the Duisburg/Rheinhausen, and Ruhrhort/Hochalen rail bridges. (See Map. No. 10).

Ibid Encl.47F Para.13.

D.S.C./T.S.100

Pt.9 Encl. 56A

D.C.S./T.S.100/9

Pt.4. Encl. 47A

Para.13.

See p. 113.

defended targets. The Air Commanders agreed that in the wintry weather which they were then experiencing Rhine bridges should not be attacked unless the urgency of the tactical situation demanded it and in that case medium bombers should be dispatched. Both at this Air Meeting and at the next held on 8 February, the Deputy Supreme Commander said he felt that the Army was expecting too much from the destruction of bridges. He reminded his colleagues that the Germans were adept at crossing wide rivers by ferries and pontoons and he reminded them of the success of the German withdrawal across the Seine during the previous summer. He ruled that no other target was to be given a priority above oil except when urgently required for attack in support of the ground force. (1)

#### The plan for the interdiction of the Ruhr

By the beginning of February the situation on the western front was such that the Rhine was too close to the battle zone to be of any real use as a line of interdiction either for strategic or for tactical purposes. The railway system west of the Rhine was in a chaotic state after the numerous bombing attacks which took place during the battle of the Ardennes, and the Air Commanders had to choose a new line of physical obstacles along which the battlefield could most satisfactorily be isolated. There was general agreement that since the loss of Silesia to the enemy, the Ruhr was of the utmost importance to German economy as it was now the only source of hard coal and steel.

The Strategic Air Forces, as already related, were engaged in bombing rail centres on routes running east and north-east from the Ruhr. There were as follows:-

- (a) Hamm Bielefeld Minden
- (b) Soest Paderborn Hameln
- (c) Schwerte Arnsberg Warburg
- (d) Munster Osnabruck Bremen.

See Chap. 2 pp. 31, 37, 59 and Chap. 6 pp. 183-185. Heavy bombers had also bombed the key viaducts and bridges on the railway routes and major railway centres within and along the approaches to the Ruhr, and had also made a series of attacks on the highly important inland waterways leading into the Ruhr, the Dortmund - Ems and Mitteland Canals. The Air Commanders wanted a plan in which the Tactical Air Forces would combine in isolating the Ruhr with the Strategic Air Forces, subject, of course, to the Army's requests for support in the land battle.

The IXth Air Force had experienced a good deal of success in their bridge cutting operations between the rivers Moselle and Rhine during the battle of the Ardennes, and had destroyed 64 out of 67 bridges. General Vandenberg therefore suggested that his medium bomber force should be used to cut bridges carrying railways leading into the Ruhr from eastern Germany. The line of interdiction (a total of 19 bridges or viaducts) was to run up the Weser from Bremen to the Minden district and then swing westwards towards Coblenz including bridges on the rivers Seig, Dill and Lahn. The Deputy Supreme Commander supported General Vandenberg's plan as he

<sup>(1)</sup> This was confirmed in a S.H.A.E.F. (Air) signal on 2 February.

believed that it would assist land operations as well as strangling the economic life of Germany.

D.S.C./T.S.100/9 Pt.4 Encl. 52A

Discussions first took place on the isolation of the Ruhr at the Air Commanders conference on 8 February. they were interested in the scheme the Deputy Chief of Air Staff was asked to convene a meeting of the Working Committee (Communications) from the Combined Strategic Targets Committee. They met at Versailles on 10 February. After general discussion on the IXth Air Force plan, at which Air Chief Marshal Tedder and Air Marshal Robb were present, sub-committees were formed to discover whether it was at all feasible. An alternative system of targets nearer the Rhine, which included the three main railway lines carried by the Bielefeld and Arnsberg viaducts (already attacked by heavy bombers) was rejected as being impracticable as suitable targets could not be found on all the lines which required cutting. It was agreed, therefore, that the air forces should aim at the complete isolation of the Ruhr. This was, in fact, the object of the IXth Air Force plan. If it was completely successful all rail traffic between the Ruhr and the rest of Germany would virtually cease. Air Chief Marshal Tedder drew the attention of the Committee to the importance of co-ordinating heavy bomber attacks in the Ruhr with this interdiction scheme. Rail cuts made around heavily bombed areas would add to the confusion and would not only cause difficulties in re-routeing trains, but the enemy would find it difficult to introduce fresh supplies of rolling stock and locomotives into any one affected area. As the three bridges across the Weser were out of range of medium bombers it was decided that they should be attacked by heavy bombers in addition to the Bielefeld and Arnsberg viaducts.

D.S.C./T.S. 100 Pt.9 Encl. 59A

> After approval by the Combined Strategic Targets Committee the plan was presented to the Air Commanders at their conference on 15 February and they agreed that it should be put into operation at once. General Vandenberg stated that he was about to begin attacks on the more southerly bridges. The Deputy Supreme Commander suggested that when the weather was unfavourable for bridge attacks the medium bombers should bomb rail centres in the vicinity, in order to increase the enemy's shortage of rail repair facilities. Fighter bombers were to cover railway lines near centres recently attacked as they would probably find profitable targets in the shape of stationary trains.

D.S.C./T.S.100/9 Pt.4 Encl. 55A

An outline plan was issued by S.H.A.E.F. (Air) to the 2nd T.A.F./30317/ three Tactical Air Forces on 17 February. The IXth Air Force was to attack the following bridges arranged in order of priority according to their traffic capacity and importance.

See Map. No. 24

78/0ps.

Arnsberg Bad Oeynhausen Vlotho Nieder Marsberg Pracht Nieder Scheldt Lage

Herford Volkmarsen Dottesfeld Neuwied Bergheim Colbe

It was to attack as alternative targets small railway centres west of the line of interdiction and south of the Ruhr industrial area. Fighter bombers were to attack stations, open lines, locomotives and rolling stock in the same area.

120

In conjunction with the IXth Air Force 2nd T.A.F. was to attack small railway centres, stations, open lines, locomotives and other rolling stock north of the Ruhr industrial area.

The 1st Tactical Air Force was to attack similar targets south of the IXth Air Force tactical area, these operations were designed to interrupt communications leading to and from the Saar industrial area.

The Tactical Air Forces were also to attack railway targets east of the Ruhr and were to delay the repair of bridges by attacking personnel and material. In this way they would help to paralyse the rail system completely.

The Strategic Air Forces were responsible for attacking the following bridges or viaducts:-

Bielefeld Altenbeken Arbergen Bremen Nienburg

The Bielefeld and Arnsberg viaducts spanning the rivers
Johannes and Ruhr respectively, although west of the interdiction line were placed high in the priority list because it
was believed that their destruction would at once reduce by
half the traffic on the enemy's most important railway lines
leading to the Ruhr from the rest of Germany.

During the week beginning 18 February the IXth Air Force commenced attacks on bridges east of the Ruhr and the Strategic Air Forces increased the rate of their attacks on the great railway viaducts. These operations were to continue until 24 March, the day on which the Rhine was crossed by the Twenty First Army Group, and little more than a week before the Ruhr was finally encircled by Allied ground forces.

Operations by the Strategic Air Forces against oil and communications targets 17 January-7 February.

Weather restricted the operations of British and J.S. heavy bomber operations during the period especially in the last two weeks of January. R.A.F. Bomber Command flew 632 sorties by day and 4870 sorties by night. It was handicapped by a shortage of high explosive bombs to which Air Chief Marshal Harris drew attention at the Air Commander's meeting of 1 January. Incendiaries had therefore to be dropped on targets which would normally have been saturated with high explosive.

After the battle of the Ardennes the Strategic Air
Forces began to increase their effort against oil targets
which had inevitably slackened because of the recent requirements of the land battle for close support. The Ground Staff
at S.H.A.E.F. stressed the importance of maintaining attacks on
oil targets so as to bring the enemy's transport to a halt.
At the end of January there were only four synthetic oil
refineries in the Ruhr and in eastern Germany which still
required attack. (1) The heavily bombed refinery at Politz
in Central Germany remained under close scrutiny as much of

See Map. No. 24

See Chap. 6 p. 183

D.S.C./T.S. 100/9 Pt.5 Encl.39A Para.6

Ibid

<sup>(1)</sup> They were at Bohlen, Ruhland, Magdeburg and Lutzkendorf.

the damage there had been repaired. The Benzol plants in the Ruhr were also listed as targets as the enemy was believed to be using as much as 70 per cent of crude benzol in his motor transport fuel. At the same time Air Chief Marshal Harris pointed out that the new German weapons such as their guided missiles and jet aircraft did not require fuel of a high grade. He suggested that it might be necessary to make a new estimate of essential oil requirements.

Oil targets attacked by R.A.F. Bomber Command during this period were at Wanne Eikel and Duisburg in the Ruhr. The nearby coking plants of Hansa and Prosper also suffered damage. At the same time the VIIIth Air Force bombed marshalling yards, oil plants and armoured fighting vehicle factories in the Ruhr.

Communications targets were chosen with the object of retarding attempts by the enemy to concentrate against the imminent offensive of the Allies west of the Rhine. For this reason the heavy bombers concentrated on targets in the Rhineland, particularly in the last week of January. By that time 25 railway centres had been heavily damaged, ten had suffered medium damage and 24 were reported to be unharmed in western Germany. R.A.F. Bomber Command attacked marshalling yards at Cologne Krefeld and Munchen Gladbach and the VIIIth Air Force bombed rail centres at Neuss, Hohenbudberg and the already devastated marshalling yards at Cologne. Several attacks were made against Rhine On 28 January, Fortresses and Liberators made another attempt to destroy the Hohenzollen road/railway Strike photographs showed bombs burstbridge at Cologne. Other aircraft ing on the western approach to the bridge. bombed the Rheinhausen bridge at Duisburg lower down the river. Although this bridge did not appear to have been put out of action the western approach was observed to have been damaged. East of the Ruhr a small attack was made by 37 U.S. heavy bombers against the Bielefeld viaduct.(1) Other sorties during the first week of February were flown against the Wesel bridges and marshalling yards at Mannheim, Ludwigshaven and Magdeburg.

As usual American heavy bomber sorties operating over Germany were accompanied by swarms of Mustangs and Thunderbolts of the VIIIth Fighter Command. Air battles on a large scale did not occur with the exception of the Berlin raid on 3 February. On that day nearly 900 fighter sorties were flown and 41 of the enemy were claimed to have been destroyed with the loss of nineU.S. fighters. The 352nd and 361st Groups of this Command continued to support the IXth Air Force over the area west of the Rhine and a number of sweeps and patrols were made. No large claims for the destruction of enemy aircraft were made by the fighters taking part in these tactical operations.

In the southern sector of the front R.A.F. Bomber Command made two attacks on the city and railway centre of Stuttgart in response to a request made by the ground forces. Other city targets attacked during this period were at Karlsruhe, Wiesbaden, Mainz and Gelsenkirchen. An increase in Mosquito attacks was noticeable from the close of January onwards and sorties by this type of aircraft were flown

VIIIth Air Force Monthly Summary of Ops. Jan. -Feb. 1945

<sup>(1)</sup> A further attack by the VIIIth Air Force on the 29th and one by Bomber Command on 6 February were both abortive.

against towns centres and oil targets in place of the heavy bombers. On the night of 1/2 February Mosquitoes flew to cities as far apart as Mainz, Seigen, Mannheim and Berlin; the latter place was attacked by two waves of 122 aircraft.

Support by the Strategic Air Forces to the Russian Offensive 3 February to 18 March

Outside the Ruhr the heavy bombers were directed, on certain occasions, against centres on the main communication lines between the eastern, western and southern fronts, the main object being to prevent the enemy from bolstering up the eastern front against the Russian onslaught. The heavy attacks on Berlin, already close to the battle front, should be included in these operations. They began when the VIIIth Air Force attacked Berlin on 3 February and dropped 2,279 tons of bombs in the vicinity of the Templehof Station. Photographic recommaissance after R.A.F. Bomber Command's Mosquito attack on the night of 1/2 February and the American daylight raid showed that while damage to railway facilities had only been moderate, an area about one and a half miles square in the heart of the city had been devastated. Resi dential and industrial property suffered severe damage. Nor did Government buildings escape and amongst those hit were the Chancellory, the Air Ministry, the Foreign Office and the Headquarters of the Gestapo. Further attacks by the VIIIth Air Force against railway stations in Berlin were made on 23 February and 18 March, in both cases over 1,000 aircraft taking part. Once again the extent of damage to property and buildings in the city was greater than that to railway facilities.

In the second week of February no less than five heavy bomber attacks were made on targets near the Russian front by the Air Forces based in England in collaboration with the Russian High Command. They were the important rail centres of Dresden, Chemnitz and Cottbus, the latter place at that time being only 15 miles from the Russian forward positions. The XVth U.S. Air Force operating from Italy also gave direct support to the Red Army when it made a number of attacks on rail centres in Austria, Czechoslovakia and southern Germany all of them feeding the German front in the Balkans.

The cities of Dresden and Chemnitz were raided alternately by night and day heavy bombers. On the night of 13/14 February R.A.F. Bomber Command visited Dresden for the first time in great strength; 805 aircraft took part in the raid. On the following day the VIIIth Air Force dispatched one force to bomb Chemnitz about 40 miles west of Dresden and another to make a second attack on Dresden. On the night of 14/15 February, R.A.F. Bomber Command followed up the VIIIth Air Force attack on Chemnitz with 717 heavy bombers.(1) On the 15th the third attack was made on Dresden by U.S. heavy bombers and other VIIIth Air Force aircraft bombed the town of Cottbus about 70 miles north east of Dresden.

It was not possible to make a photographic reconnaissance over the city of Dresden until 22 March.(2)

- (1) On the nights when Dresden and Chemnitz were bombed diversionary attacks took place on oil targets in the vicinity of the main objectives.
- (2) The damage shown in the photographs included that caused by U.S. attacks on 7 October 1944, 16 January and 21 March 1945 in addition to the three February raids.

See p. 113

VIIIth Air Force Monthly Summary of Ops. Feb. 1945

R.A.F. Bomber Command O.R.B. Feb. 1945

VIIIth Air Force Monthly Summary of Ops. Feb. 1945 R.A.F. Bomber Command Night Raid Report No.837

Ibid Report No.838

D.S.C./T.S.100 Pt.9. Encls.81A-82A and File B.Ops.II/71/378

VIIIth Air Force Monthly Summary of Ops. Mar. 1945. p. 56. The combined British-U.S. attacks were then seen to have caused tremendous damage. It was estimated that 85 per cent of the city had been destroyed. Industries, several bridges over the Elbe and public buildings were severely damaged. The damage to the city of Chemnitz was not on such a vast scale; the bombing was scattered over the town and railway facilities were barely touched. At Cottbus a good deal of damage was inflicted on the town and the marshalling yard. During the attacks of these two nights and days R.A.F. Bomber Command had flown 1,522 sorties and dropped 5,256 short tons of bombs; the VIIIth Air Force had flown 1,266 effective sorties and dropped 3,050 tons of bombs.(1)

During the second week of March a different kind of operation took place at the request of the Red Army. On 12 March the Allied Military Mission in Moscow forwarded a request by Marshal Khudyakov of the Russian General Staff to the Combined Chiefs of Staff for an Allied air attack on O.K.H.(2) which was believed to be housed in a huge underground shelter known as the 'Citadel' at Zossen some 38 kilometers south of Berlin. The Combined Chiefs of Staff instructed that an attempt should be made to destroy it if such an operation was at all practicable. Accordingly on 15 March 570 Fortresses and Liberators bombed the assumed site of the headquarters. Reconnaissance reports later revealed that a number of buildings in the area were gutted or seriously damaged.(3)

## Summary of ground operations 16 January - 8 February

Ground operations in this phase were of necessity on a restricted scale because the Allied Armies were preparing for their great thrusts to close to the Rhine. In the northern sector British and Canadian troops concentrated near Nijmegen for their offensive between the Rhine and the Maas. Mopping up operations west of the Roer were continued by British forces. In the central sector the First U.S. Army resumed its offensive to capture the Roer dams while the Third U.S. Army continued to drive back the German rearguards from the salient in the Ardennes. In the south the First French Army reinforced by the XXIst U.S. Corps and the 12th U.S. Armoured Division began operations

- (1) An indiscreet remark by a member of S.H.A.E.F. (air) at a Press Conference in Paris aroused the U.S. press into announcing a change in Allied bombing policy with the launching of 'terror' attacks. General Arnold (Chief of Staff U.S.A.A.F.) insisted that S.H.A.E.F. should deny this implication and requested that it should be more careful in future. (See S.H.A.E.F. (Air) Hist. Rec. and Diary p.1 March 1945 which contains extracts from A.M. News Analysis on the so called 'terror' raids supposed to have been ordered as a result of the Yalta Conference).
- (2) Ober Kommando Heer The German Army High Command.
- (5) A discussion on the vulnerability of the shelter at Zossen took place at Hitler's conference on 23 March, General Burgdorf, Adjutant to the Armed Forces, reported that Zossen was still 'perfectly usable' but if the barracks were destroyed in a future attack it would be impossible to remain there. (See 'Hitler Directs His War', Records of Daily Military Conferences, p.144.)

124

to eliminate the Colmar Pocket. The Nineteenth German Army could not withstand the additional weight of men and material in this sector and withdrew. Colmar was captured by 3 February and by the 9th all resistance west of the Rhine in that area had ceased. Around Saarbrucken the Seventh U.S. Army became involved in bitter fighting and only limited advances were made.

Tactical Air operations 27 January to 7 February

Air Support for Operation Blackcock

In the meantime the Tactical Air Forces took full advantage of the few fine days during the second half of January to strike against the enemy's withdrawal from the Ardennes salient. For the most part this was the responsibility of the IXth Air Force. The 2nd T.A.F. gave indirect assistance by continuing its attacks on communications north of the Ruhr. But in the third week of January it was primarily responsible for supporting the Second British Army's operations in the Roermond 'triangle'. This was an area bounded by the Rivers Roer, Wurm and Meuse and it will be recalled that plans were made early in December for XXX Corps to clear the area. weather and the subsequent German attack from the Eifel caused this attack (Operation Blackcock) to be postponed temporarily. On 15 January XIIth Corps began the operation which had for its main objective the capture of Heinsberg. The battle that ensued was an affair for the infantry as the ground was too slushy for mobile operations. The XIIth Corps completed its task by 26 January and the area was then taken over by the Ninth U.S. Army.

Medium, light and fighter bombers supported the ground operation but apart from an attack by the IXth Bombardment Division on Erkelenz, east of the River Roer on 16 January weather did not allow extensive air activity until the 20th. On that day Typhoon fighter bombers attacked gun positions and strong points on the south western edge of the Birgelerwald at Ophoven, Herkenbosch, Vlodrop and Wassenberg. Good results were obtained by Typhoons of No. 245 Squadron which attacked and hit five gun pits near Wassenberg. number of the enemy were seen running for cover and were sprayed with cannon fire. This was the first close support given to Second Army by No. 83 Group for some time. The Group's Typhoons continued their effort for the next two days. The villages of Montfort and Voorst north west of Erkelens were set on fire on the 21st and on the 22nd, a clear day with snow on the ground. No.84 Group's aid was enlisted. No. 146 Wing (No. 84 Group) destroyed a factory building at Heinsberg No. 146 using 1,000 pound and 500 pound bombs and a large oil fire was seen burning. Other Typhoons made further strikes against Montfort and dive bombed the villages of Utterath and Schleiden, a few miles south of Heinsberg, causing large fires and explosions. In addition to these destructive activities a squadron of Spitfires was employed in dropping leaflets over the district of Heinsberg - Geldern. (1)

Continuous dive bombing attacks by No. 83 Group were made on 23 and 24 January on the villages of Kompden, Utterath, Dremmen, Schleiden, Porselen, Oberbruch and Horst. Pilots claimed that the roads leading to these areas were well covered by craters. A headquarters and strongpoint in a chateau near Birgelen were strafed by rocket-firing Typhoons A number of these targets were indicated to the fighter bomber pilots by the ground forces which fired red smoke shells

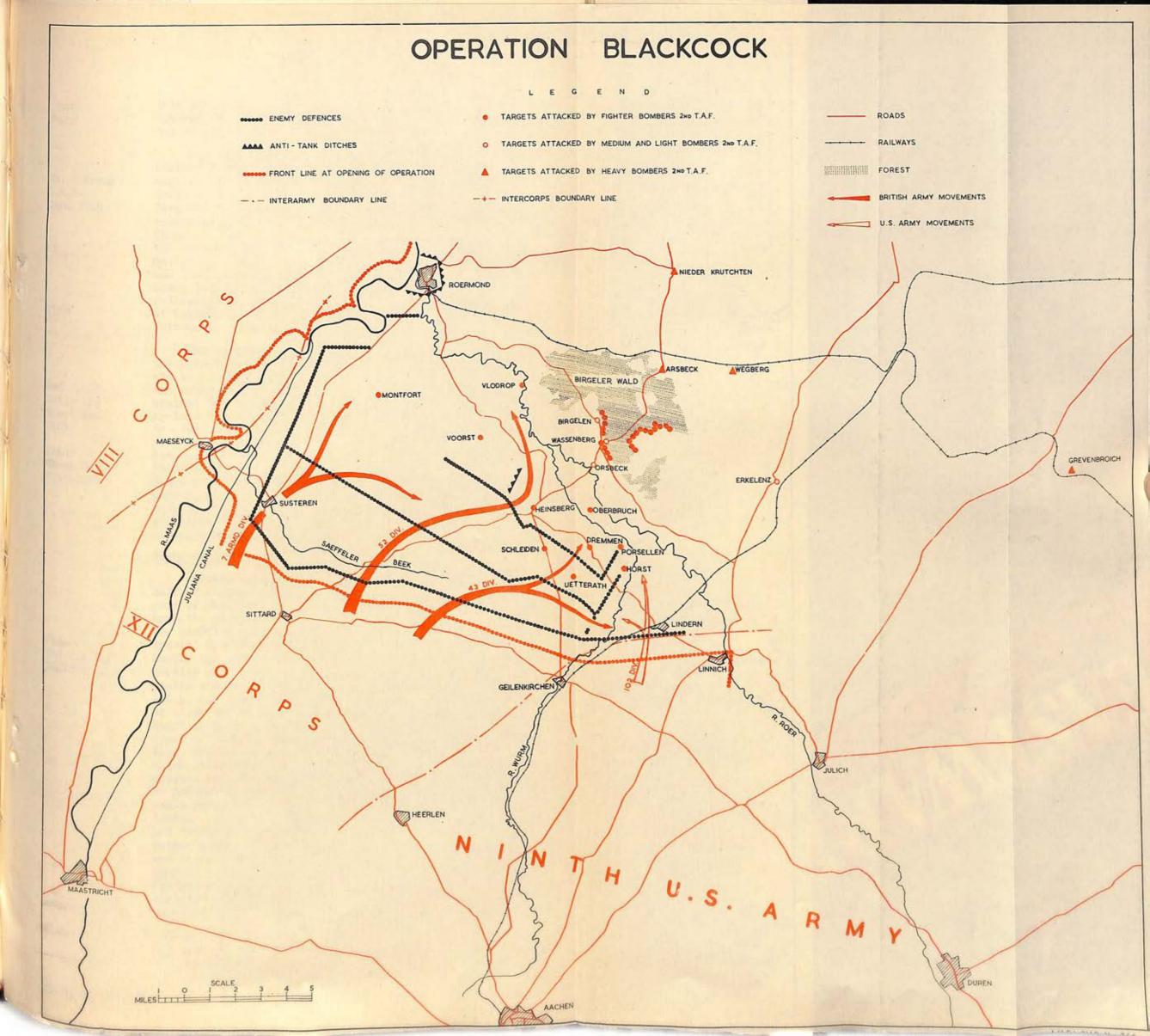
See Chap. 2. p. 42.

S.H.A.E.F. Daily Int./Ops. Summary No.92.

2nd T.A.F. Daily Log Sheet No. 2407

Ibid Sheets No. 2422 4 - 2437 -40.

Ibid Sheet No. 2450



into the desired area. On 24 January. snow and sleet covered the battle area and little more could be done in the way of close support until the beginning of February.

A powerful effort was made by British light and medium

No. 2 Group O.R.B. Jan. 1945

bombers to support Operation Blackcock both by day and by On 21 January 60 Mitchells and Bostons of No. 2 Group bombed artillery positions in the woodlands north of Although the targets were difficult to Birgelen village. recognize pilots believed that their attack had been accurate. Birgelen itself was hit. On the 22nd No. 2 Group attacked the road junction of Wassenberg three miles north of Heinsberg. Eight aircraft bombed the towns of Rheindahlen and Hockeleren, an error of about six miles due to their being late in identifying the primary target. On the following day the mediums concentrated on the road centres of Wegberg and Nieder Kruchten, six to seven miles north of Bursts were observed on both targets.

Ibid

The Mosquito squadrons of No. 2 Group were active over the Rhineland from the night of the 17/18 to 22/23 January and in particular around the Heinsberg-Erkelenz area. the night of the 19th/20th 117 sorties were flown not only against the customary rail movement of the enemy but also against the villages of Birgelen, Wassenberg, Orsbec and Erkelenz used as billeting areas for German troops. weather was experienced on the night of 21/22 January when attacks were made on towns farther to the east such as Krefeld, Neuss, Grevenbroich and Munchen Gladbach. Mosquitoes flying from the U.K. as well as the continent took part in the operations. In the early part of the evening not only was there 10/10ths cloud but air crews had to contend with snow storms and icing. By using alternative routes all aircraft succeeded in accomplishing their tasks.

2nd T.A.F. Daily Log Sheet No. 2403

Night bombing by No. 38 Group

Heinsberg.

Ibid Sheet No. 2415-2416

> A feature of the tactical night operations in the second half of January and the beginning of February was the employment of Halifaxes and Stirlings from No. 38 Group to supplement the nightly effort of No. 2 Group. Primarily intended for airborne operations No. 38 Group had been employed on Special Operations Executive or Special Air Service duties during the summer time and had flown an average of 60 to 80 sorties per night. A slack period arose during the winter months and on 10 December the Air Officer Commanding No. 38 Group, Air Vice Marshal Scarlett-Streatfeild asked S.H.A.E.F. to allow him to give battle experience to his Halifax and He indicated that the Stirling crews over the Rhineland. types of targets against which his force might be employed were limited as his aircraft carried no oxygen equipment which restricted them to medium height and permitted them to They also lacked any kind operate only for limited periods. of defensive armament. On the other hand the Stirlings could carry twenty four and the Halifaxes fifteen 500 pound After the headquarters of No. 38 Group and 2nd T.A.F. had consulted each other, S.H.A.E.F. (Air) agreed to the former's employment by 2nd T.A.F. on the western front. was decided that, because of their vulnerability, they should operate at night either on nuisance raids or in attacks against communications targets. Operating under the daily directive issued by Main Headquarters 2nd T.A.F., No. 38 Group was to receive its instructions directly from No. 2 Group. (1).

2nd T.A.F./ 30478/Ops.

<sup>(1)</sup> Attacks were made on Gee fix and aircrews were instructed to use the Mark IX bombsight in which they had already become proficient.

2nd T.A.F. Daily Log Sheet No. 2411

cloud.

See Chap. 5 p. 147 district of Goch.

Sheet No. 2415

Ibid Sheet No. 2465

Ibid Sheet No. 2513

Armed reconnaissance and night harassing operations by 2nd T.A.F. 17 January to 8 February

The first operation of No. 38 Group in conjunction with No. 2 Group took place on the night of 20/21 January when ten

On the next night Stirlings bombed the billeting

Halifaxes bombed the communications centre of Wegberg north

areas in the towns of Arsbec and Nieder Kruchten, also north of the Birgelerwald. Once again no results were observed.

The Group's operations became more ambitious towards the end of the month; on 28/29 January twenty Halifaxes attacked

towns of Modrath and Liblar, towns lying between Duren and Cologne. Bombs were seen to burst across the railway at the latter town. Beginning on the night of 1/2 February No. 38

Group aircraft attacked communication points which might be

on Grevenbroich, an important railway network lying between

Cologne and Rheydt. On 7/8 February, the eve of Operation Veritable, 95 Halifaxes and Stirlings attacked the billeting areas of Calcar, Udem and Weeze west of the Rhine in the

used by the enemy to bring up reinforcements against the imminent operations Veritable-Grenade. Four raids were made

east of Heinsberg. No results were seen because of low

With reference to armed reconnaissance, the tasks of 2nd T.A.F. and the IXth Air Force remained the same, although the IXth Tactical Air Command had reverted to the command of the IXth Air Force. On 25 January the areas for 2nd T.A.F. were changed. No. 83 Group was to operate within an area extending roughly from Boxmeer to Hanover and Paderborn and included the towns of Lingen, Unna, Hamm, Dinslaken, Paderborn, Neuss, Rheydt and Linnich. No. 84 Group No. 84 Group was to cover the northern area up to Bremen and Borkum and the Netherlands north of the River Maas. The XXIXth Tactical Air Command operated within an area bounded by Monschau, Gemund and Euskirchen on the south, along the Rhine down to Neuss on the east and Rheydt and Linnich on the west. will be remembered that the VIIth Air Force had been instructed to make armed reconnaissance to the east of these At the end of January certain routes were singled out for concentrated attack. These for No. 83 Group were as follows:

2nd T.A.F. 0.R.B. Apps. No. 76 and 78

Ibid App. No. 80

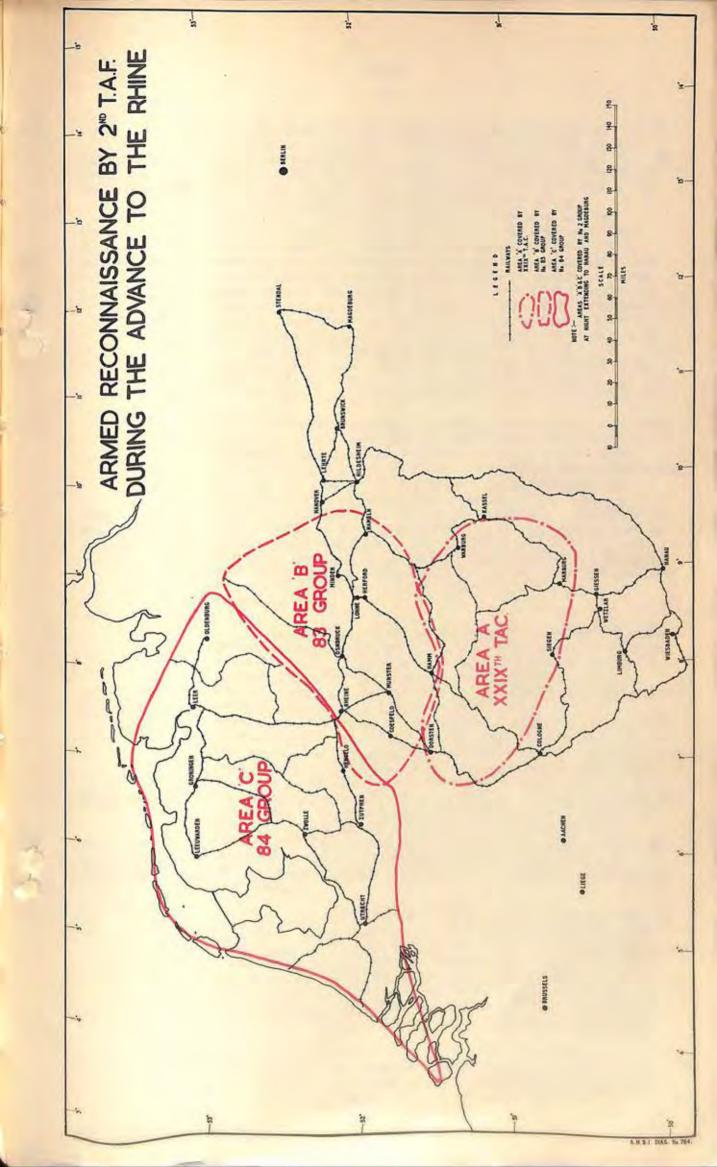
- (a) Wesel Munster Osnabruck Bremen
- (b) Hamm Lohne
- (c) Osnabruck Lohne Wunstorf
- (d) Soest - Altenbeken
- (e) Lohne Hameln

For No. 84 Group the following were defined:-

- (a) Delmenhorst Leer Groningen Assen Meppel -Zwolle
- (b) Leer Lingen
- (c) Meppen Oldenburg

And for the XXIXth Tactical Air Command:-

- (a) Neuss Cologne
- (b) Neuss Grevenbroich Deren
- (c) Duren Cologne
- (d) Grevenbroich Cologne.



2nd T.A.F. Daily Log Sheet No. 2404

Ibid Sheet No. 2417 - 2421

The threat in the Ardennes having ended, the 2nd T.A.F. was able to cover new territory north of the Ruhr in its armed reconnaissances. On 20 January, for example, No. 168 Typhoon Squadron (No. 143 Wing) operated between Hameln and Holzminden and attacked seven trains; six locomotives and 22 goods wagons were claimed to have been damaged. good flying weather experienced on 22 January all over western Germany enabled 2nd T.A.F. to fly over 450 armed reconnaissances. It so happened that considerable rail reconnaissances. movement was observed and a large score of locomotives and goods wagons were claimed as destroyed or damaged. Among other targets Tempests of No. 122 Wing spotted a number of twin engined aircraft at Bielefeld. The enemy attempted to provide cover over the Lower Rhine area by flying patrols of Me.109s and F.W.190s. An interception of one such patrol was made over Rheine by Spitfires of No. 421 Squadron. Five enemy aircraft were claimed to have been destroyed for the loss of one Spitfire. By the end of the day 2nd T.A.F. had flown a total of 1,218 sorties on all types of operations.

Ibid Sheets No. 2447-8

Thid Sheets No. 2431 - 2436

Ibid Sheet No. 2467

Ibid Sheets No. 2479 - 80

Armed reconnaissances in some strength against railways and rail traffic continued in this manner until the start of Operation Veritable and a detailed account would merely become a series of repetitions. One or two operations must, however, be singled out for note. On the morning of 24 January 15 locomotives were damaged on the Hamm-Bielefeld line by Nos. 484 and 80 Squadrons. A further two were claimed to have been damaged by No. 486 Squadron on the Munster-Osnabruck line. Sorties by No. 80 Squadron that afternoon resulted in seven more locomotives being damaged Other squadrons made successful attacks east of Osnabruck. on rail transport north of Gottingen and around the Steinhuder Meer.

A special effort was made during armed reconnaissances to harass the network of G.A.F. airfields north of the Ruhr. A characteristic operation took place on 23 January when a strong effort was made against airfields at Bielefeld, Rheine, Osnabruck and Twente. (1) The G.A.F. sent protective patrols into the air and there were clashes between Me.190's and Tempests and Spitfires. A handful of A handful of Me. 262's became engaged in a dog-fight but one of them flying low to the ground was shot down by a Tempest pilot of No. 56 Squadron A successful attack was made by No. 274 near Coesfeld. Squadron on 29 January when it strafed about 20 Me. 109's in Claims were made for the dispersal area at Hesepe airfield. On 2 February one aircraft destroyed, and six damaged. Tempests of No. 122 Wing accounted for an Me. 109 and a Dornier 217 (the latter destroyed at zero feet) and for two Me. 109's claimed to have been damaged. Spitfires of No. 132 Wing attacked a Ju. 88 on the ground at Soesterberg airfield.

At night Mosquitoes were active during the last week of Their task was to cover approximately the area over which the fighter bombers had flown by daylight while in addition calls were made on them to attack road and rail transport assisting the enemy forces, in particular Sixth S.S. Panzer Army, to withdraw to the Rhine south of Cologne. Mosquitoes thus attacked road and rail traffic between the Roer and the Rhine from Euskirchen to Erkelenz and Rheydt.

Tracks in the snow at Twente airfield revealed that (1) aircraft were being dispersed in farm yards one and a half miles away.

128

2nd T.A.F. O.R.B. Apps. 72 et seq. East of the Rhine they ranged from Bocholt to Osnabruck, Hanover and Minden including such towns on the northern fringe of the industrial Ruhr such as Hamm, Unna and Bielefeld Southwards they flew over Seigen, Altena and Koblenz.

No. 2 Group O.R.B. Jan. - Feb. 1945. On the night of 25/26 January No. 2 Group discovered a concentration of motor transport retiring from the Prum area and about 150 vehicles were claimed to have been damaged. Seven trains were attacked by Mosquitoes that evening including an ammunition train which caught fire when attacked. Sorties flown on the nights of 27th, 28th and 29th yielded good results particularly north of the Ruhr. On the night of 28/29 January, for example, about 1,100 goods wagons standing in marshalling yards were attacked in addition to twelve trains. As the target date for Operation Veritable grew near Mosquitoes concentrated on striking at traffic leading into the area west of the Rhine.

## Reconnaissance by 2nd T.A.F. during January

Nos. 35 and 39 Wings. O.R.B. January 1945 The severe weather experienced during this month made it very difficult for the day and night reconnaissance squadrons to perform their respective tasks. But Nos. 35 and 39 Wings attached to the Composite Groups operated whenever possible making tactical, photographic and artillery reconnaissances. No. 34 Wing's activities (strategical reconnaissance) were also extremely restricted by fog, snow and ice. A number of Spitfire, Wellington and Mosquito sorties were nevertheless completed successfully over the Rhineland and north-west Germany. The extent to which weather influenced air operations may be illustrated by the fact that the Mosquitoes of No. 140 Squadron attached to No. 34 Wing flew no more than nineteen sorties in daylight and thirty five by night throughout the month. The Wellingtons of No. 69 Squadron flew forty eight visual and photographic reconnaissance sorties by night. (1)

No. 34 Wing O.R.B. January 1945

> Some notable sorties were flown by the latter squadron despite the weather. Its main task was to make visual and photographic reconnaissances over roads, railways and marshalling yards opposite to the Second British Army front. Bright moonlight assisted the squadron on the night of 22/23 January, when nine sorties were flown. One Wellington, piloted by the Squadron Commander, made a reconnaissance of roads east of Venlo and took a valuable photograph of motor transport moving along a road near the village of Herongen. The enemy retaliated by opening fire on the British aircraft but it returned safely to base. Another feature of this sortie was that six 250 pound bombs were dropped on a road in the same district; it was the first occasion on which a Wellington, operating in a reconnaissance role, had carried During the period 27/28 to 29/30 January mineteen sorties were flown, a number of them at little more than treetop height. On the last night in the period one aircraft completed three sorties, refuelling and reloading in the most unfavourable conditions. Road and rail activity on the Roer valley front were closely scrutinised. The moonlight and the snow assisted aircrews in the recognition of roads and rivers, while the explosion of flares against the snow exposed a wider area and enabled aircrews to take a number of valuable photographs showing the direction of enemy transport movements.

No. 69 Sqdn.
O.R.B.
Jamuary 1945
and 2nd T.A.F.
O.R.B.
App. No. 74
January 1945

<sup>(1)</sup> In passing it should be noted that this squadron lost eleven aircraft in the German attack on airfields on 1 January.

129

Countermeasures by 2nd T.A.F. against the rockets and flying bombs

See Chap. 2, p. 40

Account of the Continental Crossbow Operation 1944-45 by Air Defence Division S.H.A.E.F. p.14

During the winter months of 1944/45 the enemy was still using rockets and flying bombs in a fruitless attempt to disrupt Allied supply installations on the continent. (1) This threat had not in any way abated. In the latter half of December an average of about 100 rockets a week were fired mostly against Antwerp which since 13 October, had become the principal target on the continent for this kind of attack. A large number of rockets also continued to be fired against the United Kingdom and during January 226 incidents were reported compared with 137 in December. Launching sites were situated mainly in northern Holland but there were also a few located in the Eifel. From January until March the rocket effort against Antwerp steadily declined (apart from a brief interlude in February when 91 rounds were recorded in one week). On 27 March the last rocket was fired against London and on the following day the final rocket was directed against the port of Antwerp.

Ibid pp. 19-21

An increased effort in the flying bomb offensive, like the rockets, had been timed to coincide with the German offensive in the Ardennes and Antwerp and Liege were naturally the principal targets. After the failure of this On 7 February attack the flying bomb effort slackened. the enemy's launching sites in the Wittlich-Munstereifel district west of the Rhine ceased fire and Liege, their main target, was not attacked again. But firing continued against Antwerp from eastern Holland and the Rotterdam area where three new launching sites had been observed. attacks did not, however, interrupt the steady flow of supplies through the port. During the period 27 January to 26 February the average rate of effort against Antwerp was 70 bombs a day which, in the last week of the period, rose to more than 80 bombs a day. During March the effort gradually declined from 70 to 20 rounds a week and the last flying bomb was launched at Antwerp in the early hours of 30 March. Only a few flying bombs were fired from east of the Rhine against the central sector and they ceased altogether on 20 March.

The main responsibility for countermeasures against the Crossbow targets continued to lie with R.A.F. Fighter Command while a marginal effort was provided by 2nd T.A.F., the operational area of which, included launching and storage sites and the supply lines leading to them. The policy that the Tactical Air Forces should be distracted as little as possible from their support of the Allied ground forces continued to be observed. Thus in spite of the increased flying bomb attacks against Antwerp during the winter the Deputy Supreme Commander ruled, on 30 January, that the commitments of the Tactical Air Forces did not permit any extra effort to be directed against Crossbow targets.(2)

D.S.C./T.S. 100/9 Pt.4 Encl.36A para.2.

<sup>(1)</sup> For details of flying bomb and rocket attacks on the United Kingdom and countermeasures by R.A.F. Fighter Command the reader should consult R.A.F. Narrative, Air Defence of Great Britain Volume VII, Chapter 7.

<sup>(2)</sup> The employment of heavy bombers against V weapon production centres was considered to be impracticable as it was more important that they should concentrate on their primary objectives - oil and transportation targets.

Air Division S.H.A.E.F. Report pp.54-56 There were four kinds of air action used by 2nd T.A.F. in countermeasures against the rockets and flying bombs:-

- (a) Pre-arranged attacks on specific targets.
- (b) Armed reconnaissance sorties over areas where static targets might be found or where fleeting targets might present themselves.
- (c) Rail interdiction sorties design to check the movement of supplies to firing areas or forward storage sites.
- (d) Night intruder missions in areas associated with rocket/flying bomb equipment and supply.

At the end of December the War Cabinet were anxious that countermeasures against the rocket attacks then being made on London should be increased. Various targets were examined for attack by both Tactical and Strategic Air Forces but it was not considered that a very large diversion of air effort against the rockets would be justified. However, on 23 February consultations between representatives of R.A.F. Fighter Command and 2nd T.A.F. took place at the Headquarters of 2nd T.A.F. with the object of finding how counter-measures against the rockets might be intensified. A general exchange of information and intelligence took place and a mumber of decisions were reached. They agreed that the best way by which rocket fire could be reduced was by cutting the supply lines leading to the launching sites. The launching sites and field storage areas usually lay well camouflaged in wooded areas and were very difficult to spot from the air. It was not worth while attempting to bomb launching sites, unless they were actually in operation, because of the temporary nature of their construction. Pre-arranged attacks were, in future, only to be made on suitable targets such as railway stations and sidings, where rockets were known to be unloaded, and bridges on the supply lines.

The value of armed reconnaissance sorties was discussed and they agreed that it was impossible to predict with any degree of certainty at what time after a recorded launching another could take place. In the meantime 2nd T.A.F. was to maintain small standing patrols over the most active sites at Enschede and Zwolle, on the borders of Holland and Germany, which would attack any targets seen by the pilots and would deter the rocket crews from firing by their presence over the area. Tactical reconnaissance aircraft were to notify their Group Headquarters when they saw a rocket fired.

Another decision taken, shortly to end in an unfortunate incident, was that medium bombers were to be employed against certain storage and technical adjustment areas provided that they could be spared from the support of ground operations. The use of Mosquitoes was ruled out as the danger from flak was too great. Targets lists, arranged in order of priority, were to be supplied by R.A.F. Fighter Command together with the necessary intelligence on the targets. Headquarters, 2nd T.A.F. were to select the most suitable targets on the list and were to decide upon the time and method of attack.

Prior to this conference two pre-arranged operations of note had been carried out by 2nd T.A.F., Instructions for the first were issued on 7 January. It was known that there were rocket firing sites in the woods around Hellendoornsche about nine miles to the east of Deventer. Reconnaissance had

R.A.F. Narrative Air Defence of Great Britain Vol. VII pp.268-272

2nd T.A.F. O.R.B. App. No.36A Feb. 1945.

2nd T.A.F. O.R.B. App. 57. Jan. 1945. shown that the projectiles and other equipment were carried by railway to the vicinity and then distributed from stores in the woods to the firing points. Fuel for the rockets was brought by rail to the nearby station of Nijverdal. Air Marshal Coningham decided that a joint attack by Nos.83 and 84 Groups should be made against the rail facilities and certain road bridges behind the firing sites. It was hoped that the operation would show to what extent air action against communications in rear of the firing points would affect the rate of fire. The importance of the operation was such that it ranked second in priority to the commitments of 2nd T.A.F. in the Ardennes.

2nd T.A.F. Daily Log Sheet No. 2385

Sheets No. 2489 and 2507

Ibid

Ibid Sheet No.2422

No. 84 Group O.R.B. App. No.11 Feb. 1945.

2nd T.A.F. Daily Log Sheets No.2485-2492 and 2501-2508

The attack was not made until 14 January, seven days No. 84 Group dispatched 35 Spitfires to bomb later. Nijverdal station and the road bridge at Hankate several miles to the north. The station was hit but the bridge escaped damage. At the same time 31 Typhoons of No. 83 Group made a strike against the field store and railway station south of Ommen about six miles to the north of They fired 102 rocket projectiles at a quantity Nijverdal. of rolling stock in the station yards. Their second target was a bridge across a canal at Nieuweburg of which a section was reported to have been blown up. More fighter bomber attacks in this area and at points near Zwolle and Deventer were made on 3 and 6 February. Nijverdal station was again hit but a strike against the firing sites was unobserved.

A different type of target was the oxygen plant of Alblasserdam several miles north of Dordrecht which was attacked by 48 Spitfires of No. 132 Wing (No. 84 Group) on the afternoon of 22 January. (1) The aircraft carried 500 pound and 250 pound bombs. The first two squadrons to go into the attack dropped eight bombs on the works. Nos. 322 and 66 Squadrons, following in their wake, succeeded in directing all their bombs onto the target area. The Dutch reported later that the factory had been completely destroyed and that no civilian dwellings had been affected. Subsequent reports stated that the factory only produced oxygen gas for repairs. It transpired that most of the liquid oxygen for the rockets was transported from Germany.

Armed reconnaissance areas during January and early February were defined by Main Headquarters, 2nd T.A.F. as follows:- No. 83 Group operated east of the Dutch border over Enschede - Ahaus - Coesfeld - Stadtlohn. No. 84 Group operated to the west over the area Zwolle - Almelo - Deventer. Operations were to progress from west to east. By the end of January armed reconnaissances and the interdiction of supply lines had considerably increased. On 3 February 15 out of 35 and on 6 February 17 out of 37 rail cuts made by 2nd T.A.F. were on known rocket supply routes.

A series of attacks on rail/road bridges and railway lines leading into the Hague district (where there were known to be firing sites) was made by No. 146 Wing (Typhoons) of No. 84 Group from the middle of January up to the beginning of February, when No. 84 Group became absorbed in preparations for the First Canadian Army offensive in the Rhineland. These attacks served a dual purpose for they not only helped to interrupt the flow of supplies and

<sup>(1)</sup> A previous attempt on 20 January had been abortive because of bad weather.

See Chap. 5. p. 144

2nd T.A.F. O.R.B. Opp. No.64 Jan. 1945

No. 84 Group O.R.B. App. No. 11. Feb. 1945.

2nd T.A.F. Daily Log Sheets Nos. 2438 and 2449

No. 84 Group O.R.B. App. No. 11. Feb. 1945.

2nd T.A.F. Daily Log Sheets No. 2489 and 2507

No.84 Group D.R.B. App. No. 11. Feb. 1945.

See Chap. 7.

equipment to rocket firing sites but they distracted the enemy's attention from the Reichwald area south of Nijmegen where ground operations were shortly to take place. It was hoped that the German commanders in the west would believe that they were preparatory attacks for an Allied advance into western Holland from south of the Maas.

No. 146 Wing were ordered to bomb bridges on the lines from Leiden to the Hague, Utrecht and Haarlem and from Dordrecht to Rotterdam. The first sorties against these targets were flown on 14 January but it was not until the 22nd that satisfactory results were obtained. A total of Two bridges were seven bridges was attacked on that day. hit, one of them, a railway bridge north of Leiden, was seen to be sagging. Reports received from the Dutch Underground Movement a week later indicated that rail traffic between Leiden and Haarlem had stopped completely. producing prefabricated barracks which was situated near one of the bridges also received several direct hits. A bridge The fighter near Utrecht escaped damage with a near miss. bombers also cut railway lines in several places.

During the following two days eight bridges were attacked by the Typhoons and four of them were claimed as damaged. At other points there were near misses and the railway track was dislocated. During one of these attacks the Dutch reported that a number of private houses were damaged. On 29 January rail interdiction proved to be successful according to Dutch reports. The railway track near Sliedrecht east of Arnhem received four direct hits. In the Utrecht area the line near Woerden was demolished for a distance of 1,200 metres but unfortunately a number of Dutch houses also suffered damage. The Germans were stated to be repairing the line in great haste. On 3 and 6 February No. 146 Wing flew sorties against another twelve bridges mainly between Leiden, Gouda and Haarlem and some damage was The Underground Movement reported that one of the targets, a railway bridge, south east of Amsterdam, had escaped harm and requested an early attack as there was intensive traffic along that line.

Counter measures against rocket firing activity in the form of armed reconnaissances and rail interdiction in eastern and western Holland continued, insofar as support to ground operations permitted, until the Rhine was crossed by Twenty-First Army Group, after which an advance was made into eastern Holland by First Canadian Army.

The medium and light bombers of No. 2 Group also attacked the rocket supply lines. Mitchells and Bostons made further attacks on 3 and 6 February against bridges over the River Lipsel at Zwolle and Deventer. (1) Both bridges remained intact and the main reason for the failure of their destruction would appear to be the heavy concentration of flak at these vital points. (2) At night the Mosquito squadrons harassed traffic on railways and in stations in eastern

<sup>(1)</sup> The same bridges had been attacked by No.2 Group during the previous autumn. See Chap. 2, p. 31 of this volume.

<sup>(2) 2</sup>nd T.A.F. had asked the IXth Air Force to help with attacks on the Ijssel bridges but the American commitments in the central and southern sectors were too extensive. See file 2nd T.A.F./30450/Ops. Encls. 51-52A.

## 133

Holland throughout January, February and early March, notably The enemy usually moved at Holten and Marienburg stations. The enemy usually move his rockets and supplies to the firing sites and unloaded stores at night and it was believed that a good deal of delay was imposed upon him by the intruder operations.

At the beginning of March the primary Crossbow target was the Haagsche Bosch, a wooded area on the outskirts of the Hague where rockets had been seen lying on the ground. Numerous attacks on the site had already been made by R.A.F. Headquarters, 2nd T.A.F. decided that Fighter Command. No. 2 Group should attack this target as it was first priority on 3 March in accordance with the arrangements recently made with R.A.F. Fighter Command. Accordingly two Wings, Nos. 137 and 139 (56 aircraft) bombed the storage site at 0100 hours on the 3rd.

A.M. File C.33814/47/1 Encls.133-176 and Pt.II Encl. 1A.

A few days later the Dutch Embassy protested to the Air Ministry and the Foreign Office that a number of bombs had fallen in a built-up area during this attack and a large The Prime Minister, number of Dutch people had been killed. Mr. Churchill, demanded a thorough investigation of the affair and it transpired that the error was caused firstly from a mistake in reading map co-ordinates by the officer briefing one of the Wings and secondly to a misunderstanding over target information on the night before the attack took place. The Air Officer Commanding 2nd T.A.F. at once ordered that medium bombers were in future not to make attacks on targets in the Hague and an assurance was given to the Dutch Government that they would be consulted whenever attacks were planned against Crossbow targets situated in No further attacks against the built-up areas in Holland Haagsche Bosch were not made either by R.A.F. Fighter Command or by 2nd T.A.F.

Ibid

This is not the place to assess the effectiveness of countermeasures against Crossbow but it must be stated that rail interdiction, night intruder sorties and the occasional attacks on specific targets by 2nd T.A.F. must have increased the difficulties of the enemy in maintaining a steady rate of fire. It is doubtful whether armed reconnaissance were of such value as aircraft were over the firing areas for too short a time nor did they ever report anything which could definitely be associated with the firing of rockets or flying bombs. (1)

Report by Air Defence Division S.H.A.E.F. p.56

Attacks on special targets by 2nd T.A.F.

See also Chap. 2, P. 44

2463

2nd T.A.F. Daily Log Sheets No. 2422 and

Several raids against special targets took place during this period. Two attacks were made against the Gestapo Headquarters situated in a large villa at Dordrecht on 22 The first attack made by No. 164 Squadron and 28 January.(2) met with failure although the pilots had claimed a number of The second made by four Spitfires of No. 66 direct hits. Squadron practically destroyed the building.

- An analysis made by Air Defence Division S.H.A.E.F. of (1) the Allied air effort and the number of rockets fired between 22 January and 26 March showed that whenever there was an increase in the air effort against rocket installations the rocket effort decreased. (See Air Defence Division S.H.A.E.F. Report p. 57).
- This target was cleared for attack on 15 December, 1944. by the Dutch Government. (See A.M. File 33814/47/I Encls. 92A-96A.

DS 96326/1(141)

SECRET

134

No. 84 Group O.R.B. App. No. 11. Feb. 1945.

2nd T.A.F. Daily Log Sheet No. 2422

2nd T.A.F. O.R.S. Report No. 34 p. 10.

2nd T.A.F. Daily Log Sheet No. 2463

2nd T.A.F. O.R.S. Report No. 34 p.13.

2nd T.A.F. Daily Log Sheet No. 2422 and No. 84 Group O.R.B. Jan. 1945.

2nd T.A.F. Daily Log Sheets No. 2463 and 2490

No. 84 Group O.R.B. App. No. 11. Feb. 1945.

2nd T.A.F. O.R.B. App. No. 66 Jan. 1945.

2nd T.A.F. Daily Log Sheet No. 2397 Germans were reported by the Dutch to have been killed.
On 22 January Typhoons of No. 609 Squadron flew to the
Gorinchem district and attacked a ship laid up in a creek
near the River Waal which was believed to be sheltering enemy
troops. Investigations by 2nd T.A.F. Operational Research
Section showed that this information was entirely false.
The vessel had sustained two direct hits but was still seaworthy. Another misdirected attack took place on 28 January.
The target was the Kaastel de Rutterberg near Doorn which
was supposed to contain a Saboteur Training School.(1) Two
squadrons (20 Spitfires) of No. 132 Wing made the attack and
severely damaged the building. In the course of the operation one aircraft was lost. Subsequent information proved
that the building was never used as a training school but a
headquarters had closed down there six weeks before the
attack took place.

Close Support to First Canadian Army 17 January - 7 February

Close support was on a small scale as there was little ground activity on this part of the front during the period under review. The most frequent kind of operation was attacks on military headquarters. On 22 January, for example, a battalion headquarters at Randwijk near Arnhem and a regimental headquarters east of Nijmegen on the right bank of the Rhine were attacked by Spitfires of No. 123 Wing. Direct hits were claimed on both buildings and this was confirmed by the 49th British Division on whose front the headquarters was situated.

A final attempt to clear out the enemy from the Kapellsche Veere, the island between the Waal and the Maas, where the enemy had established a bridge-head for some time, began in the last week of January. Two squadrons of Spitfires from No. 84 Group afforded close support on 28 January and 3 February and bombed positions in the Dussen-Perenboom area. The enemy had dug himself into the reverse sides of dykes and it was difficult to ascertain from the air what damage had been done.

Attacks on Naval Targets by 2nd T.A.F.

Another responsibility of 2nd T.A.F. was to conduct offensive operations against the midget submarine bases on the coast of north-west Holland. On 29 December 16 Lancasters of Bomber Command had made (according to Dutch reports) an extremely effective attack on the submarine base at Poortershaven near Rotterdam. It was stated that seven out of the 11 U-boat pens were destroyed and that all the U-boats inside were damaged. Heavy casualties were inflicted on German personnel in the vicinity. By 16 January, however, the daily directive of 2nd T.A.F. contained the information that the base was still in active use. indicated that midget submarines were being stored near Maassluis on the estuary of the Lek near Rotterdam. attack was made on the submarine sheds by Spitfires of No. 132 Wing on 17 January and bombs were reported to have covered the target area.

<sup>(1)</sup> Headquarters, Twenty First Army Group had asked for this target to be attacked as early as 28 November. It was believed to be engaged in training saboteurs to interfere with the use of Antwerp port. (See File 2nd T.A.F./30450/1/Ops. Encl. 16A).

135

Ibid Sheet No. 2449

A.M. War Room Summary of Bomber Cmd. Ops. Feb. 1945.

File 2nd T.A.F. 30317/17/0ps.

In the meantime No. 84 Group kept watch on midget submarine activity with reconnaissances over the bases of
Poortershaven, Nieuwesluis and Helleuetsluis whenever there
was favourable weather. A second attack on the Maassluis
submarine pens, based on information from reconnaissances,
was made on 24 January. No. 132 Wing again claimed that
it had caused severe damage. On 3 February Bomber Command
attacked the base at Poortershaven and U and E-boat pens at
Ijmuiden further up the coast.

Operations of XXIXth Tactical Air Command in 2nd T.A.F.

The XXIXth Tactical Air Command continued to operate under the general direction of 2nd T.A.F. after the battle of the Ardennes. At this time its Commander, General R. E. Nugent, had his main headquarters at Maastricht. Four Thunderbolt Groups, together with two Reconnaissance Groups, were disposed on airfields at Le Culot and St. Trond. The two squadrons from No. 85 Group, which had moved into the American sector during the battle of the Ardennes, remained at Ophoven until the end of the month. No. 132 Wing, which had been temporarily attached to No. 85 Group during this emergency, moved from Chievres to Gilze Riejen in the middle of January, but it continued to operate under the orders of No. 85 Group.

General Vandenberg decided that as the Ninth U.S. Army was not actively engaged in the battle for the time being, he would allow General Nugent to use no more than one Thunderbolt and one Mustang Group and assigned the remainder of his aircraft to the IXth Tactical Air Command. Mustangs, moreover, were only to be used for escort duties This left only one to the IXth Air Force medium bombers. Group available to support the Ninth U.S. Army. On learning of this order, the Air Officer Commanding-in-Chief, 2nd T.A.F. decided that the XXIXth Tactical Air Command should not fly escort duties without permission from him, and he made it quite clear that the tasks of this Command were two-fold; first to give cover to the Ninth U.S. Army and second, to provide immediate support to this force when so required. In an emergency 2nd T.A.F. would divert medium and fighter bombers should it be necessary. arrangement with the IXth Air Force worked satisfactorily. At the beginning of February the XXIXth Tactical Air Command occupied the airfields of Asch and Ophoven in preparation for the coming joint British - American offensive in the In the meantime General Nugent's Thunderbolts Rhineland. gave support to the British operations west of the river Roer (Operation Blackcock) with attacks on the marshalling yards at Rheydt and Grevenbroich.

Operations by the IXth Air Force against the German withdrawal from the Ardennes Salient

The German withdrawal was aided by poor weather, but on 22 January the IXth Air Force was given a great opportunity to make harassing attacks, which resembled in character the operations of 2nd T.A.F. over the Falaise Argentan gap on 18 August 1914. Pilots of Thunderbolts and Mustangs reckoned that there were concentrations ranging from 100 to 500 vehicles on the roads leading into and away from Prum north of the salient. Much congestion was discovered at points further south, such as Vianden, Eisenbach and Dasburg. Medium bombers assisted the fighter bombers by attacking road and rail bridges at Bullay, Simmern, Sinzig and Dasburg. Other bombers visited the

Int./Ops. Summ.

marshalling yards of Gerolstein and Blankenheim. By the end of the day the IXth Air Force had flown a total of 1,561 sorties S.H.A.E.F. (Air) marshalling yards of Gerolstein and Blankenheim. No.98 Jan. 1945 and claimed to have destroyed over 1,500 vehicles of all descriptions.

0

Ibid Nos. 99 to 102

Reasonable weather enabled the IXth Air Force to continue the pursuit from 23 to 26 January. The IXth Bombardment Division spent the 25th attempting to destroy railway bridges and marshalling yards west of the Rhine. (1) On the following On the following day Marauders made an accurate attack on the important rail junction of Euskirchen. At the same time the fighter bombers devoted their attention to enemy motor transport travelling in the direction of the Rhine. Snow on the ground made these targets easy to identify.

Bad weather with snow and sleet set in on the night 24/25 January and continued until the end of the month. that time the Sixth S.S. Panzer Army had disengaged itself from the battle and was concentrating in the area of Bonn prior to moving to the eastern front.(2) On 30 January 1st S.S. Panzer Corps with the 1st and 12th S.S. Panzer Divisions had assembled near the Rhine. Field Marshal Von Rundstedt had formed Panzer Schwerpunkt J at Koblenz composed of the 2nd Panzer and Panzer Lehr Divisions. South of Cochem on the river Mosel was another concentration of armour which included the 2nd S.S. Panzer Corps, the 2nd and 9th S.S. Panzer Divisions. The 2nd Panzer Division was on its way to this point. The Headquarters of Fifth Panzer Army was still forward of the Eifel, but elements of 116th Panzer Division were withdrawing northwards and the only armour in the line belonged to the 9th Panzer Division.

A.H.B.6. Doc. Lage West 30 Jan. 1945

> Medium and fighter bombers of the IXth Air Force continued to attack the road and rail transport of these forces and bridges and communication centres. On 8 February General Vandenberg told the Air Commanders' Meeting that his Air Force had completed the task of harassing the German withdrawal from the Ardennes.

D.S.C./T.S. 100/9 Pt.4 Encl. 47A part.13

Spitfires of 2nd T.A.F. escorted the U.S. medium bombers occasionally during this period.

<sup>(2)</sup> In the middle of March it was reported to be fighting on the Hungarian sector.

137

#### CHAPTER 5

## THE ALLIED ADVANCE TO THE RHINE

#### The Supreme Commander's plan

D.S.C./T.S.100/ 12 Encls. 54A and 61A During the period 8 February to 24 March the Allied Armies in north west Europe staged three offensives with the object of expelling the enemy from west of the Rhine. The Commander in Chief West, Von Rundstedt, had at the end of January, according to Allied estimates, about 80 divisions on the western front, not all of them, however, at full strength. It was believed that this force could be increased by another 22 divisions should the Allied offensives on the eastern front and in Italy prove ineffectual. Both the nature of the ground and the strong defences west of the Rhine favoured the enemy and he could use his weak divisions to the best advantage.

At the end of January General Eisenhower had at his disposal 71 divisions for the forthcoming battle but some of them had suffered heavy casualties in the fighting in the central sector.(1) There was, therefore, no great disparity between the opposing ground forces. Only in the air did the Allied Tactical and Strategic Air Forces have overwhelming superiority. The policy for operations in this phase of the campaign was that only one major offensive could be staged at a time. This would enable the Allies to concentrate their air and ground forces with the greatest possible strength.

The Supreme Commander had divided his plan for the advance up to and the subsequent crossing of the Rhine into three phases, each of which would merge into one another. They were as follows:-

The intention was to clear the enemy Phase I. from the area north of the Moselle and west of the Rhine. The main operation, (Operations Veritable-Grenade) which was to begin as soon as possible, was to be the responsibility of Twenty First Army Group with the Ninth U.S. Army under its control. Its task was to seize the left bank of the Rhine between Emmerich and Duisburg. First U.S. Army was to launch an attack to coincide with this offensive and was to seize the area round the River Erft north of Cologne with the object of securing communications between Aachen and Munchen - Gladbach. In the Ardennes sector the Third U.S. Army was to contain the enemy and widen the breaches recently made in the Western Wall. South of the Moselle the Sixth Army Group, apart from improving its positions for the future capture of the Saar, would remain on the defensive.

Phase II. Twenty First Army Group was to prepare to cross the Rhine and seize an initial bridgehead between Emmerich and Wesel. The First and Third U.S. Armies were to secure the communications of the Northern Group of Armies by clearing out the remainder of the enemy north of the Moselle (Operation Lumberjack). The Sixth Army Group was to remain on the defensive until operations north of the Moselle had been completed. It would then launch an offensive to clear the Saar and advance to the Rhine (Operation Undertone).

See p. 171

<sup>(1)</sup> He had requested an additional ten divisions for the battle of the Rhine. (See Chap. 4, p. 114)

138

See p. 173.

See Chap. 1

pp. 2-4.

Phase III. The bridgehead across the Rhine north of the Ruhr was to be widened until it was possible to deploy within it the large stirring force necessary for future operations towards the east. The front between the Ruhr and the Moselle would remain on the defensive and south of the Moselle the Sixth Army Group was to complete its operations to secure the left bank of the Rhine south of Frankfurt.

The first phase of the advance to the Rhine

Early Plans for Operation Veritable. December 1944 - January 1945

Once a stalemate had been forced upon him at Arnhem, Field Marshal Montgomery had intended to consolidate on the left bank of the Rhine as quickly as possible. The plan for this operation was that Twenty First Army Group should drive in a south easterly direction from the Nijmegen bridgehead and capture the ground enclosed by the Meuse and the Rhine. The reader will recall that the first attempt to fulfil this plan was made at the beginning of October 1944 (Operation Gatwick). But an attack never materialised for the reason that all resources of Twenty First Army Group had to be brought to bear first, on clearing the approaches to the port of Antwerp, and secondly, to relieve pressure on the Second British Army front by pushing back the enemy forces which were still west of the Meuse in the neighbourhood of Venlo. The first task was completed by the beginning of November and the second during the early part of December.

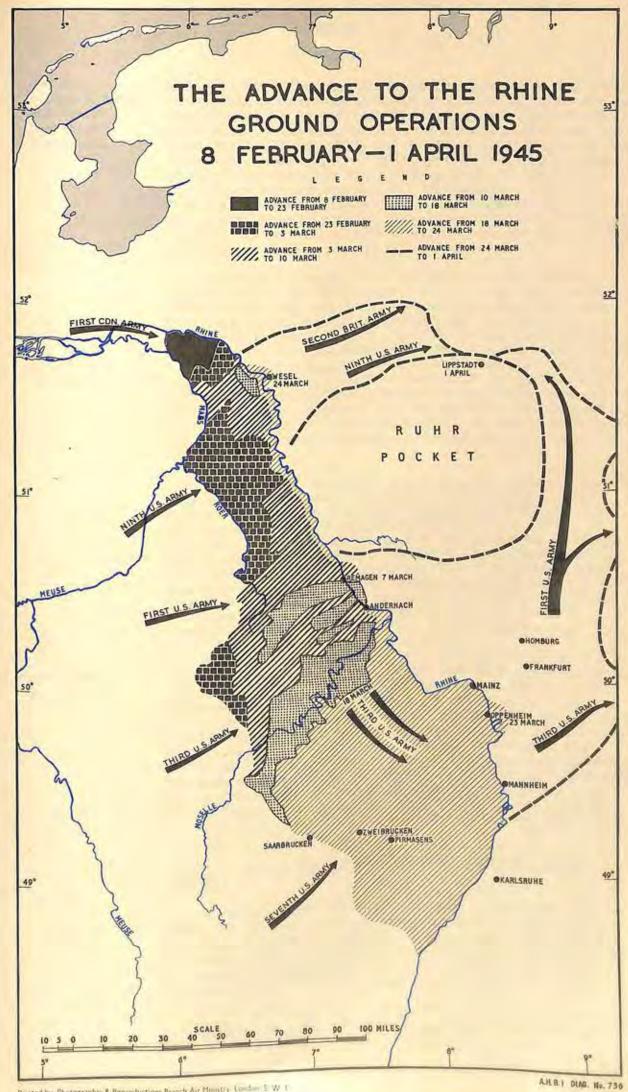
Folder S.A.S.O. 2nd T.A.F. Operation Veritable.

The Commander-in-Chief, Twenty First Army Group appreciated at that stage that the time had come to continue preparations for the clearing of the Rhineland. become known as Operation Valediction and was shortly to be renamed Operation Veritable. Field Marshal Montgomery expounded his plans to Air Marshal Coningham accompanied by the Deputy Senior Air Staff Officer, 2nd T.A.F. at a conference held at Main Headquarters Twenty First Army Group on 9 December. The Field Marshal declared that there were two ways by which the war could be ended rapidly. The first was the capture of the Ruhr, Germany's remaining industrial centre and the second way was to force the German Army into This would handicap it severely because of mobile warfare. its shortage of fuel, transport and armoured fighting vehicles. He emphasised that it was important that the enemy should be given no rest during the winter months. Moreover, the battle for the territory west of the Rhine would lead up naturally to the crossing of the Rhine in the coming spring. (1) The First Canadian Army was to be responsible for the operation and was to advance to the line Orsoy - Venlo (towns on the Rhine and the Meuse respectively). The approximate target date for the operation was to be 1 January and Field Marshal Montgomery described it as the 'British Empire's contribution to the winter campaign'. It was to be accompanied by an American thrust towards the Rhine from the River Roer.

2nd T.A.F. O.R.B. App. No. 14 Dec. 1944

Planning conferences for Operation Veritable took place during that week at the Main Headquarters of 2nd T.A.F. and Twenty First Army Group. No. 84 Group, R.A.F., which normally

<sup>(1)</sup> Engineers reckoned that they would be unable to construct temporary bridges across the Rhine before mid-March because of the danger of drifting ice.



and Folder S.A.S.O. 2nd T.A.F. Operation Veritable. supported First Canadian Army operations was made responsible for the air plan and on 17 December a detailed discussion was held between its Air Officer Commanding, Air Vice Marshal Hudleston, and representatives from First Canadian Army and XXXth British Corps, which was to play a leading part in the operation. The Army made it clear from start that because of strategic necessity the operation must go forward even if the weather was unfavourable for air support. But the Commander of XXXth British Corps, General Horrocks, believed that his chances of success would be increased by 'fifty per cent' if air operations were practicable at the start of the operation.

Folder S.A.S.O. 2nd T.A.F. Operation Veritable. The main features of the air plan were that heavy bombers were to be used before D Day to knock out the Wesel bridges which were the main artery feeding the battle area from east of the Rhine. They were also to attack the concentration areas of Goch and Cleve behind the Siegfried Line together with Emmerich on the Rhine on the night before the operation was launched. On D Day a heavy or medium bomber attack was requested to neutralise the Siegfried Line defences. A request for aircraft to drop smoke bombs on the high ground at Hoch Elten, east of the Rhine near Emmerich, used as an artillery observation post, was turned down as the R.A.F. explained that it could not meet the requirement in full.

Considerable discussion arose over the Napalm or fire bomb(1) which the Army wanted to see used by the R.A.F.

They refused to take into consideration the technical disadvantages which were explained to them by Air Force Officers. The IXth Air Force had used this bomb in recent operations on the Continent but the R.A.F. had not been favourably impressed with the results. Furthermore this weapon could only be used by American aircraft and at a time when they would be heavily committed with operations on their own front. Apart from the last two requests Air Vice Marshal Hudleston agreed with the Army's demands.

See Chap. 3 p. 71. Von Rundstedt's offensive began on the day of this conference and all plans for Veritable had to be shelved for the time being. The XXXth British Corps became Field Marshal Montgomery's strategic reserve and certain of its divisions were soon involved in the Ardennes battle. By the end of January the situation in the west was very much more favourable to the Allies than it was in early December. The defeat of his armoured force west of the Rhine coupled with the Russian threat from the east reduced the enemy's strength in the western front. However, the First Parachute Army, the principal unit in the northern sector, had not yet been involved in any major action and was still fresh and of good morale.

The Final Ground and Air Plan for Operations Veritable-Grenade

In view of the comparative success of the First and Third U.S. Armies in the Ardennes the Supreme Commander was undecided whether he should allow these operations to become the major effort in the west, or whether he should abide by his original plan, revert to the defensive on that front and order the Twenty First Army Group to go ahead with its

<sup>(1)</sup> Wing tanks which could be dropped at a low level on a ground target.

140

operations to close the Rhine north of the Ruhr. Instead he decided to compromise. On 18 January a new directive was issued to the Army Group Commanders. In it General Eisenhower stressed the importance of recovering the initiative by launching offensives north of the River Moselle. The Northern Group of Armies with the Ninth U.S. Army under its command was to complete preparations (interrupted by the sudden German counter attack) for closing to the Rhine north of Dusseldorf. But these operations (to be controlled by Twenty First Army Group) were not to prejudice General Bradley's attacks in the Ardennes. Should the situation in this sector continue to be favourable to the Allies the Twelfth Army Group was to breach the Siegfried Line and advance on the Axis Prum-Euskirchen.

DSC/TS 100/12 Pt. 2 Encl. 50A

Some of the Commanders who attended the daily meetings of the Supreme Commander at his Headquarters, including his Deputy, General Spaatz, and the Deputy Chief of Staff, General Morgan, were in favour of early and vigorous action in sectors other than the Ardennes. They held that once the Armies had probed and discovered a weak spot armoured divisions could be used to exploit the breach. They believed that instant action was required to offset the great Russian advance on the eastern front which had begun in the second week of January. Moreover, it was essential that the Allied Expeditionary Force should hold the left bank of the Rhine from where crossings would later be made north of the Ruhr.

S.H.A.E.F. (Air) Hist. Record and Diary App. 10 January 1945.

> By the end of January the Supreme Commander was more in favour of concentrating the bulk of the Allied Expeditionary Force on an offensive in the northern sector and at last recognized the importance of gaining the left bank of the Rhine as quickly as possible so as to follow up the German withdrawal. By that time the enemy had extricated the Sixth S.S. Panzer Army from the fighting and the Fifth Panzer Army was being pressed back across the River Kyll. In a new directive issued on 1 February General Eisenhower stated that Operations Veritable and Grenade were to take place at the earliest opportunity. Operation Veritable was to be launched no later than 8 February and Operation Grenade no later than 16 February. The modified directive effected the Twelfth Army Group, in that while its effort to seize the Roer Dams (an operation interrupted by Van Rundstedt's attack) was to continue, the offensive in the Ardennes was to be reduced to an "aggressive defensive".

DSC/TS. 100/12 Pt. 2 Encl. 59A.

> Field Marshal Montgomery issued a new directive to the Twenty First Army Group on 21 January. After describing the plight of the enemy he defined the task of the British and American Armies under his control. In general this was to drive the enemy from west of the Rhine from the forward positions near Nijmegen to the line Julich - Dusseldorf. Afterwards they were to cross the Rhine and engage the enemy in mobile warfare on the plains of northern Germany. detail the First Canadian and the Ninth U.S. Armies were to make converging attacks. The First Canadian Army was to attack towards the south-west with its left flank on the The Ninth U.S. Army was to attack north-eastwards from the line of the Rhine through Julich and Dusseldorf. The Second British Army was to cross the Meuse at Venlo and advance in the wake of these attacks. Before the Supreme Commander had amended the target dates of these operations, Field Marshal Montgomery had intended that Operation Veritable should begin on 8 February and Operation Grenado

Thid Encl. 56A.

141

at the earliest possible date after the 15th. The Air Officer Commanding-in-Chief, 2nd T.A.F. was to control the supporting operations of the 2nd T.A.F. and the XXIXth Tactical Air Command.

On 24 January, three days after the Commander-in-Chief, Twenty First Army Air Group had issued his directive for Operation Veritable - Grenade, a conference was held at the Main Headquarters of First Canadian Army No. 84 Group to discuss the air effort in support of Operation Veritable in Attending were the light of the new situation in the west. the Senior Air Staff Officer, No. 84 Group, Air Commodore T.N. McEvoy and the Chief of Staff, First Canadian Army. In general the ground and air plans did not differ in complexion from the ones discussed and in December. plexion from the ones discussed early in December. From the air point of view the weather was, of course, still a predominant factor but the Commander XXXth British Corps agreed to postpone the operation up to twenty four hours The conference should it be unfavourable for flying. decided that a twenty four hour weather forecast was to be telephoned to the Headquarters of XXXth Corps by 1700 hours Referring to the Napalm bomb the on D Day minus one. Senior Air Staff Officer, No. 84 Group, said that it would not be available for the operation but that the M76 incendiary bomb was effective against houses and open gun emplacements. During the remainder of the conference, targets for heavy and fighter bombers were discussed. On 27 January a final conference on the air plan was held at No. 84 Group Main Headquarters and attended by representatives from S.H.A.E.F., the VIIIth Air Force, Twenty First Army Group and First Canadian Army.

The terrain over which the battle was to be fought was Reference to the far from ideal for military operations. Reference to the map will show that north of Duisburg the Rhine and Meuse pursue, to being with, almost parallel courses and gradually converge towards each other until the Meuse is only six miles The Rhine at this point becomes the south of Nijmegen. A third river, the Niers Waal on entering Dutch territory. A third river, the Nies flows parallel with the Maas and joins it at Gennep, south west of Nijmegen. The Allied front line followed the Meuse as far as Cuyk (south of Nijmegen) and then swung across the high-lying, wooded ground north of the Reichwald Forest and met the Waal about three miles south of Nijmegen. topographical feature in the district was the Reichwald Forest which dominated the area while the strongly fortified high ground known as the Nutterden and Materborn features, Elsewhere the ground was low-lying and lay west of Cleve. The water subject to flooding from the Meuse and Rhine. had receded after floods in December and had left the ground The enemy could cause further floods on in a sodden state. the Rhine by blowing the winter dykes.

The German defences were constructed in great depth in three zones. The first was a series of outposts west of the Reichwald Forest linked by an anti-tank ditch. Behind it was the northern extremity of the Siegfried Line which ran south from the village of Kranenburg along the end of the Reichwald to Goch (itself well fortified) and thence to Geldern from where it could dominate the Meuse valley. Most important were a series of trench systems which had been constructed on the high ground near Materborn. During the winter a third line had been made from a point on the Rhine opposite Rees which stretched to Geldern and farther south. This defensive system was known as the Hochwald 'layback'.

No. 84 Group O.R.B. App. No. 19 Feb. 1945.

142

The enemy was well served by communications. East of the Rhine there was the railway network radiating from the large junctions of Munster and Rheine. Road and railway bridges crossed the Rhine at Wosel and there were three ferries on the stretch of the river between Emmerich and Wesel. Further to the south the Rhine was bridged at Duisburg. West of the Rhine class A1 roads linked the administrative centres of Goch and Geldern. Most significant was the proximity of the Ruhr industrial area with its marshalling yards and supply depots. Railways ran north from the Cologne area through such centres as Grevenbroich and Hohenbudberg.

Paper G.S.1(a) Main HQ. 21st Army Group

> The enemy's ground forces were under command of General Blaskovitz who had available for action the Twenty Fifth Army based largely in south west Holland, and the First Parachute Army centred around Emmerich. The Reichwald district was controlled by the 84th Infantry Division.

> The plan for the Allied ground forces were briefly as follows. The XXXth British Corps was to begin the attack at 1030 hours on 8 February employing five divisions. Before they moved forward one thousand guns were to put down a heavy barrage on enemy positions. Once a break through had been achieved the IInd Canadian Corps was to join the battle and take over the left hand sector. The whole operation was designed to take place in three phases. The first was the clearing of the Reichwald Forest and an advance up to the line Gennep - Asperden - Cleve. Secondly, the main German defensive line was to be breached east and south east of the Reichwald. This included the capture of the towns of Weeze, Udem, Calcar and the ground on the south bank of the Rhine opposite Emmerich. Finally the Army was to break into the Hochwald 'layback' and advance to the line Geldern - Xanten.

No. 84 Group was to co-ordinate all air support for Operation Veritable and the resources of Nos. 83 and 2 Groups were also available. The final operation order of No. 84 Group was issued on the afternoon of 6 February. A Typhoon Wing of No. 83 Group was to operate under No. 84 Group for a period of five days or longer should the situation demand it. But in general No. 83 Group was to complete the more distant isolation of the battle field allowing No. 84 Group to bring close support to the First Canadian Army. Other forces available for the operation were R.A.F. Bomber Command and the VIIIth and IXth Air Forces.

Both Nos. 83 and 84 Groups were to provide cover but it was intended that No. 83 Group should bear the brunt of fighter operations in order to allow No. 84 Group to concentrate on the battle. Air cover was to take an aggressive shape with offensive patrols and attacks on G.A.F. airfields. Reconnaissance tasks were to be the responsibility of No. 84 Group but would be augmented by No. 83 Group, if necessary.

The pre-arranged support programme was divided into targets which were either within or outside the resources of the two composite groups. Broadly speaking the support offered by fighter bombers before D Day was firstly, the isolation of the battlefield and secondly pre-arranged Army support tasks such as attacks on headquarters. It was fortunate that the former task coincided with the current 2nd T.A.F. interdiction plan and did not involve shifting the weight of air attacks to a new area and so arcuse suspicions in the enemy's mind. The railway lines running north and south through Geldern, Venlo and Wesel were

Operation Veritable Air Plan. 29 Jan. 1945 No. 84 Gp. O.R.B. App. No. 19 Feb. 1945. especially singled out for attack so as to hinder the movement of enemy reinforcements and supplies. At the same time plans for the Strategic Air Forces had as their primary object the attack of oil and communication targets in the Ruhr and this had no little effect on the battle area immediately west of the Rhine. Nearer targets which were to be struck by heavy or medium bombers were the two Wesel bridges, ammunition dumps at Dulmen, Kanten and Greven and the oil mill at Heiden east of Emmerich.

On the night of D Day minus one, heavy bombers were to attack Cleve, Goch and Emmerich. Light bombers were to harass the towns of Weeze, Udem and Calcar throughout the night.

On D Day the most pressing task for the Air Forces was the destruction and demoralisation of the enemy in the strongly held Nutterden and Materborn features. obvious that these defences could be neutralised by heavy air bombardment but the Army wanted its mechanised forces to make a rapid break through after the initial attack. be impossible if all the roads were cratered and a compromise had to be made between air and ground forces. The XXXth British Corps Commander accepted shallow cratering of the Materborn feature where he had a choice of roads. No cratering was bombers were allocated for this task. permitted on the Nutterden feature and the majority of targets here were to be attacked by fighter bombers. However, medium bombers using air burst bombs were to strike at enemy troops moving back to this area and they were to be followed up by fighter bomber attacks which were to continue until the arrival of the ground forces.

The remaining requirements for pre-arranged air support on D Day were in the following order of priority.

- (a) The isolation of the battle field. This was to be continued after D Day both by day and by night.
- (b) The silencing of enemy artillery. This was to involve a big artillery recommaissance effort from D Day to D Day plus two.
- (c) The destruction of enemy ammunition reserves in the vicinity of the battle area.
- (d) The destruction of important enemy headquarters.

Immediate support was to be provided by a 'cab-rank' of one Wing of Typhoons controlled by a Forward Control Post located in the vicinity of the Headquarters of XXXth British Corps. Each of the assaulting divisions was to be equipped with a contact car and R.A.F. pilots who had completed their operational tour of duty were to be employed as controllers. After a break through, when a division might be outside the effective range of the Forward Control Post, the contact car would assume control over the 'cab-rank'. Measures were also taken to maintain the weight of air support in the likely event of bad weather. A Mobile Radar Control Post (S.C.R.584) had recently arrived in the British sector and was to be held in readiness near the Forward Control Post to guide fighter bombers on to their targets.

MA

144

## The Air Plan for Operation Grenade

The Air Officer Commanding in Chief, 2nd T. A.F. delegated the planning and execution of the air effort in support of Operation Grenade to General Nugent, Commanding General, XXIXth Tactical Air Command. An elaborate air plan was contrived of which the following were the main features. Air supremacy over the Ninth U.S. Army was to be maintained by a series of heavy and medium bomber attacks against G.A.F. airfields; fighter bombers of 2nd T.A.F. and IXth Air Force were to strafe aircraft on the ground. Secondly, the battlefield was to be isolated by destroying the Rhine bridges between Wesel and Bonn. The rail and road network between the Rivers Roer and Rhine was to be cut so as to prevent the flow of reinforcements and supplies into the battle zone. The usual close support to the Ninth Army would be given by the XXIXth Tactical Air Command. Plans for a heavy bomber attack on the east bank of the Roer, which was the first objective of the Ninth U.S. Army, were abandoned after it had been decided that the best time to cross the river was just before dawn. Furthermore sufficient artillery had been assembled in the area for counter battery fire.

File 2nd TAF/3031/ 73/Ops. Encl. 2A

## Assembly of ground forces and the deception plan for Operation Veritable

In the meantime the troops due to take part in the operation were being assembled in the Nijmegen area. This was in itself an involved and complicated movement. The XXXth British Corps disengaged itself from the Ardennes battle and troops from XIIth British Corps were extricated from the Heinsburg salient, where they had been taking part in Operation Blackcock. The concentration area was extremely limited for topographical reasons, in addition to which it was very close to the front. There were only two bridges across the Maas, at Grave and at Mook, where the divisions could pass into the concentration area, and these points became a congested bottleneck. Added to this the thaw had turned the roads into deep mud and slush only to be aggravated by the flow of heavy transport along them.

Fortunately the Belgian railways were by then in a serviceable state. During February 343,800 tons were off-loaded at Canadian Army road heads and 446 good trains moved up stores to railheads, some of which were in close proximity to the front line. In spite of the difficulties of weather and terrain everything was ready by the target date set for the operation.

See Chap. 4 p. 131.

A.H.B.6
Trans, Diary
of Luftwaffe
Command West
Ops. and
Report No. 185
Hist. Sect.
Canadian
Mil. HQ.
pp. 22-23.

While all these preparations were in progress an elaborate deception plan was put into being so as to deceive the enemy as to the exact object of the offensive. It was hoped that he would be led to conclude that a push across the Maas was imminent north of Nijmegen. As mentioned already in the last chapter, No. 84 Group played an important part in this scheme with its attacks on bridges and the cutting of railway leading into north west Holland. But despite the fact that their Arado 234's were flying almost daily over the British sector, the German Supreme Command did not entertain any suspicions of a push southwards from Nijmegen, but believed that the main attack would be directed either from Venlo or from the Roer valley.

#### 145

## Disposition of 2nd T.A.F. for Operation Veritable

2nd T.A.F. Orders of Battle for Feb. 1945, On the eve of the battle No. 84 Group was composed of five Typhoon rocket-projectile, four Typhoon bomber squadrons, fourteen Spitfire fighter and three Spitfire and Mustang reconnaissance squadrons. They operated from airfields at Gilze Riejen, Woensdrecht, Mill and Schijndel in Holland. No. 131 Wing (Typhoons) stationed at Grimberghen near Antwerp, the most distant airfield from the front, was to operate daily from Schijndel for the period of the battle. The Main Headquarters of the Group was located at Goirle near the town of Tilburg. The Group Control Centre was at Turnhout north east of Antwerp.

At this time No. 83 Group was composed of twelve Typhoon, thirteen Spitfires, five Tempest and three reconnaissance squadrons. They flew from airfields occupied throughout the winter at Eindhoven, Heesch, Brussels, - Evere, Volkel and Helmond. The Main Headquarters of No. 83 Group was still at Eindhoven and the Group Control Centre at Erp, Holland.

S.H.A.E.F. (Air) Hist. Record and Diary App. 11A Jan. 1945.

DSC/T.S.100 Pt. 9 Encls. 61A - 65A.

2nd T.A.F. 0.R.B. App. No. 12 Mar. 1945. See Chap. 7 p. 229.

By 20 January a detachment of No. 616 Squadron flying Meteors III had arrived on the continent and was stationed at Brussels/Melsbrock. at Brussels/Melsbroek. The remainder of the squadrons did not cross over to the continent until the first week of April for the reason that the Meteor had been equipped with the B23c engine which had a poor rate of climb and was limited in endurance when compared with the enemy's Me. 262. Air Marshal Coningham considered, therefore, that there were obvious disadvantages in maintaining these aircraft close to the front line and decided that as soon as the squadron had been equipped with Rolls Royce Derwent (B37) engines it should be used in an interceptor role over Allied territory. Meantime pilots of No. 616 Squadron were trained in photorecomnaissance tasks and it was not until the end of the campaign that the Meteors were employed on armed reconnaissances and offensive fighter operations, (1)

## The state of the G.A.F. on the western front in February 1945

Throughout the ensuing battle the G.A.F. interfered only on a very small scale. This was largely owing to the transfer of units eastwards to meet the Russian threat and secondly to the drastic fuel economy measures which were imposed on air operations in the west at this time. Moves of fighter and ground attack Geschwaders began soon after the start of the Russian offensive on 12 January. It is reckoned that about 700 aircraft were transferred from west Thus the strength of Luftwaffe Command west was reduced by about one half bringing it to the same position as The only dangerous element in the enemy's in October 1944. air resources in the west was his jet aircraft. It has already been seen how this threat was to a large extent nullified by the continuous British fighter and fighterbomber offensive against G.A.F. bases north of the Ruhr.

Based on Information from A.H.B.6 Translated Documents.

<sup>(1)</sup> Meteors flew their first sorties on armed reconnaissance on 16 April 1945.

146

Rise and Fall of the G.A.F. (A.C.A.S.(1)) p. 381.

On 5 February Jagdkorps II, the German fighter command in the west, ordered that fighter operations must be cut down to the minimum because of the fuel shortage. Even scrties by jet fighter-bombers had to be reduced. Army commanders were instructed by O. K. W. to reduce their demands for close

Preparatory air operations by Tectical and Strategic Air Forces to Operation Veritable 2 - 7/8 February

2nd T. A.F. Daily Log Sheet No. 2481, 2491.

Thid Sheets Nos. 2501-2508.

No. 2 Group

0. R. B. Feb. 1945.

VIIIth A.F. Monthly Summary of Ops. Feb. 1945.

Bomber Command Night Raid Report No. 832.

See Chap. 6 P. 184.

On 2 and 3 February No. 84 Group was employed on the cover plan for Operation Veritable. On the 2nd it attacked the headquarters of 6 Parachute Division at Gameren near Zaltbommel. On the 3rd Spitfires of No. 329 Squadron bombed the headquarters of LXXXVIII Corps then located in a villa about a mile north east of Utrecht. Two hits and three near misses were claimed. On 6 February, a clear day, a big effort was made by both Nos. 83 and 84 Groups against rail communications leading into Holland and in the Munster-Rheine district.

Mitchell bombers of No. 2 Group also took part in these cover operations. On 3 and 6 February unsuccessful attacks were made against the railway bridges across the Ijssel at Deventer and Zutphen and the aircraft encountered intense On 2 February a start was made on pre-D Day targets for Veritable when 60 Mitchells were dispatched to bomb the oil mill at Heiden, about 18 miles east of Emmerich. bombing was accurate and a reconnaissance aircraft which flew over the target area an hour later reported that the mill was still on fire. Two attacks by No. 2 Group were made on the petrol, oil and lubricant depot at Emmerich on 4 and 6 February in place of heavy bombers. The first attempt was abortive because of poor weather but the second time many bombs were dropped in the target area. At night Mosquitoes continued to isolate the battlefield by harassing communications leading to it from the Cologne district.

On 1 February heavy bombers of the VIIIth Air Force made their first attempt to destroy the road and rail bridges at Wesel. The Fortresses and Liberators concentrated on the road bridge dropping 315 (short) tons of H.E. around it. The railway bridge was bombed with 66 tons but was undamaged.

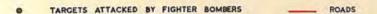
R. A. F. Bomber Command entered the battle at 2200 hours on the night of 7/8 February when it attacked the town of Goch and Cleve with 769 aircraft. Master bombers ordered aircrews to bomb their targets from 5,000 feet, where they were below the cloud, as both targets were well marked. A total of 1,870 tons of high explosive was dropped. The south and centre areas of Cleve were severely damaged; defence positions and roads suffered heavy damage in Goch. German night fighters appeared on the scene just after the attack had ended and pursued the Goch force over Allied territory as far as Brussels. Two Lancasters were shot down. About two hours later that night R. A.F. Bomber Command made a further attempt to disrupt repair work on the Dortmund-Ems Canal at Ladbergen but all bombs missed the target.

R. A. F. Bomber Command had intended making a repeat attack on Goch but despite the fact that the Army was entirely satisfied with the results the Commander in Chief Bomber Command

<sup>(1)</sup> Dispositions of the G.A.F. on 6 February may be seen on a captured situation map re-produced as Map No. 22.

# OPERATION VERITABLE - AIR SUPPORT 8 FEBRUARY - IO MARCH 1945





TARGETS ATTACKED BY MEDIUM BOMBERS +--- RAILWAYS

TARGETS ATTACKED BY HEAVY BOMBERS

- - PHASE LINES



D.S.C./T.S.100/9 Pt. 4 Encl. 47A Para. 11. stated that the town would be bombed unless adequate reasons were produced for the attack to be cancelled. At the Air Commanders Meeting on the 8th the Deputy Supreme Commander reminded his colleagues that Bomber Command had recently been complaining of a shortage of bombs and ordered that a second attack should not be made.

Operating under the orders of No. 2 Group, 95 Halifaxes and Stirlings of No. 38 Group bombed enemy billeting areas at Calcar, Udem and Weeze, all lying to the south of Bomber Command's targets. These operations continued from 2350 hours to 25 minutes after midnight on the night of the 7/8th. One Halifax was forced down with engine trouble near Lille.

The First phase, of Operation Veritable Air-Ground Operations, 8 February

The infantry began to advance at 1030 hours after an intensive artillery bombardment had silenced the enemy's guns. But a good deal of opposition was encountered and progress was slowed down by minefields and floods. Between 1300 hours and nightfall the floods north of the Cleve-Nijmegen road had risen 18 inches.

Ibid Sheets Nos. 2514 - 2523 and No. 84 Group O.R.B. 8 Feb. 1945.

Ibid Sheet Nos. 2518 - 2519

2nd T.A.F. O.R.S. Report No. 28.

2nd T.A.F. C.R.S. Report No. 28 pp. 6-8.

Spitfires and Mustangs of 2nd T. A.F. on tactical reconnaissance were the first aircraft airborne in the operation shortly before 0800 hours. The weather was promising in the early morning but quickly deteriorated and low lying patchy cloud gathered over the Rhineland.
No. 84 Group supported by No. 121 Wing (Typhoons) of No. 83 Group began its pre-arranged support shortly after 0820 The primary target was an ammunition dump at hours. Kranenburg but it was not attacked because of low cloud. No. 2 Group bombed it later that morning using navigational In its place the Typhoons set on fire the village of Millingen on the Rhine south east of Nijmegen which had been Typhoons also set on fire an converted into a strongpoint. emergency wooden bridge built by the enemy across the Ijssel at Doesburg some miles north-east of Arnhem. To the south west Spitfires bombed the headquarters of 1051 Grenadier Regiment (84 Division) at Tuthees south of Afferden but it was later discovered that the building was not hit. ammunition dump and shell factory supposed to be situated just north of Goch were bombed by Spitfires. There was later found to be no target of military importance in the vicinity.

One of the principal fighter bomber tasks for D Day was the cutting of military telephonic communications between Holland and Germany. Intelligence believed that the main telephone exchange system for the First Parachute Army was at No. 83 Group was detailed to make Terborg north of Emmerich. the attack and over 100 rockets were fired by Typhoons The extent of the damage was later against the building. revealed by members of the local Dutch resistance group and by the 2nd T. A. F. Operational Research Section. exchange was housed partly above and partly below ground. The first floor was almost entirely ruined but the enemy was able to improvise and carry on. In another house the teleprinter room was destroyed. The same aircraft also hit the adjacent headquarters of General Windig, the Commander of Artillery, First Parachute Army. (1) The general himself

<sup>(1)</sup> Photographs of the damage caused to the buildings will be found at Appendix No. 5.

died shortly afterwards as a result of his wounds. No. 121 Wing claimed to have attacked and set on fire a headquarters in the castle of Huis Wisch near Terborg. However, civilians later declared that no such attack on this building took place that month.

Typhoon squadrons of No. &4 Group which attacked two other telephone communication centres were less successful. This was due in the first place to the wrong pin point map reference being given by the Dutch Resistance. The targets were at Arnhem and Zevenaar a few miles to the east of the former town. Low cloud also helped to frustrate the operation. Farther afield Typhoons and Spitfires on armed reconnaissance cut railways and strafed rail traffic east of the Rhine and in the Zwolle-Groningen district. No. &4 Group claimed to have cut the main line between Emmerich and Wesel.

The Forward Control Post was hardly used for close support operations because of the low cloud and for the first time on No. 84 Group front, the Mobile Radar Control Post went into action. During the afternoon Typhoons bombed the villages of Mehr and Niel on the Canadian axis of advance from a height of 10,000 feet guided by the Mobile Radar Control Post (M.R.C.P.)

As the afternoon wore on there was a slight improvement in the weather. The air effort was then directed to harassing the arrival of enemy reinforcements from the south east. The villages of Zijfflich, Mehr and Niel came under attack. Cratering would not be accepted by the Army in this area. Investigations showed that a number of bombs fell in the target area and may well have caused some delay and confusion. Another important target attacked by Spitfires of No. 66 Squadron at that time was the 84th Divisional Headquarters and a nearby ammunition dump at Asperden, north of Goch. The ammunition dump was, however, unscathed and very little damage was done to the headquarters.

The ground forces were due to reach the Nutterden feature late in the afternoon and they were to have been preceded by an American medium bomber attack. But in view of the bad weather this operation was put forward to the morning and the enemy was thereby given some respite before closing with the Allied infantry. Allied infantry. The ground forces were also delayed by the minefields and the soggy condition of the ground. The IXth Bombardment Division had planned to use navigational aids but the Oboe chain did not function and not more than one of the seven missions against the Nutterden and Materborn features was effective. The attack took place at 1100 hours. 1530 hours No. 84 Group sent fighter bombers to bomb these defended localities directed by the Mobile Radar Control Post. A number of 500 pound bombs were dropped. The enemy had turned houses into strong points and incendiary bombs might well have made the attack more effective. Air attacks on the Nutterden feature continued from 1630 hours until nightfall.

The artillery reconnaissance programme which was such an important feature of the air plan had to be abandoned because of the poor visibility. Tactical reconnaissances, however, revealed that the enemy was moving up his reserve from south east of Geldern. A total of 102 reconnaissances were flown by 2nd T.A.F. that day.

Ibid.

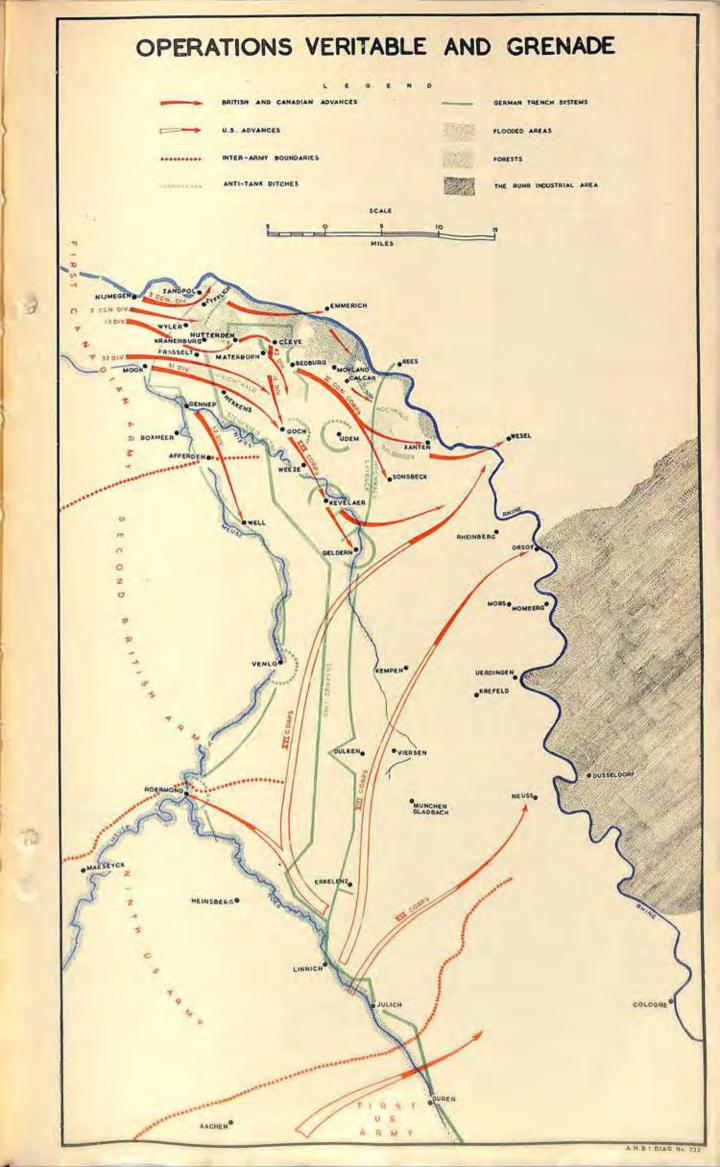
2nd T.A.F. Daily Log Sheet No. 2521.

2nd T.A.F. O.R.S. Report No. 28 p. 5.

2nd T.A.F. O.R.S. Report No. 28.

Ibid pp. 2 - 4.

No. 84 Group O.R.B. 8 Feb. 1945.



## 149

Sorties flown by the two Composite Groups on fighter cover over the Reichwald district were uneventful. The G.A.F. did not attempt to come to the assistance of their comrades on the ground.

By night fall British troops had captured Wyner and Kranenburg but the Materborn and Nutterden features had not yet been taken. At least the Germans had been driven out of the positions they had occupied throughout the winter and about 1,200 prisoners had been taken. A total of 1,201 sorties were flown by 2nd T.A.F. of which 547 were prearranged. The IXth Air Force had flown about 167 sorties in support of Veritable. Although the air effort would have been far more effective had the weather been more favourable, the attacks against headquarters, communications and reserves ensured the success of the first day's operations. Throughout the night Mosquitoes of No. 2 Group harassed road and rail movement east and west of the Rhine.

2nd T.A.F. Daily Log Sheet No. 2524.

## Air-Ground operations 9-14 February

On 9 February operations in the air were further restricted by low cloud and rain which lasted until the afternoon. By the evening the Materborn and Nutterden features had been captured. Canadian troops advancing north of the Cleve-Nijmegen road in amphibious vehicles had occupied Millingen and Mehr. British troops were making their way through the Reichwald Forest. Water was rising on the Nijmegen-Kranenburg road and everywhere travel on the ground became increasingly difficult.

No. 84 Group O.R.B. Feb. 1945. It was the intention of No. 84 Group to prevent the enemy from reinforcing his forward troops from the south east. But not until the late afternoon was it possible for fighter bombers to attack rail transport and locomotives in the Krefeld-Geldern-Wesel area. No. 83 Group flew sorties well to the east of the Rhine and claimed to have destroyed a bridge with rockets at Schermbeck due east of Wesel. No. 2 Group was also ordered to delay movement to the front. It bombed the Rhineland towns of Geldern and Rheinberg in 10/10ths cloud. Cover was provided by Nos. 83 and 84 Group Spitfires.

2nd T.A.F. Daily Log Sheet Nos. 2528. Close support sorties were flown between 1500 and 1700 hours and Spitfires and Typhoons operating under the Mobile Radar Control Post bombed Goch, Calcar, Moyland and Till, the later two places being south east of Cleve. No. 193 Squadron attacked the headquarters of the First Parachute Army at Dinxperlo north of Emmerich. Part of the building was claimed to have been completely destroyed.

No. 84 Group O.R.B. 10-12 Feb. 1945. For the following three days (10-12 February) the object of 2nd T.A.F. operations was still to isolate the battlefield rather than to give close support. The enemy had reacted swiftly to the British advance and had already moved up 116 Panzer division and 15 Panzer Grenadier division from the Cologne area. The poor weather made close support prohibitive in any case. Movement was attacked both east and west of the Rhine. On the 11th, 425 armed reconnaissances were flown. Fighters and fighter bombers ranged as far east as Munster and Paderborn. East of Cleve a motor convoy was seen to stop and take cover on the approach of British aireraft. A total of 22 locomotives were claimed as destroyed and 71 damaged together with a large number of goods wagons.

2nd T.A.F. Daily Log Sheet Nos. 2533-2547

150

The majority of these claims came from No. 83 Group. (1) In two days 49 rail cuts had been made round the battle area and a number of railway stations had been attacked.

Pre-arranged attacks were made against headquarters and On the afternoon of 10 February No. 84 concentration areas. Group made two attacks on the administrative section of the 84th German Division headquarters then located near Marienbaum south of Xanten. Bombs were reported to have fallen in the target area and fires were started. Shortly before this attack fighter bombers staged an attack on light gun positions in the vicinity. Another Typhoon squadron successfully bombed the headquarters of LXXXVth Corps, believed to be north east of Goch. Nearby at Afferden Spitfires attacked another headquarters (180 Division). second attack was made on the telephone exchange at Arnhem but no results were observed. Other fighter bombers were directed against stores and ammunition dumps south of the On the 11th Typhoons controlled by the Reichwald Forest. Mobile Radar Control Post re-attacked Till and Moyland.

Air operations on 12 February were impracticable and only 25 sorties were flown by the whole of 2nd T.A.F. On the 13th 453 armed recommaissances were flown. The main feature of close support operations was a heavy attack by 72 Typhoons on Sonsbeck lying between Kevelaer and Xanten and through which reinforcements were passing. Full use was made of the Mobile Radar Control Post. Nearer to the scene of the fighting assistance was given to XXXth Corps advancing in the direction of Goch by 'winkling' operations on the Cleve-Goch road. Tactical reconnaissance showed that a good deal of enemy movement was in progress particularly from Holland in the direction of Emmerich.

Bostons and Mitchells of No. 2 Group took part in bombing concentration areas in the enemy's rear areas and between 10 and 13 February two attacks were made on Xanten and Kevelaer and one attack each on Sonsbeck, Udem and Weeze. All operations were conducted with navigational aids. On several occasions intense flak was encountered by these aircraft. On the night of 10/11 February 100 Mosquitoes of No. 2 Group harassed road and rail movement in both the Veritable and Grenade areas.

The IXth Air Force had, in the meantime, been engaged in preparatory air attacks in support of Operation Grenade. But while the First U.S. Army was approaching the Roer dams, the enemy destroyed the discharge valves of the Schwammenauel Dam and caused the River Roer to overflow its banks along the entire front of the Ninth U.S. Army. Field Marshal Montgomery had no alternative but to postpone the American operation.

The Strategic Air Forces gave indirect support to Operation Veritable whenever they attacked communications in the Ruhr. But on occasion they intervened directly in the land battle as, for example, on 8/9 February. At 1500 hours on the afternoon of the 8th a pilot of No. 83 Group on tactical reconnaissance reported a concentration of goods

Ibid.

Tbid Sheet Nos. 2550-2558.

No. 2 Group O.R.B. Feb. 1945.

2nd T.A.F. O.R.B. 8 Feb. 1945.

<sup>(1)</sup> Very extensive armed reconnaissances were flown that day by all the Tactical Air Forces and the VIIIth Fighter Command. The heaviest rail traffic was located between Magdeburg and Berlin and between Wurms and Karlsruhe.

Bomber Command Night Raid Report No. 833 wagons and locomotives in the marshalling yard of Hohenbudberg on the west bank of the Rhine near Krefeld. At 1535 hours Main Headquarters, 2nd T.A.F. submitted this report to S.H.A.E.F. (Air). An attack by R.A.F. Bomber Command was at once laid on and at 0615 hours the following morning 151 Lancasters dropped 633 tons on the marshalling yard. The attack was reported to have been rather scattered.

D.S.C./T.S.100/9 Pt. 4 Encl. 47A para. 6.

At the Air Staff Meeting at S.H.A.E.F. that day Air Vice Marshal Oxland, Senior Air Staff Officer, R. A.F. Bomber Command Advanced Detachment at S.H.A.E.F., stated that his Command was uncertain as to the degree of priority to be accorded to special targets requested by S.H.A.E.F. informed that the support of the ground forces was to be given overriding priority according to the current directive to the heavy bomber forces. This included priority over oil targets. Other targets were recommended by Air Staff, S.H.A.E.F. were to be regarded not as immediate operational requirements but as Certain members of the meeting accused 'filler' targets. S.H.A.E.F. of impeding the strategic bombing plan by suggesting too many of the latter kind of target. On the other hand it was pointed out that the purpose of the Bomber Command Mission to S.H.A.E.F. was to liase with Air Staff S.H.A.E.F. This apparently was rarely done. and discuss these problems.

See Chap. 4 p. 112.

The VIIIth Air Force attacked the road and rail bridges across the Rhine at Wesel daily from 8 to 11 February but two of the attacks were abortive. The petrol, oil and lubricants depot at Dulmen east of Wesel was bombed as a diversionary target. Air Marshal Coningham had reported to S.H.A.E.F. that Twenty First Army Group had demanded that the Wesel bridges should continue to be bombed until the enemy himself destroyed them. Comments were made on this seemingly illogical request at the Air Staff Meeting at S.H.A.E.F. on 9 February.

VIIIth Air Force Monthly Summary of Ops. Feb. 1945.

By 14 February the First Canadian Army was faced by one panzer, one panzer grenadier, four parachute and three infantry divisions. Flooding had slowed up all progress on the ground. But by the 13th the first phase of the operation had been completed. In the western part of the sector the British had captured Gennep where it was proposed to build a bridge across the Meuse and relieve the congestion at Mook and Grave. They had cleared the Reichwald Forest and were advancing on Goch. On the east the Canadians had secured the west bank of the Rhine opposite Emmerich.

The Ninth U.S. Army, on tiptoe to begin Operation Grenade, was still held up by the floods in the Roer valley. The enemy was therefore free to concentrate his reserves in the north. On the other hand it was hoped that when the U.S. attack began their task would be easier. Furthermore, the postponement of Operation Grenade enabled the IXth Air Force to fly sorties against Veritable targets which otherwise it would not have been in a position to do.

The Second Phase of Operation Veritable. Air-ground Operations 14-26 February

The intention of First Canadian Army in this phase was to penetrate into the second line of defence in the area Goch - Udem - Calcar. On 15 February IInd Canadian Corps took over the left hand sector of the front and advanced upon Calcar and Udem. The XXXth British Corps operated to the east of the River Niers on the axis Goch - Geldern.

No. 84 Group O.R.B. 14 Feb. 1945 and 2nd T.A.F. Daily Log Sheets No. 2562-2579

D.S.C./T.S.100/9 Pt. 4 Encl. 55A para. 6.

No. 2 Group O.R.B. 14 Feb. 1945.

S.H.A.E.F. Air Summary of Ops. No. 121 para. 5.

VIIIth A.F. Monthly Summary of Ops. Feb. 1945.

A.H.B.6 Trans Reports by Intelligence, G.A.F. Operational Staff p.21 Feb. 1945.

2nd T.A.F. Daily Log Sheet No. 2567.

No. 83 Group O.R.B. 14 Feb. 1945.

On 14 February, for the first time since the start of Operation Veritable, intensive air activity was possible. As the morning progressed visibility extended from four to eight miles. Aircraft of 2nd T.A.F. were out in full force. Their tasks were twofold; close support was to be provided for the Army and the remainder of the fighter bomber force was to isolate the battlefield. The main effort in the former category was devoted to the area around Goch and Cleve. Strong points, gum and mortar positions and self propelled guns were attacked throughout the day. The headquarters of No. 180 German Division near Kevelaer was bombed by No. 84. Group and a number of direct hits were claimed. Other fighter bombers attacked fuel and ammunition dumps, the bridge over the Ijssel near Arnhem (a failure) and a staging camp behind the front. Nos. 83 and 84 Groups both accumulated a good score of damaged or destroyed rail transport. Officer Commanding 2nd T. A.F. had already reported on these operations to the Deputy Supreme Commander and pointed out that a congestion of rail transport occurred in the vicinity of rail centres which had just been bombed by heavy bombers. As usual No. 83 Group operated east of the Rhine on armed recommandation and No. 84 Group divided its effort over the area between the Rhine and the Meuse and western Holland. Reconnaissance had shown that the roads leading to Emmerich from Zutphen and Arnhem were then in constant use. on armed reconnaissance also strafed villages in the rear areas. On this day a total of 81 rail cuts were made round the battlefield, a big proportion of them being west and south of Wesel.

No. 2 Group contributed no small share towards the day's effort. Its aircraft flew 122 sorties against likely enemy concentration areas at Udem, Weeze, both road and rail centres leading to Goch and Nieukerk and Straelen where the road and railway converged on the fortified town of Geldern. In company with No. 2 Group, the IXth Bombardment Division attacked targets in the Veritable area for the second time. Just under 200 effective sorties were flown against the towns of Geldern, Kevelaer, Issum, Camp, Xanten and Goch. Results claimed by aircrews varied from good to excellent. The remainder of the IXth Air Force, including fighter as well as medium bombers, bombed bridges east of the Roer in preparation for Operation Grenade.

The VIIIth Air Force made its fifth attack on the two Wesel bridges and this time put the road bridge out of action. One span at the western end was destroyed and the framework was seen to be sagging in the water. So far the railway bridge was intact.

The good visibility induced the G.A.F. to participate in the battle during the early morning. About 55 Me's 262 and Ar's 234 strafed targets in the area Cleve - Kranenburg - Gennep. They admitted having lost two Me's 262 at the conclusion of the raid. British fighter patrols engaged the enemy between Nijmegen and Cleve but did not shoot down any enemy aircraft. During the afternoon Spitfires, Typhoons and Tempests made attacks on the Munster - Rheine Group of airfields. Here about 86 F.W.190's had been engaged in providing cover for the jet fighter bombers as they came into land. One aircraft was claimed to have been destroyed in the air and three on the ground by No. 83 Group at Munster and Quackenbruck. This event gave the Group cause for self congratulation as on that date it claimed to have destroyed one thousand aircraft since its formation of which 793 had been accounted for since 6 June 1944.



153

2nd T.A.F. O.R.B. App. No. 19 Feb. 1945. The total number of sorties flown by 2nd T.A.F. on 14 February amounted to 1,822 out of which 751 sorties were pre-arranged. Twelve pilots and 13 aircraft were lost as a result of these operations. That evening the Main Head-quarters of 2nd T.A.F. received a message from General Crerar, the Commander of First Canadian Army in which he expressed his appreciation of the support given by the R.A.F. and American Air Commands. He ended with the following words: "The teamwork has been quite first class and the results quite excellent".

The 14th of February was a notable day for air operations in the north west European campaign and the biggest total of sorties since the days of the fighting in Normandy was reached. The VIIIth Air Force was out in strength and bombed the marshalling yards at Magdeburg, Dresden and Chemnitz. R.A.F. Bomber Command attacked the Bielefeld and Altenbeken viaducts. The XVth U.S. Air Force bombed oil targets in Vienna. The total number of sorties for the day was divided as follows:

R. A. F.	Bom	ber Co	ommand		40
VIIIth	Air	Force	e Bombers		1,355
11	11	tt	Fighters		973
XVth	.11	11	Bombers		691
11	n	11	Fighters		379
2nd British T. A. F.					1,822
IXth Air Force				2,297	
1st T.A.F.					881
R. A.F. Fighter Command				417	
C. A. T.	0. R.		ish Sector		114
ii		Amer	ican Sector		191
				Total	9,160

2nd T. A.F.

Daily Log

Sheet Nos. 2580-2581. Heavy bombers of No. 38 Group attacked the towns of Ijsselburg and Rees for the second consecutive night. Results were unobserved because of 10/10ths cloud. The majority of No. 2 Group Mosquitoes harassed movement in districts north and south of the line Roermond-Neuss. Other Mosquitoes operated east of the Rhine with cannon, flares and machine guns.

Ibid Sheet No. 2586 and No. 84 Group O.R.B. 16 Feb. 1945.

Bad weather returned on 15 February and flying was not possible until midday on the 16th. Pre-arranged support on that day was given to 51 (Highland) Division which had outflanked the Forest of Cleve and was advancing on Goch. During the night it captured the villages of Hassum and Asperden about two miles north of Goch shortly after both places had been subjected to attack by No. 84 Group. was a closely co-ordinated air-ground operation. 1413 and 1615 hours 71 Typhoon sorties were flown against Asperden and between 1415 and 1600 hours 37 Spitfires dropped 18 tons of bombs on Hassum. Prisoners of war captured later testified that these areas were evacuated as a direct result of air attacks. Mitchells and Bostons continued their Medium bombers of the IXth Air attacks on Weeze and Udem. Force were reported to have made a successful attack on Rees. Armed reconnaissances east of the Rhine ranged as far as Bremen, Hanover and Minden. Pre-arranged attacks on railways resulted in 37 cuts being made in the vicinity of the battle area and caused a scarcity of rail traffic near the front.

2nd T.A.F. Daily Log Sheet Nos. 2583-2589. 154

For the next four days (17-20 February) there ensure another spell of bad weather. By then the Army had entered the town of Goch although resistance did not finally end there until the 21st. By that time XXXth British Corps held the triangle Bedburg - Calcar - Goch. The Canadians were thrusting with difficulty towards Calcar. The enemy was making a determined effort to hold up the British advance. The celebrated Panzer Lehr division had arrived from the Ardennes sector and counter attacked the Canadians at Calcar. Yet another enemy infantry division had appeared on the scene. Reconnaissance by 2nd T.A.F. showed the most active part of the enemy front to be on the eastern sector around Marienbaum and Udem.

No. 84 Group O. R. B. 16 Feb. 1945.

Pt. 4 Encl. 55A para. 14.

A.M. War Room Summary of Bomber Command Ops. Feb. 1945. Bomber Command O.R.B. App. A. Feb. 1945.

VIIIth A.F. Monthly Summary of Ops. Feb. 1945.

2nd T. A.F. O. R. B. Intelligence Apps. Feb. 1945 No. 84 Group Report on Operation Veritable para. 21.

See p. 167.

2nd T. A. F. Daily Log Sheet No. 2603.

The Main Headquarters of 2nd T. A.F. meanwhile requested S.H.A.E.F. (Air) that a heavy bomber attack be made on Wesel to stop the flow of reinforcements and supplies into the D.S.C./T.S./100/9 Veritable area. The value of such an operation was queried by General Thatcher (Assistant Chief of Staff, A3) but the Deputy Supreme Commander pointed out that there would be congestion in the town if the bridges across the Rhine had been destroyed and detailed R. A.F. Bomber Command for the task. Between 16 and 19 February four daylight attacks were made; 726 sorties were flown and 224 tons of high explosive were dropped on Wesel. Bomber Command met no enemy air opposition but 2nd T. A.F. fighters were at hand should their protection have been necessary. The town and its marshalling yard was severely damaged.

> The VIIIth Air Force made four more attacks on the Wesel bridges and by 24 February both approaches to the railway The bridge bridge were reported as being unserviceable. itself was unharmed. Other targets attacked by this force in the neighbourhood were the marshalling yards at Hamm and Rheine. A minor raid took place against the railway bridge across the Rhine at Duisburg.

> From 21 to 25 February the ground forces made very slow This was reflected in air operations by the large progress. number of 'cabrank' sorties to meet requests for immediate support. But they were fast becoming a drain on the resources of 2nd T.A.F. (92 fighter or fighter bomber pilots were lost from the start of Operation Veritable to 25 February) and it became necessary for the Air Officer Commanding No. 84 Group to restrict air support to those targets which were delaying 'the actual advance of formations'. On 22 February the long planned Operation Clarion was put into action. This was a widespread attack on communications over Germany and both Strategic and Tactical Air Forces were called upon to The part played by 2nd T.A.F. on make the maximum effort. that day may be found in another section. It was in no way connected with the land battle.

> On 21 February an outstanding air attack was made on the Kastel Blijenbeck situated on the high ground dominating Afferden in the western sector, on the axis of advance of 52nd British Division. The strongpoint was completely destroyed by the bombs and rockets of the Typhoons of No. 146 Wing.
> The R. A.F. claims were confirmed by British troops when they occupied the place shortly afterwards. Other attacks made in answer to Army requests took place at Calcar, Sonsbeck, the Forest of Cleve, Kappeln (north of Udem), Weeze and Marienbaum. Typical targets were observation posts, infantry positions, fortified houses, gun emplacements and railway stations behind

## 155

the front. A number of cluster and incendiary (M.76) bombs were used. The destruction of a ferry crossing the Rhine near Rees on 24 February may also have had an effect on the land battle.

No. 2 Group O.R.B. Feb. 1945.

No. 2 Group O.R.B. 21 Feb. 1945.

No. 84 Group O.R.B. 21 Feb. 1945 and XXXth Corps War Diary Entries 22-22 Feb. 1945.

S.H.A.E.F. Air Ops. Int. Summary No. 321 Feb. 1945.

2nd T.A.F. Daily Log Sheets No. 2597-2656.

Tbid Sheet No. 2634 See Chap, 2 p. 38.

Thid Sheet No. 2652.

No. 2 Group added extra weight to the bombing of communication centres in the enemy's rear and attacked Rheinberg, Geldern, Udem and Xanten. As usual these attacks were made in bad visibility but at Geldern and Udem aircrews reported satisfactory results. An unfortunate incident occurred on the afternoon of the 21st when 35 Mitchells of No. 139 Wing were dispatched to bomb Weeze. The leader of No. 320 (Duto The leader of No. 320 (Dutch) Squadron bombed Goch situated about two miles to the north of the proper target. He at once realised his error but was too late to prevent the rest of his squadron from following Troops of 51 (Highland) Division were occupying his example. the town and some twenty to thirty men were killed. Commander of XXXth Corps on learning of the incident demanded that No. 84 Group (responsible for operations on his front) should cease its activities over that sector for the remainder of the day. Fighter bombers which were to have supported 51 (Highland) Division had therefore to be diverted to alternative targets at Weeze and Sonsbeck. On the following day the Air Officer Commanding No. 84 Group expressed his deep regret in a letter to General B. G. Horrocks, Commander of XXXth Corps.

Major General Anderson's IXth Bombardment Division also gave support to the British ground forces on 21 February when 155 aircraft were dispatched to bomb Xanten and Geldern. Aircrews reported excellent results.

Meanwhile air attacks on rail transport north of the Ruhr were intensified and they culminated in Operation Clarion on 22 February. However, heavy rail traffic was observed and attacked after this operation especially on the 25th. The following claims were made by 2nd T.A.F. during the five day period 21-25 February.

Rail Cuts Locomotive		Goods wagons	Motor transport	
332	67 destroyed	272 destroyed	221 destroyed	
	360 damaged	1,385 damaged	465 damaged	

An important target was discovered by Tempests of No. 83 Group on 24 February when they attacked an oil refinery and three oil trains near Celle in the Hanover district. Pilots claimed to have caused a great deal of destruction. On the next day a second attack was made on the oil refinery with one squadron of Tempests and three squadrons of Typhoons from No. 83 Group. The target area was seen to be still on fire and more damage was inflicted.

A reduction in the number of close support missions was the reason for an increase in sorties against Crossbow targets. They took the form of attacks on Diver launching sites, storage areas and the usual interdiction of railways leading into the launching area.

The G.A.F. had, in the meantime, been making a few ineffective low level attacks on Allied troop concentrations in the Cleve area. But their effort was more than offset by the air supremacy imposed by 2nd T.A.F. over G.A.F. bases north of the Ruhr. Consequently the bulk of the enemy's fighter force was forced to adopt a defensive role and provide airfield cover while the jet squadrons were taking off or landing. On

A.H.B.6 Trans Intelligence Reports G.A.F. Operational Staff Feb. 1945 pp. 28-43. 2nd T.A.F. 0.R.B. Intelligence Apps. Feb.-May 1945.

2nd T.A.F.
Daily Log
Sheet No. 2648
A.H.B.6 Trans.
Intelligence
Reports G.A.F.,
Operational
Staff
Feb. 1945 p.43.

Thid

2nd T.A.F. O.R.B. Intelligence Apps. Feb. 1945. 21 February, for example, while 48 Me's 262 and Ar's 234 were despatched on low level attacks west of the Rhine, 80 conventional type aircraft had to provide cover for an hour and a half over the Rheine group of airfields. Only occasionally did British fighters engage the enemy when providing cover or escort. Between 21 and 25 February 2nd T.A.F. claimed to have destroyed 33 enemy aircraft shot down for the most part over or on enemy bases. Tempests accounted for 15 of these aircraft. (1) An outstanding operation of this nature took place on the afternoon of 25 February when 96 enemy aircraft were engaged in providing cover for the jet fighter bombers. Spitfires of No. 442 Squadron (No. 83 Group) engaged one of these formations and were credited with destroying five of the enemy. In fact, ten German aircraft were reported as lost or missing according to the Luftwaffe Command West situation report for that date.

At night Ju's 87 and a few fighter bombers attacked communications and troop concentrations behind the Allied front but the majority of these attacks were aimed at the U.S. sector. Nightly defensive patrols above the Twenty-first Army Group area were flown by No. 85 Group but during the month of February it did not claim to have destroyed more than five enemy aircraft.

## Operation Grenade: 23 February to 10 March

The Ninth U.S. Army had been impatiently awaiting the floods on the River Roer to subside. At last on 17 February, Field Marshal Montgomery decided that, weather permitting, the Ninth U.S. Army would begin its attack on the 23rd. At 0330 hours on that day General Simpson's troops assaulted across the Roer under cover of a powerful artillery barrage. Within a few hours twelve battalions were on the far bank. By the next day a number of bridges had been thrown across the The town of Julich was taken that day and by the 26th Erkelenz was in American hands. The enemy put up little resistance and a large number of prisoners of war was taken. The ultimate objective of the Ninth Army was to seize the left bank of the Rhine from Neuss to Rheinberg to link up with the First Canadian Army. On the right XIXth U.S. Corps advanced on Neuss and Krefeld; in the centre XIIIth U.S. Corps made towards Viersen and Dulken. On the left flank XVIth Corps, entering the battle a few days later, advanced northwest and took Roermond and Venlo. Meanwhile to the south of Ninth U.S. Army, the First U.S. Army began an advance across the upper reaches of the Roer, their object being to close to the Rhine south of Dusseldorf.

While the Ninth U.S. Army was waiting to cross the Roer the air plan for Operation Grenade underwent revision. The heavy air attacks on G.A.F. bases were cancelled for the following reasons. The G.A.F. would be unlikely to interfere with Allied ground operations because of its pressing commitments on the eastern front and elsewhere. The small force of German aircraft available in the west had the choice of operating from a large number of airfields which made a powerful attack against them uneconomical. Countermeasures against jet reconnaissance aircraft would remain the responsibility of 2nd T.A.F. The bombing of the Rhine bridges was

Pile 2nd T.A.F./ 30317/73/Ops.

<sup>(1)</sup> No. 84 Group had acquired two squadrons of Tempests which began to operate on the western front on 24 February. On that day one of these squadrons claimed to have damaged six F.W. 190's in an attack on Plantlume airfield.

also ruled out, firstly, because the enemy possessed sufficient barges and pontoons to cross the river if the bridges were destroyed, and secondly, because the heavy bomber force could not be spared for the long period which would be required for such operations. Finally a list of communications targets to be bombed by the Tactical Air Forces was issued. The medium bombers were to attack 17 railway centres or bridges; the XXIXth and the IXth Tactical Air Commands were to raid 26 small marshalling yards and bridges.

2nd T. A.F. O. R. B. App. No. 22 Feb. 1945. On 14 February the Senior Air Staff Officer, 2nd T.A.F. visited General Nugent at his headquarters to discuss final details of the air plan for Operation Grenade. It was decided that armed reconnaissance should not be concentrated in one area so as to deceive the enemy as to the probable axis of advance. Rail interdiction was to be the most important task for the XXIXth Tactical Air Command together with attacks against small bridges. No. 2 Group assisted by heavy bombers of No. 38 Group was to concentrate on attacks on movement by night in the area of Neuss, Krefeld, Munchen Gladbach and Grevenbroich. Medium bombers of the IXth Air Force were to attack, when possible, the major communication centres behind the enemy's front by day. Finally should General Nugent be short of aircraft, No. 83 Group would provide additional fighter cover.

S.H.A.E.F. (Air) Summary of Ops. Nos. 115 et seq. The XXIXth Tactical Air Command had five Thunderbolt and Mustang Groups available and two more Groups were placed under General Nugent's control for the period of Operation Grenade. Between 8 and 21 February his command attacked road and rail bridges and marshalling yards. The principal targets were bridges across the River Erft, flowing parallel with the Roer, at Zieverich and Grevenbroich from whence roads ran direct to the front. These attacks reached a climax on 14 February. The cutting of railway lines began on the 20th; on the next day fighter bomber pilots claimed to have made 109 cuts. Another important task of XXIXth Tactical Air Command was to provide cover west of the Roer while the Ninth U.S. Army was concentrating for the offensive.

No. 2 Group O.R.B. Feb. 1945. A valuable contribution to the battle was made by the Mosquitos of No. 2 Group which harassed movement by night between the Roer and the Rhine; they also covered the important military route leading from central Germany to Cologne south of the Roer, through Lippstadt, Meschede, Olpe to Siegburg and rail centres and routes on the eastern and southern outskirts of the Ruhr, Mention has already been made of the heavy bomber attacks in the Rhineland by No. 38 Group.

See Chap. 4 p. 125.

S.H.A.E.F. (Air) Daily Ops./Int. Summary No. 1 19 Feb. 1945.

See Chap. 6 p. 183.

Ibid No. 5. 23 Feb. 1945 No. 2 Group O.R.B. Feb. 1945 Meanwhile the IXth Bombardment Division had been occupied with strikes against bridges in the First and Third U.S. Armies' sectors and had succeeded in keeping rail traffic immobile there. On 19 February it began to isolate the Ruhr by attacking bridges on the eastern approaches to the industrial zone. Bridges at Niederscheldt and Pracht on the rivers Dill and Sieg east of Bonn were the first to be bombed. On 22 February nearly all available aircraft of the Ninth Air Force were pre-occupied with Operation Clarion and little was done in the tactical area. Medium bombers were rarely used by the Americans for night operations but on the night of 22/23 February 50 Bostons bombed targets in support of operation Grenade. In company with them Mosquitos of No. 2 Group bombed the towns of Grevenbroich, Zulpich and Kempen using G.H. technique. No results were observed.

S.H.A.E.F. (Air) Daily Ops./Int. Summary No. 5 23 Feb. 1945.

No. 2 Group 0.R.B. 23 Feb. 1945.

SoHoA.E.Fe (Air) Daily Ops./Int. Summary No. 6 et seq.

D.S.C./T.S.100/9 Pt. 4 Encl. 68A. para. 2.

2nd T. A.F. O.R.B. Feb. 1945. p. 109.

A.H.B.6 Trans. Reports G.A.F. Operational Staff Feb. 1945 pp. 39-40.

See pp. 172-173

S.H.A.E.F. (Air) Daily Ops./Int. Summary No. 7 25 Feb. 1945.

Ibid Nos. 11 and 14 1-4 Mar. 1945.

No. 2 Group O.R.B. Feb.-Mar. 1945. On 23 February the day of the ground assault the XXIXth Tactical Air Command flew 525 sorties and attacked armoured fighting vehicles, strong points and motor and rail transport. They also be marshalling yards at Schleiden, Siegburg and Gustorf in the vicinity of the battle zone. Cover was provided overhead while assault bridges were thrown across the Roer. Medium bembers of the IXth Air Force flew 409 sorties against communication centres in the Roer valley at Erkelenz, Elsdorf, Buir, Jackerath, Zulpich, Golzheim and Grevenbroich. Reconnaissance pilots reported that all targets had been severely damaged. No. 2 Group dispatched 69 Mitchells against a railway bridge at Schweinhein south of Krefeld and a road/rail bridge at Neersbroich near Munchen Gladbach. Results were unobserved because of 10/10th cloud.

For the next two weeks the XXIXth Tactical Air Command gave full support to the Ninth U.S. Army. Each Corps was assigned one Group of Thunderbolts for close support. The remaining Groups were employed on armed reconnaissance and rail cutting from the front to Dusseldorf and Cologne. The enemy could do little to resist the American advance as most of his reserves had been committed against the British. But on 25 February the 11th Panzer Division was reported to be detraining west of Cologne. Attacks which lasted for the next three days were made by XXIXth Tactical Air Command against this division which delayed its deployment.

In an attempt to remedy the ineffectiveness of the German Army in this sector the G.A.F. made several large scale bombing attacks against the Roer River crossings on the nights of 24/25 and 25/26 February. During the first attacks two pontoon bridges were destroyed and this caused some delay in ferrying equipment to the far bank. On the second night 220 aircraft (Ju's 87 and F.W's 190) attacked roads, bridges and towns in the Roer valley. Fighter bomber attacks were also made by night against the American spearheads driving towards the Rhine. By daylight some times as many as 125 enemy fighters made sweeps west of the Rhine. But the U.S. probes across the Rhine at Remagen and Oppenheim soon diverted the G.A.F. into attacking these vital points.

The IXth Bombardment Division had been ordered to support Operation Grenade until 26 February but by then it was going ahead with the isolation of the Ruhr and only a small proportion of its effort was devoted to targets west of the Rhine. Nevertheless it bombed communication centres at Grevenbroich, Horren and Quadrath on 25 February. Three rail centres between Cologne and Grevenbroich were bombed on 1 March. Three days later a few U.S. medium bombers operated on the Twenty First Army Group front east of Wesel. Military routes leading to Cologne such as that from Lippstadt to Seigen were also effectively attacked. Another target, the bombing of which probably affected the battle area, was the important ordnance depot at Unna, east of Dortmund, believed to be one of the main supply dumps for the German troops west of the Rhine.

While the American medium bombers operated on the outskirts of the Ruhr by day, the light bombers of No. 2 Group covered approximately the same area by night. In the last week of February these aircraft bombed communication centres, barracks and motor transport parks west of Cologne. East of the Rhine they harassed the railways between Munster and Wesel and lines feeding the rocket launching sites from northern Germany.

#### 159

By 2 March the Ninth U.S. Army had cleared Neuss and reached the left bank of the Rhine. The enemy was once again trapped in a pocket with one escape route through Wesel. Early on 3 March U.S. troops entered Geldern and joined hands with the 53rd British Division on the northern approaches to the town.

Operation Veritable: The final phase: the elimination of the bridgehead west of Wesel. Air-ground operations 26 February to 10 March

On 26 February the IInd Canadian Corps began the assault (Operation Blockbuster) against the Hochwald 'layback', its object being to reach Xanten on the west bank of the Rhine opposite Wesel. The First German Parachute Army fought with savage determination and progress was still slow across the water-logged ground. But the Canadians operating by night as well as by day methodically drove the enemy back.

Full scale air operations were planned to give impetus to the attack. The main feature was to have been a powerful strike by No. 2 Group against the anti-tank gun screen in front of the Hochwald Forest. Fighter bombers were to have contributed to this operation by dropping cluster bombs among the gun crews. In addition, 2nd T.A.F. was to delay the arrival of reinforcements into the battle zone by bombing rearward communication centres. But as so often had happened before, low cloud and rain were responsible for curtailing this plan. Only 88 sorties were flown by British fighters and fighter bombers on the 26th. The effort of No. 2 Group was reduced to 30 sorties against gun positions in the Balberger Wald.

On 27 February similar weather conditions prevailed, the only operations of any importance being two attacks by No. 2 Group against Marienbaum on the northern outskirts of the Hochwald Forest and one raid against the town of Sonsbeck. During the second raid on Marienbaum, Bostons bombed on the Mitchells which were using radar aids. The Mobile Radar Control Post directed Typhoons on to Winnekendonk an important road centre for the Hochwald area.

At night the Mosquitos of No. 2 Group continued their intruder operations. For the second consecutive night an important target had been a big dump at Xanten which was believed to be one of the main sources of supply for the LXXXVI German Corps. On the night of 26/27 February their attacks were supplemented by ten Stirling heavy bombers from No. 38 Group.

By 28 February, the Canadian advance which had been making fair progress was delayed by fierce artillery and mortar fire. Fortunately the mist shrouding the Low Countries lifted by mid-day and enabled 2nd T.A.F. to make its one and only large scale effort in support of the last phase of Operation Veritable. Strikes were made by Typhoons against mortar, artillery and infantry positions in the Hochwald in an attempt to subdue their fire. But the major part of the tactical air effort was devoted to attacks on troop concentration areas and strong points just behind the front line. Such targets were at Winnekendonk, Weeze, Sonsbeck, Kanten and Kempen. Another outstanding close support operation was an attack by three squadrons of No. 151 Wing on a military headquarters believed to be located at Birten about two miles south of Kanten. Outside the battle area fighter bombers severed railways

No. 84 Group O.R.B. 26 Feb. 1945.

2nd T.A.F. Daily Log Sheets No. 2658-2659.

Thid Sheet No. 2662.

Tbid Sheet No. 2660

21 Army Group/ Int./1116 24 Feb. 1945.

2nd T.A.F. Daily Log Sheets No. 2670-2676. leading into the Wesel district in 37 places. In an encounter with a large force of Me. 109's and F.W. 190's over Osnabruck Tempests of No. 274 Squadron claimed to have shot down five of the enemy.

2 Group O.R.B. 28 Feb. 1945.

No. 2 Group despatched 121 Mitchells and Bostons against the road centres of Geldern and Rheinberg. At the latter No results place there was also an important supply depot. were observed after these attacks. Escort was provided by fighters of 2nd T.A.F. At the end of the day 2nd T.A.F. had flown 1117 sorties, of which just over half had been prearranged.

2nd T.A.F. O. R. B. pp. 22, 26

2nd T. A.F. Daily Log Sheet No. 2607

p 138 Mar. 1945.

During the first two days of March there were signs of enemy troop concentrations on the west bank of the Rhine at certain points between Duisberg and Cologne, but opposite Wesel there was, so far, no sign of a break. British reconnaissance aircraft operating by day and by night kept a sharp watch for signs of a general withdrawal. On the ni of 2/3 March Mosquitoes of No. 34 Wing, operating over the Rhine crossings, discovered a large concentration of motor On the night 2nd T. A.F. O.R.B. vehicles along the western bank between Mors and Krefeld and on the approaches to the ferry at Orsoy further down stream. The XXIXth Tactical Air Command was informed and the next morning U.S. fighter bombers claimed to have destroyed over 100 motor vehicles, six armoured fighting vehicles and 29 barges in that area.

No. 84 Group 0. R. B. 1 Mar. 1945.

In the meantine there was a slackening of fighter bomber activity west of the Rhine in the Twenty-First Army Group area partly due to strong cross winds over No. 84 Group bases, and partly because of a decision to reduce the number of close support sorties. This was taken at a conference attended by representatives of No. 84 Group and First Canadian Army on the evening of 1 March. Reference has already been made to the heavy losses then being sustained by 2nd T.A.F. It was, therefore, decided that the number of Typhoons operating in a 'cab rank' was to be reduced; the Forward Control Post was to confine its activities to a divisional or brigade front rather than to be employed on a corps front; fighter bomber attacks on enemy batteries were to be made only when guns were out of range of Allied artillery or in the event of their being especially troublesome to the ground forces.

2nd T. A. F. Daily Log Sheet No. 2681-2696.

However, small fighter bomber strikes were made on Sonsbeck, the Hochwald area, Winnekendonk, Veen and Twistedon (near Kevelaer). A close watch was also kept on barge Aircraft of No. 2 traffic and ferry boats on the Rhine. Group continued to disrupt communications with three raids on Kevelaer and one each on Xanten and Geldern. The last at on Kevelaer was unsuccessful because of the failure of the The last attack G. H. equipment; the towns of Mors and Rheinberg were bombed in its place.

2nd T. A.F. O. R. B. p. 90 Feb. 1945.

D.S.C./T.S.100/9 Pt. 4 Engl. 73A para. 3.

The rapid advance of the Ninth Army towards Neuss and Krefeld was also reducing British air effort west of the Rhine. By 27 February the operational boundary of the XXIXth Tactical Air Command had been extended to the line Venlo - Geldern -Wesel but its aircraft were to operate at least five miles in Consequently there was an front of the British bombline. increase in 2nd T. A. F's fighter activity north of the Ruhr. An agreement was made between 2nd T. A.F. and the XXIXth Tactical Air Command that when enemy jet fighter bombers were reported over the U.S. sector, sweeps would be made by the Eritish fighters over the G.A.F. bases. In fact, on 1 and 2 March nearly over the G.A.F. bases. 2 March, nearly 200 enemy fighter aircraft were engaged either

161

2nd T.A.F. Daily Log Sheets No. 2695. in providing cover to the jets or making incursions west of the Rhine north of Cologne. During that period Tempests and Spitfires of 2nd T.A.F. claimed to have destroyed 17 enemy aircraft, (1) in the course of fighter sweeps. Noteworthy combats were made on 2 March by No. 222 Squadron (Tempests) which claimed five and Nos. 350 and 130 Squadrons (Spitfires) which claimed six aircraft.

2nd T.A.F. O.R.B. Extract from Ops. Log Book p. 31 3 Mar. 1945. By 3 March a more mobile battle was developing on the ground. The Hochwald and Balberger Forests had been largely cleared. To the west XXXth British Corps taking advantage of the hard fighting around the Hochwald made considerable progress towards Geldern and had joined up with the Ninth U.S. Army. Shortly before 1100 hours that day Air Marshal Coningham acting on information that the enemy withdrawal across the river had definitely begun ordered British and U.S. fighter bombers to cover the roads leading to Wesel west of the Rhine. They were to operate on the assumption that there would be no enemy aircraft in the vicinity. For the next week the efforts of 2nd T.A.F. were directed towards harassing the enemy.

D.S.C./T.S.100/9 Pt. 4 Encl. 70A para. 4.

Calls were also made upon the Strategic Air Forces to Twenty First Army Group break up the enemy's withdrawal. requested S.H.A.E.F. (Air) that heavy bombers should make an attempt to destroy the nine bridges over the Rhine between Cologne and Wesel and so isolate the enemy forces then being pushed back by the British - U.S. Armies to the river. the Air Staff Meeting held at S.H.A.E.F. on 27 February both Army and Air Force officers expressed disapproval of this They believed that the harassing of the enemy's scheme. withdrawal could be more efficiently performed by fighter Not only was there insufficient time in which to bombers. carry out heavy bomber attacks but the fact that the enemy had an ample supply of ferries, barges and pontoons had been overlooked. They agreed it was far better for the Strategic Air Forces to continue the present policy of destroying German oil production when the Reich was on the point of collapse. Air Chief Marshal Tedder, who was presiding, once again quoted the example of the Seine crossings during the previous summer when so much enemy equipment had been saved.

2nd TyAsF. O.R.B. p. 95. 28 Feb. 1945. R.A.F. Bomber Command O.R.B. App. A. Feb. 1945. In any case the rapid advance of the Ninth U.S. Army made the planning of bomber support operations extremely difficult. On 28 February, for example, at 0200 hours, General Simpson had requested a heavy bomber attack on News. This was at once passed on to R.A.F. Bomber Command and a force of 307 aircraft was dispatched that morning but all the bombers had to be recalled owing to the close proximity of Allied troops to the target area. On 3 March General Simpson informed Headquarters, Twenty First Army Group that the present rate of the American advance made it unsafe to make heavy bomber attacks on the Wesel and Duisburg bridges and the Dusseldorf marshalling yard. Instead a force of 128 R.A.F. heavy bombers were dispatched to bomb the marshalling yard at Wanne Eikel in the Ruhr.

2nd T.A.F. O.R.B. p. 32 3 Mar. 1945.

On the night of 3/4 March photographs by reconnaissance aircraft of No. 34 Wing taken over the Homberg area (opposite Duisburg) revealed concentrations of between 80 to 200

2nd T.A.F. O.R.B. p. 35. Mar. 1945.

<sup>(1)</sup> Daily reports issued by Luftweffe Command West claim that 14 aircraft were lost and 20 were missing for these two days on the northern sector of the front. (A.H.B.6 Prans: Int Report G.A.F. Operational Staff March 1945 pp. 4-12).

vehicles. Bombers of No. 2 Group were ordered to stand by but the Ninth U.S. Army still refused to permit bomber attacks on the west bank of the Rhine. On the 4th the weather was too bad for U.S. tactical air units to attack the targets as they had done on the previous day.

2nd T.A.F. Daily Log Sheets No. 2700, 2713. In the meantime a five mile safety limit had been fixed round the Wesel bridges and No. 2 Group was ordered to bomb them. Two attempts were made on 3 and 5 March (157 sorties) to destroy both the rail and road bridges. On both cases the targets were covered with cloud and it was difficult to ascertain what destruction, if any, had been done. On the last attack aircrews believed they had damaged the eastern end of the road bridge. During the final attack on the afternoon of 5 March the Mitchells experienced some difficulty in locating the target because of 'Window' dropped by R.A.F. Bomber Command aircraft then engaged in a raid on Gelsenkirchen in the Ruhr.

The bombing of the Wesel bridges on the 5th was evidently effective for at midday on that date the XXIXth Tactical Air Command informed 2nd T.A.F. that the west bank of the Rhine opposite Wesel was congested with troops waiting to withdraw across the river. No. 84 Group was ordered to attack the choke point in conjunction with the American Air They were also to strafe ferry boats in the neighbourhood of Wesel. East of the Rhine both Composite Groups were to block the enemy's escape routes and delay the arrival of reinforcements. At that date the areas defined by 2nd T.A.F. for armed recommaissance were as follows. The XXIXth Tactical Air Command covered the southern approaches to the Ruhr from Cologne as far east as Soest, Paderborn and Kassel while its scuthern boundary was the River Sieg. No. 83 Group operated from Groenlo (south eastern Holland) as far east as Hanover and Paderborn and along the northern fringe of the Ruhr to Haltern and Dinslaken. No. 84 Group covered the Netherlands and the coastal belt as far east as Bremen and southwards up the Rhine as far as Rees.

2nd T.A.F. O.R.B. App. No. 73 Mar. 1945.

The prevailing low cloud covered the enemy's movement on 5 March and the small number of aircraft on armed reconnaissance did not claim more than three motor vehicles. Fighter bomber pilots also had to contend with a great concentration of flak in the Wesel bridgehead (it was reckoned that the enemy had assembled upwards of eighty 88mm guns) which made low level flying most hazardous. The greatest number of sorties was consequently flown by fighter aircraft which provided cover to No. 2 Group and swept the G.A.F. airfields.

2nd T.A.F. Daily Log Sheet No. 2712 et seq.

As Wesel had become such an important communication centre to the enemy, Twenty First Army Group asked for it to be bombed again. At the S.H.A.E.F. (Air) Meeting on 4 March the Deputy Chief of Staff (Air) ordered that a visual attack should be made provided the target had been cleared with the Ninth U.S. Army. On the evening of 6 March (which had been a very cloudy day) a small force of 48 Lancasters attacked Wesel with the object of destroying enemy troops and equipment in the town. During that night 138 heavy bombers of R.A.F. Bomber Command dropped 460 tons of H.E. over Wesel. The town had already been partially devastated by previous raids and the additional debris and craters made further road blocks.

Pt. 4 Encl. 76A
para. 5.

R.A.F. Bomber
Command O.R.B.
App. A.
Mar. 1945.
R.A.F. Bomber
Command Night

Raid Report

No. 857.

D.S.C./T.S.100/9

163

2nd T.A.F. O.R.B. p. 41 6 Mar. 1945.

No. 83 Group Intelligence Summary No. 261.

No. 2 Group O.R.B. Mar. 1945.

The enemy completed his withdrawal across the Rhine under cover of low cloud and drizzle during the next three days (7-10 March). A German officer captured by the Canadians stated that the Wesel railway bridge was still intact and had been converted to take two lines of motor To the south the enemy withdrew with greater rapidity and by 7 March the west bank of the Rhine between Rheinberg and Cologne, except for small pockets, was clear of the enemy. Aircraft of 2nd T. A.F. could no longer operate over the Wesel bridgehead because of the low cloud and the intense flak and devoted their attention to harassing road and rail traffic leading to Wesel from the east and to the Zwolle - Enschede district where the majority of the rocket launching sites were located. Large sections of the rail track had been taken up for repair around Enschede. An order issued by 7th German Parachute Division captured about this time stated that 'the enemy's attacks on lines of communication and transport seriously affect supplies to the fighting troops unless units themselves take prompt action to clear away damage'.

No. 2 Group had also shifted its attacks to railway centres east of Wesel with the object of harassing the German withdrawal. On 9 March 121 Mitchells and Bostons raided Dorsten and Haltern. On 10 March No. 2 Group made its deepest penetration into Germany since Operation Clarion when it bombed the marshalling yard of Burgsteinfurt between Munster and Rheine. Spitfires and Tempests gave escort to the bombers and continued to scour the G.A.F. bases but did not shoot down more than three of the enemy.

By 9 March the IInd Canadian Corps had occupied Xanten and the Ninth U.S. Army had reached Ossenburg four miles south of Wesel. The XXX th British Corps had swung eastwards on Wesel. In the early hours of 10 March the German rear guard withdrew across the Rhine and blew the Wesel railway bridge. The remaining bridges between Wesel and Cologne had also been destroyed by the enemy and Allied troops had reached the left bank of the Rhine in that sector by the same date.

## Summary of Operations Veritable - Grenade

The first phase of General Eisenhower's plan to close to the Rhine was now complete. Operation Veritable had been a long drawn out battle which lasted for four weeks due to the bad weather conditions in which it began and the fanatical resistance of the German Army. But the postponement for a fortnight of the Ninth U.S. Army offensive because of the floods on the Roer proved to be advantageous to the Allies. The enemy who had deployed the bulk of his reserves in the north was threatened with converging attacks on both flanks and was compelled to withdraw in order across the Rhine. The great importance of the Ruhr was the real reason for the fierce stand west of the Rhine but his heavy losses made the enemy incapable of defending that great river obstacle. A total of 53,000 prisoners was taken by the British and U.S. forces and it was reckoned that the enemy casualties were about 40,000 men killed or missing.

The co-ordination by the Air Officer Commanding in Chief, 2nd T.A.F. of operations of both British and U.S. tactical air units worked smoothly and there was no friction or misunderstanding when American aircraft were controlled by

164

the British or vice versa. The non-existence of a boundary line between the two British and U.S. Armies considerably simplified close support operations.

The slow progress on the ground made a greatly increased number of close support requests both for Strategic as well as for Tactical Air Forces necessary. For example, No. 84 Group, concerned entirely with Operation Veritable, flew 11,151 sorties during this phase of which 2,628 sorties were flown on pre-arranged or impromptu missions, for the most part in support of the Army. It became necessary to restrict 'cabrank' operations to a divisional or brigade rather than a corps front. R.A.F. Bomber Command flew 1,792 and the VIIIth Air Force flew 563 sorties in support of Veritable and Granade. This was a diversion from strategic attacks on oil and communications targets.

The prolonged battle west of the Rhine prevented 2nd T.A.F. from going forward with interdiction and harassing preparations to support the crossing of the Rhine by Twenty First Army Group later in March. Moreover, Air Marshal Coningham had hoped to have forward landing grounds closer to the Rhine so as to give effective support to the ground forces when they were advancing east of the river. But the engineer resources of Twenty First Army Group became absorbed in road building and repair during the thaw period when troop concentrations for Operation Veritable Air Marshal Coningham has stated his were in progress. opinion that a boldly planned offensive begun earlier, while the ground was still hard, would have gained the main objectives of Operation Veritable more quickly even though there would have been fewer troops available.

A.M. Coningham's Draft Report on 2nd T.A.F. Operations. paras. 213-214.

The Allies enjoyed complete air superiority throughout the operation and the Typhoon and Spitfire force of No. 84 Group could be used solely for close support when required. Such air superiority made armed reconnaissance sorties more manoeuvreable as aircraft could work in twos or fours instead of in larger formations. On the other hand the concentration of flak at vital points along the Rhine eventually became a serious deterrent to fighter bomber operations. Light and medium bomber operations were also affected because of the number of aircraft which returned with minor flak damage and thus reduced the number of sorties in subsequent operations. Another feature of the Rhineland battle was the use of the Mobile Radar Control Post when bad weather precluded air-ground attack by visual means.

A final point appertaining to the more fluid stage of the Rhineland operations was the difficulty experienced by air headquarters in planning heavy bomber attacks during a rapid advance. When the enemy was withdrawing from his bridgehead opposite Wesel, for example, several heavy bomber attacks were cancelled because Allied troops were too close to the target area. This took place at a time when the heavy bombers involved in the operation could have been used profitably elsewhere.

Air Marshal Coningham therefore asked Twenty-First Army Group firstly to explain to Army Commanders how important it was that they should be able to forecast the position of their forward troops at least 12 hours ahead and secondly that they should evolve a system whereby forward elements, out of touch with the main body, would display recognition signals to Allied aircraft overhead. The Chief of Staff Twenty-First Army Group issued instructions on these lines to the three Armies

2nd T. A. F. O. R. B. App. No. 36. Mar. 1945.

#### 165

At the same time Nos. 83 and 84 Groups were under command. instructed by 2nd T.A.F. to make sure that the mobile columns which they would support on future operations were equipped with contact cars and that reconnaissance aircraft should check their positions at regular intervals. Such information would be of invaluable assistance to the planning of heavy bomber operations. (1)

## Strategic Air Operations: Operation Clarion

The battle of the Rhineland was accompanied by an intensive bombing of benzol plants and oil refineries which still assumed precedence over communication targets. it was the opinion of the Deputy Supreme Commander and S.H.A.E.F. G.2 that, as the fuel shortage on the western front was so acute, there was little point in expending such a great D.S.C./T.S.100 effort on these plants. They suggested that the ground Pt. 9, Encl. 66A. offensive would derive more benefit from attacks on communications in the Ruhr which would be combined with the interdiction of this area. The Deputy Ohief of Air Staff, who conferred with the Deputy Supreme Commander on 22 February, refused to lower the priority of benzol targets. Combined Strategic Targets Committee stated, at this time that the remaining three large oil refineries in central Germany and the benzol plants in the Ruhr were responsible for producing about 50 per cent of the enemy's fuel production and must be put out of action in order to cripple

the Wehrmacht's mobility.

The activities of the Strategic Air Forces over the Ruhr from 8 February to 9 March are summarised in the following table

Air Force	Oil Targets	Sorties	Transporta- tion Targets	Sorties
R. A. F. Bomber				
Command	Gelsenkirchen	712	Dortmund	149
-	Kamen	875	Datteln	159
=	Politz	475	Dortmund-Ems	222
-	Reizholz	128	Canal	
VIIIth U.S.				
Air Force	Dortmund	731	Harm	348
-	Datteln	219	Osnabruck	329
-	Gelsenkirchen	341	Munster	163
-	Castrop Rauxel	115	Essen	106
-	Essen	116	Rheine	212
44	Langendreer	230	Hagen	111
-	Huls	111	Dortmund	635
	Total	3,653	Total	2,434

At the same time the increased range of the Tactical Air Forces turned their rail cutting and harassing of transport into operations of a strategic character. For example on 11 and 14 February the joint efforts of 2nd T.A.F., the

D.S.C./T.S.100/9 Pt. 4, Encl. 64A and

S.H.A.E.F. (Air) Hist. Record and Diary p. 9 Feb. 1945.

<sup>(1)</sup> Full details of lessons learned in Operation Veritable together with a weather analysis of the period and a report on the use of the Forward Control Post and the Contact car may be found in No. 84 Group's Report on Operation Veritable to be found in No. 84 Group Appendices for April 1945.

File 51/Ops.

File B. C. /S. 32305

IXth Air Force and the VIIIth Fighter Command covered the whole of northern and parts of central Germany from the Rhine 2nd T.A.F./30317/ to Berlin. They foreshadowed a plan for the widespread and simultaneous low level attacks on German communications by all available Air Forces known as Operation Clarion and conceived by General Spaatz who circulated a suggested plan on 17 December 1944. His scheme was in direct contrast to the Air Ministry plan, supported by Air Chief Marshal Tender, for concentrated attacks on the Ruhr industrial area, known during See Chap. 1 p. 19 the autumn of 1944 as Operation Hurricane, and Which, had and Chap. 2 p. 32 never properly been executed because of the poor weather at that time. It was hoped that Operation Clarion would directly benefit the ground forces and that in addition it

- (a) Overwhelm the already strained railway repair organisation.
- (b) Result in a redeployment of flak and a consequent softening of the enemy's defences around priority targets.
- (c) Provide a most effective demonstration to the German nation of Allied air superiority and potential.

D.S.C./T.S.100 Pt. 9 Encl. 21A.

2nd T. A. F.

App. No. 62 Feb. 1945

0. R. B.

D.S.C./T.S.100/9 Pt. 4 Encl. 39A para. 8.

Thid 51/Ops.

The Deputy Chief of Air Staff opposed the plan on 27 December and reiterated his belief that the heavy bombers should concentrate on bombing oil targets. (1) He doubted the ability of Clarion to affect the land situation at the The plan was consequently held in abeyance. case the heavy bombers were then committed to the support of the land battle west of the Rhine. On 1 February, in reply to a question by General Spaatz at the Air Commanders Meeting, the Deputy Supreme Commander pointed out that the Tactical Air Forces were already executing a kind of Clarion by their deep penetrations into the Reich on armed reconnaissance. Meteorological experts, meanwhile, had forecast a spell of good weather for four days after 20 February and S.H.A.E.F. (Air) decided that with the increasing Allied pressure on both eastern and western fronts it was an opportune moment to try out Operation Clarion. The date was fixed for 22 February and the operation was timed to begin at 1300 hours. Encl. 62A para. 2 Air Staff Meeting at S.H.A.E.F. that morning and General Bedell Smith said that it must be made clear to the 2nd T. A.F./30317/ Press that Operation Clarion was an attack on communications and not on morale.

> All the Allied Air Forces in Europe took part in Clarion. Each Air Force was allotted an operational area but individual commanders were to draw up their own schedule of targets. They consisted of bridges, marshalling yards, rolling stock, crossings and signal installations. Only lightly defended or unprotected targets were chosen so that bombers could fly low enough to insure accuracy and could follow up the bombing with machine gun or cannon attacks.

<sup>(1)</sup> Both A. C. M. Harris and General Anderson (Deputy to General Spaatz) were of the opinion that the operation was only practical in the summer months and that heavy casualties would result from interceptions by the G.A.F. (See File B.C./S.32305).

# OPERATION CLARION 22 FEBRUARY 1945 LEGEND RAIL CENTRES WHERE THROUGH RUNNING IMPOSSIBLE HEAVILY DAMAGED MARSHALLING YARDS LOCOMOTIVE FACILITIES DAMAGED FRONT LINES 84 GROUP LUNEBURG WITTENBERGE No. 2 GROUP MEDIUM BOMBERS CELLE STENDA BERLIN RHEINE No. 83 GROUP NORTHEIM R.A.F. BOMBER COMMAND GOTTINGEN SANGERHAUSEN VIII TH AIR FORCE MEININGEN NEUSTADT LICHTENFELS IXTH AIR FORCE WURZBURG SCHWABISCH-HALL IST TACTICAL AIR FORCE FRIEDBURG AHSTETTEN XXTH AIR FORCE KLAGENFURT A M B 1 DIAG M+ 766

2nd T.A.F. O.R.B. App. No. 60 Feb. 1945. For Nos. 83 and 84 Groups Operation Clarion was a normal day's activity and apart from instructions that the minimum effort was to be devoted to close support and cover of Twenty First Army Group, fighter bombers operated in their usual armed reconnaissance areas. An interesting feature of the operations was the number of barges seen in use on the waterways, in itself evidence that rail interdiction was being effective. The XXIXth Tactical Air Command reverted to the control of the IXth Air Force for the period of the operation.

The medium bombers of No. 2 Group made much deeper . penetrations than was their wont but Spitfires of 2nd T.A.F. provided escort. A force of 72 Mitchells and Bostons, flying in formations of six, bombed seven railway stations, four bridges and an aqueduct. One bridge was claimed to have been destroyed and there were near misses on other targets. But the operation was unique in that the Mosquito night intruder force was ordered to fly on a daylight operation. Although only one Wing was detailed in the operation order issued on 1 February, the maximum effort was ordered on 22 February, and three Wings (143 aircraft) attacked targets of opportunity, factories, buildings, signal boxes and railway stations around Hanover, Bremen, Kiel, Wilhelmshaven, Flensburg and along the borders of Holland and Germany. The low flying unleasable aircraft suffer and Germany. The low flying, vulnerable aircraft suffered heavily from flak and 21 Mosquitoes and their crews were This proved to be the biggest loss to any Group or The view of Command which took part in Operation Clarion. the Deputy Supreme Commander on this matter was that original orders for Clarion had been issued two months before and that such an error of judgment could only be attributed to bad planning on the part of Main Headquarters 2nd T. A.F. or No. 2 Group. But from the time of the original conception of Clarion, 2nd T. A.F. had planned to use Mosquitoes in a daylight role and for this reason had requested S.H.A.E.F. (Air) that their operational zone be extended to include the Kiel and Hanover areas.

S.H.A.E.F. (Air) Hist. Record and Diary p. 9 Feb. 1945.

2nd T. A. F. /30317/ 51/0ps.

The claims made by 2nd T.A.F. at the end of the day were as follows:

Target	Destroyed	Damaged	
Locomotives Goods wagons Motor Transport Barges Rail Cuts	28 83 82 9	131 818 193 71	

S.H.A.E.F. (Air) Daily Ops./Int. Summary No. 4 22 Feb. 1945.

Ibid

The IXth Air Force operated in strength south of the Ruhr down to the line Karlsruhe - Crailsheim. The medium bomber force attacked 48 bridges, 15 marshalling yards and junctions and another 15 railway facility targets. Fighter bombers made widespread armed reconnaissances. The Ist T.A.F. was responsible for the Stuttgart area and its medium bomber force bombed 29 railway centres.

The VIIIth Air Force covered central Germany roughly east of a line from Hanover to Nuremburg. Cloud observed many of the targets and bombers returned on the following day to complete their programme. The Fortresses and Liberators flew in small formations like righter bombers and attacked 62 marshalling yards, railway lines, junctions and bridges. R.A.F. Bomber Command operated over the Ruhr

against oil targets that day but a small force of Lancasters

VIIIth A.F. Monthly Summary Of Ops., Feb. 1945.

168

R. A. F. Bomber Command O. R. B. App. A. Feb. 1945.

escorted by R. A. F. Fighter Command bombed the rail viaducts at Bielefeld and Altenbeken but no results were observed. (1) Heavy bombers of the XVth U.S. Air Force flying from Italy also encountered bad weather and were unable to bomb all their targets but they succeeded in hitting 20 marshalling yards in southern Germany and Austria.

A.H.B.6 Trans. Reports by Feb. 1945.

Just under 300 sorties were flown by the G.A.F. to intercept Allied aircraft but this effort was in vain. Intelligence Apart from 2nd T.A.F., losses to Allied aircraft were G.A.F. Operational extraordinarily small and those were for the most part caused Staff p. 33. by flak. According to G.A.F. Intelligence by flak. According to G. A. F. Intelligence Reports the enemy lost 29 aircraft in counter air operations.

> The Allied air effort for 22 February is summarised as follows: --

Air Force	Sorties	Pre-arranged Clarion Targets	Tonnage (Short)	Losses
R.A.F. Bomber Command	207	2	203 (2)	1
VIIIth Air Force Bombers	1,411	62	3,833	7
" " Fighters	868	-		13
XVth Air Force Bombers	770	20	2,000	3
# # Fighters	361	-	-	10
2nd British T.A.F.	1,735	11.	1,47	33
IXth Air Force	1,935	78	1,276	10
1st T.A.F.	946	29	350	10
R.A.F. Fighter Command	330	-	-	-
C.A.T.O.R.	125			-
	8,688	202	8,109	87

S.H. A. E. F. G. 2. Enemy Communications and Supply Summary No. 28.

IIS/108/1 Effect of Air Power on Military Operations in W. Europe p. 65.

It is difficult to assess with any degree of accuracy the effect of Operation Clarion upon the German railway system as a whole but photographs taken on aerial reconnaissance during the following week showed the extent of damage at particular railway stations. As a result of heavy bomber attacks on 22 and 23 February through running was impossible at 24 rail centres in Germany and Austria, there were large bomb concentrations at 25 centres and locomotive facilities were damaged at 11 railway depots. Since Clarion was unco-ordinated with any ground offensive it is unlikely that the land campaign was at all affected. The axiom that heavy bomber forces must achieve concentration in time and place if they are to assist a land operation effectively has now been established as a result of air ground operations in this campaign. The bombing of rail communications west of the Rhine was a more effective kind of Clarion and, in fact, it

- (1) In the original plan for Clarion R. A.F. Bomber Command was to make a standard attack on the Ruhr during the operation or on the nights preceding or following it. (See File B.C./S. 32305). The two viaducts had been assigned to Bomber Command in the plan for the isolation of the Ruhr.
- (2) Not more than 35 aircraft of Bomber Command were engaged in Operation Clarion and therefore only the sorties and tonnage of bombs dropped by this small force have been included.

has already been noted that General Spastz intended the operation to take place at that time. Nevertheless at the time both the Deputy Supreme Commander and the Ground. Staff at S.H.A.E.F. appeared to be satisfied with the results of Clarion.

## Operation Bugle

But in spite of these widespread air attacks concentrated bombing of the Ruhr was believed by S.H.A.E.F. to be the best way to destroy the German economy, and the best way in which the Strategic Air Forces could assist the ground forces at that stage of the war. The Ruhr was the only source of coal for the Reich and the recent bombing of rail centres in Western Germany had thoroughly disorganised the distribution of coal. If continued, these attacks would, it was believed, bring industrial life to a standstill. At the same time the oil offensive had indubitably affected the enemy's mobility on the ground and in the air and attacks on the major centres of oil production should be continued.

D.S.C./T.S.100/9 Pt. 4 Encl. 69A para. 4.

D.S.C./T.S.100

Encls. 66A, 79A.

The Deputy Supreme Commander had always stressed the importance of heavy attacks on the Ruhr since the previous autumn. At the Air Staff Meeting at S.H.A.E.F. on 26 February he suggested that, as Operation Clarion had been a success, it should be followed up by a big attack on communication centres in the Ruhr during the next spell of fine weather; this would be succeeded, in turn, by further widespread attacks. (1) Operation Bugle, as this new plan was called, was discussed at the Air Commanders Meeting on 1 March.

Ibid Encl. 73A para. 13 and S.H.A.E.F. (Air) Hist. Record and Diary p. 1 March 1945.

The divergent views of British and American Air Commanders on strategic bombing which had existed for some time were presented with unusual frankness. On the one hand the Deputy Supreme Commander, representatives from R.A.F. Bomber Command and the Ground Staff of S.H.A.E.F. argued for concentrated attacks on the Ruhr while on the other Generals Spaatz and Anderson and American air officers at S.H.A.E.F. opposed Operation Bugle for the reason that they thought the VIIIth Air Force would suffer heavy casualties from flak in the Ruhr(2) and, secondly, that wide spread attacks would prove equally decisive, combined with a big attack on The discussion was closed by the Deputy Supreme Commander who said that everyone was agreed that oil targets should remain as top priority whenever weather conditions As for air attacks on transportation he was were suitable. in favour of alternating Clarion and Bugle, but that for the immediate future Bugle should take precedence. In any case the decision as to how the Strategic Air Forces should best be employed was the responsibility of Air Marshal Bottomley and General Spaatz.

<sup>(1)</sup> S.H.A.E.F. (Air) stated in the plan for Bugle that there were 17 key railway centres in the Ruhr of which eight were active at that moment.

<sup>(2)</sup> It had recently been reluctant in making visual attacks on marshalling yards around the Ruhn in spite of the fact that aircrews were reporting slackening of flak in the area and that on 19 February a force of 1200 U.S. bombers attacked targets in the Ruhr and returned without loss. S.H.A.E.F. (Air) Hist. Record and Diary. p.8. Feb. 1945.

170

D.S.C./T.S.100 Pt. 9 Encl. 74A.

On the evening of 3 March S.H.A.E.F. (Air) issued an order defining areas of operation (1) for Bugle to the Tactical and Strategic Air Forces and informed them that the time and date for Bugle would be decided upon by the Commanding General, United States Strategic Air Forces, Europe. By error the Air Ministry was not included in the distribution list. The dispute over the selection of heavy bomber targets by S.H.A.E.F. thus re-emerged in a new form.

Ibid Encl. 76A

The Deputy Chief of Air Staff on learning of Operation Bugle sent a signal to the Deputy Supreme Commander on 6 March in which he condemned the continuation of widespread air attacks and quoted the Joint Intelligence Committee's adverse opinion of Operation Clarion. Provided that oil targets in the Ruhr would also be attacked he was in agreement with the aims of Operation Bugle and with the selection of marshalling yards as aiming points. He concluded that the targets would be chosen by the Working Committee (Communications) of the Combined Strategic Targets Committee in consultation with the various Air Forces concerned.

Encls. 77A, 84A.

Air Chief Marshal Tedder was provoked into making an attack upon the system of selecting targets for the Strategic Air Forces whereby "committees and sub-committees have immense influence on the conduct of operations". explained in his reply to the Deputy Chief of Air Staff on 8 March that while he had always acknowledged the authorities controlling the Strategic Air Forces, at the present stage of the campaign, it was difficult to distinguish between heavy bomber operations which directly affected and those which indirectly affected land operations.

D.S.C./T.S.100/9 Pt. 4 Encls. 77B para. 4 and Pt. 5 Encl. 2A para. 3.

Meanwhile the U.S.A.A.F. had apparently accepted the idea of Operation Bugle. At the Air Staff Meeting at S.H.A.E.F. on 9 March General Schlatter (Deputy Chief of Air Staff, S.H.A.E.F.), announced that, weather permitting, Operation Eugle would take place on 10 March and would be followed by Operation Clarion II on the following day. Both Air Chief Marshal Tedder and Air Marshal Robb were then in London. When asked to approve this decision on the telephone, the Deputy Supreme Commander said he would discuss the plan with the Chief of Air Staff and his Deputy. three officers agreed that two days should be devoted entirely to Operation Bugle rather than in alternating Bugle with Clarion and this decision was passed on to S.H.A.E.F. (Air).

S. H. A. E. F. (Air) Hist. Record and Diary App. 1F March, 1945.

In fact poor weather prevented a simultaneous Allied air attack in and around the Ruhr but the heaviest daylight attacks made by R.A.F. Bomber Command during the war were directed against Essen and Dortmund during 11 and 12 March (3413 sorties in two days) and on the 10th a strong attack was made by the VIIIth Air Force in the Ruhr. From 10 to Summary of R. A.F. 20 March 2,383 sorties were flown against railway targets and 1,075 sorties against oil targets in the Ruhr by R. A. F. Bomber Command. The VIIIth Air Force flew 2,738 sorties against railway targets in the Ruhr and west of the Ruhr line

A.M. War Room Bomber Cmd. Ops. and VIIIth Summary of Ops. March 1945.

<sup>(1) 2</sup>nd T.A.F. was to operate north and the IXth Air Force south of the Ruhr while the Ruhr itself was divided into two sectors, R.A.F. Bomber command attacking west and the VIIIth Air Force attacking targets east of the line Essen - Vohwinkel.

171

of interdiction. On the outskirts of the Ruhr the Strategic Air Forces attacked rail viaducts and bridges and on 14 March the Bielefeld viaduct was destroyed by R.A.F. Bomber Command using a ten ton bomb.

Preparations by the Tactical Air Forces for Operation Plunder

No time was lost by the 2nd T.A.F. and the XXIXth Tactical Air Command after the conclusion of Operations
Veritable - Grenade to begin preparatory attacks in support of Operation Plunder, the main crossing of the Rhine north of the Ruhr. While Twenty First Army Group was concentrating for the assault, fighter bombers of 2nd T.A.F. were to cut all railway lines leading into the Wesel - Emmerich area and western Holland; Mitchells and Bostons of No. 2 Group were to bomb the communication centres just east of the Rhine; fighter sweeps were to be maintained over the G.A.F. bases north of the Ruhr with the object of neutralising the jet fighter-bomber force; finally fighter bomber attacks on vital enemy military headquarters in the area of future operations such as those of Army Group 'H' and Twenty Fifth Army were to begin when weather permitted.

The second phase of Allied operations to reach the Rhine - Operation Lumberjack

On 3 March General Eisenhower directed that as soon as the objectives of Operation Veritable and Grenade had been achieved, General Bradley was to invest the city of Cologne and close to the Rhine north of the Moselle. This offensive (Operation Lumberjack) would protect the communications of the Northern Group of Armies and would eliminate opposition by the enemy west of the Rhine against the Rhine assault operations in the northern sector.

The First U.S. Army attack went forward with unexpected The German forces west of the Rhine had been rapidity. depleted as a result of the heavy casualties in the battle of the Ardennes and because so many troops had been switched to the eastern front. They were, therefore, quite unable to meet a series of thrusts along the entire length of the western front. The R.A.F. played a part in this offens: On 1 March a request was made by First U.S. Army for a The R. A.F. played a part in this offensive. heavy bomber attack on Cologne to destroy troops and equipment. The request was approved by General Eisenhower who was touring the front at the time. The target was passed to R. A. F. Bomber Command and on the morning of 2 March 858 Lancasters and Halifaxes dropped 2,898 tons of H.E. on the already devastated city. The aiming points were the Hohenzollern and Deutz bridges across the Rhine and two ferry crossings on the west bank of the river which were within 480 yards of the Hohenzollern bridge. During the attack American troops were only six miles from the western outskirts of the city. Photographs confirmed the accuracy of the attack, the weight of which had fallen in the western quarter of the city. Once again the G.A.F. did not attempt to

By 7 March not only had Cologne been occupied but First U.S. Army troops held the west bank of the Rhine down to Dusseldorf where they linked up with Ninth U.S. Army. Troops of the 9th U.S. Armoured Division had also advanced to the Rhine at Remagen, south of Cologne, and on the evening of the 7th seized the Ludendorf railway bridge.

General Eisenhower has described this event "as one of those

D.S.C./T.S.100/ 12 pt. 2 Encl. 62A.

S.H.A.E.F. Main IIM/A52/1UU A.3 Mar. 1945 R.A.F. Bomber Command O.R.B. App. Mar. 1945. ref.

interfere.

172

S.A.C's Report to C.C.S. p.111 rare and fleeting opportunities which occasionally present themselves in war, and which, if grasped, have incalculable effects in determining future success. He at once ordered General Bradley to exploit this unforeseen situation and five divisions were instantly thrown across the Rhine to reinforce the bridgehead.

D.S.C./.T.S.100/ 12 pt. 2 Encl. 63A

A.H.B.6 Trans. Intelligence reports, G.A.F. Operational Staff March 1945.

D.S.C./T.S.100/ 11 Pt. 2 Encl. 15A.

No. 2 Group O.R.B. March 1945.

S.H. A.E.F. (Air) Daily Ops./Int. Summary No. 4 March 1945.

A.H.B.6 Trans. G.A.F. Int. Reports

D.S.C./T.S.100/ 12 Pt. 2 Encl. 67A.

Thid Encl. 66A. The enemy made desperate attempts to drive back the Americans with hastily assembled elements withdrawn from the fighting in the northern sector. The G.A.F. was committed to destroy the railway bridge and the pontoons thrown across the Rhine by General Bradley's troops. Between 8 and 20 March about 640 sorties were flown against the bridgehead by Ju's 87, Me's 109 and Fw's 190 and jet fighter bombers. Although some damage was caused to the bridge they could not stop the flow of troops to the opposite bank. Within ten days three U.S. Army Corps had been established east of the Rhine. Once again the G.A.F. had shown itself to be ineffectual in providing support to the Army. The enemy also used guided missiles against the bridgehead when, on 17 March, 11 rockets were fired at Remagen from the Hellendoorn area in eastern Holland. This was the first use of the long range rocket as a tactical weapon.

The IXth Air Force played an important part in this battle by providing cover over the bridgehead and its medium and fighter bombers attacked communications leading towards the Remagen area to delay the arrival of enemy reinforcements. During night time Mosquitoes of No. 2 Group covered rail routes between Seigburg, Frankfurt and Hildesheim. The IXth Bombardment Division also struck at G.A.F. air bases in the vicinity and in an outstanding attack on 14 March the IXth Tactical Air Command claimed to have destroyed 58 aircraft and damaged 46 on the ground at the Lippe airfield north of Cologne. These operations evidently hurt the enemy for after 13 March noticeably fewer formations were dispatched against the bridgehead. (1)

The Third U.S. Army which, since eliminating the enemy salient in the Ardennes, had stood on the defensive along the line of the River Kyll advanced towards the Rhine alongside of First U.S. Army troops who had completed their task of closing to the Rhine north of Cologne. On 9 March units of the two Armies met at Andernach on the Rhine north of Coblenz and trapped elements of the Fifth Panzer Army in their converging thrusts. By 11 March the greater part of the west bank of the Rhine down to the Moselle had been cleared of the enemy.

General Eisenhower decided on 13 March that, in view of the success of Twelfth Army Group's operations, he would launch an attack from the Remagen bridgehead (Operation Voyage) towards Frankfurt with the object of diverting enemy troops from the operations of Twenty First Army Group in the north and future operations of Sixth Army Group south of the Moselle. But at the same time First U.S. Army were to hold up to ten divisions in readiness to exploit the bridgehead north of the Ruhr and the scheme was not to prejudice Third U.S. Army's operations on the left flank of Sixth Army Group.

<sup>(1) 2</sup>nd T.A.F. had also intensified fighter sweeps over the northern G.A.F. bases. The Tempest squadrons specialized in this task.

## 173

On the same day the Supreme Commander announced that the target date for Operation Plunder, the main crossing of the Rhine in the north, would be 24 March.

The Third phase of Allied operations to close to the Rhine-Operation Undertone

Tbid Encl. 64A and 65A.

R.A.F. Bomber Cmd. Night Raid Report No. 865.

File B.C./T.S. 31943 Pt. 2 Encl. 128A.

S.H.A.E.F. (Air) Ops./Int. Summary No. 25.

D.S.C's Log S.C.A.F. 240 Mar. 1945. The Supreme Commander had already stated that the Sixth Army Group would launch an offensive to clear the enemy from south of the Moselle and to establish a bridgehead in the Mainz - Mannheim area as soon as the objectives of Operation Lumberjack had been attained. On 15 March, therefore, the Seventh U.S. Army began an attack against the Western Wall defences between Saarbrucken and Pirmasens. The Sixth Army Group had requested heavy bomber support and on the night of 14/15 March 391 Halifaxes and Lancasters of R.A.F. Bomber Command bombed the communication centres and billeting areas of Homburg and Zweibrucken in rear of the enemy's defences. Aerial photographs taken after the attack revealed that in both places railway lines had been severed and roads blocked by rubble and craters. This was the last operation by R.A.F. Bomber Command west of the Rhine for on 17 March S.H.A.E.F. (Air) directed that, because of the rapid Allied advance south of the Moselle, the bombing of targets west of the Rhine should cease unless co-ordinated by S.H.A.E.F.

On 15 March the IXth Bombardment Division and the 42nd Bomb Wing of 1st T.A.F. attacked defended localities at Neunkirchen and Pirmasens in support of the Seventh U.S. Army. The enemy troops west of the Rhine, mainly from the First German Army, were short of fuel and ammunition and resisted feebly once their main defences had been broken. Seventh U.S. Army had penetrated into the Western wall by 19 March and made towards the Rhine. It was supported by In addition extremely further medium bomber attacks. effective support was given by the XIIth Tactical Air Command which flew 3,458 sorties during the first five days of the operation and obtained excellent results against the withdrawing enemy. A significant feature was the quantity of horsedrawn transport claimed as destroyed which indicated the enemy's acute shortage of petrol.

But the enemy's retreat was also thrown into confusion by the Third U.S. Army which, forsaking inter-Army boundaries, on 14 March, struck south west across the Moselle in the enemy's rear instead of advancing north towards the Remagen bridgehead as had been anticipated. The First German Army had no alternative but to withdraw to the Rhine. evening of 21 March General Eisenhower directed that Operations Voyage and Undertone were to be prosecuted vigorously in order to establish a bridgehead across the Rhine in the Frankfurt area. The Third and Seventh U.S. armies were to seize any opportunity of making a surprise crossing of Shortly after the issue of this order, on the the Rhine. night of 22 March, troops of the 5th U.S. Division (Third U.S. Army) advancing south of the Moselle crossed the Rhine at Oppenheim south of Mainz without serious opposition and quickly established a bridgehead. (1)

Airborne landings which were to have supported a crossing by Seventh U.S. Axmy (Operation Choker II) were therefore cancelled.

174

#### Conclusion

By the third week in March the enemy had been defeated in battle west of the Rhine. The Allies held the left bank of the great river from Emmerich to Basle. The operations of the Northern Group of Armies had proceeded more slowly than had been expected and the flooding of the River Roer delayed the advance of the Ninth U.S. Army. The enemy, however, was unable to bring up reserves to slow down the American advance once it began and the final stages of Operations Veritable-Grenade were swiftly concluded. the central sector events took an entirely unforeseen turn and accelerated General Eisenhower's plan of attack. First U.S. Army rapidly cleared the ground west and north of Cologne, while the seizure of a bridge at Remagen gave the Allies a footing on the far bank of the Rhine a fortnight before the major crossing was due to begin. South of the Moselle the enemy entrenched in the Siegfried line had expected that they would be able to stave off an offensive by the Seventh U.S. Army. But units of the Central and Southern Army Groups defeated the German Army in the Saar basin and heavy losses were inflicted on men and material by the Allied Air Forces. Commanders in this sector were ordered to seize any opportunity of crossing the Rhine and this was accomplished by General Patton's troops on the night of 22/23 March. Thus by the target date for Field Marshal Montgomery's crossing of the Rhine two bridgeheads had been established on the right bank.

Report by The Supreme Commander to the C.C.S. p. 146. Instead of fighting behind the formidable barrier of the Rhine the German Armies disintegrated in the watershed between the Maas and the Rhine, in the hills of the Ardennes and the Eifel and finally in the Saar Valley. No trained formations were available to defend the Rhine or to halt the easterly advance of the Allies. As General Eisenhower later wrote in his Report to the Combined Chiefs of Staff, 'The war was won before the Rhine was crossed'.

175

## CHAPTER 6

## OPERATION PLUNDER - THE NORTHERN CROSSING OF THE RHINE

## Plans for Operation Plunder

The main assault crossing of the Rhine began late on 23 March in the area of Rheinberg, Wesel and Rees north of the industrial area of the Ruhr. Army, Naval and Air Forces on a large scale took part in the greatest and most arduous combined operation since the assault across the Channel on The River Rhine at this part of its course was 6 June 1944. about 1200 feet wide with steep banks and a swift current during the spring months caused by the melting snows. Elaborate planning and preparation over several months, were therefore, vital elements of success. Quantities of landing craft for vehicles and personnel and amphibious vehicles and bridging equipment were assembled and the troops who were to make the assault underwent intensive training. While these preparations went ahead, the Allied Air Forces carried out an intensive bombing programme in and around the Ruhr Which began over a month before the assault was due to take place.

Pt.2 Encl. 66A

On 13 March the Supreme Commander confirmed that Twenty First Army Group with the Ninth U.S. Army on its right flank under command of Field Marshal Montgomery would secure a D.S.C./T.S.100/12 bridgehead across the Rhine North of the Ruhr which would be a base for future operations to encircle the industrial The target date was to be 24 March. region. Allied Airborne Army employing the XVIII Airborne Corps was to support the assault. The Allied Air Forces were to give the highest priority to operations in connection with the northern crossing of the Rhine.

See Chap. 2 p. 63

But by the target date for what was intended to be the first and biggest of the crossing operations, there were already in existence two considerable bridgeheads across the The larger bridgehead, at Remagen, extended to a depth of ten miles on a front of 25 miles while the Oppenheim bridgehead, only two days old, was already six miles deep and nine miles wide. These developments strengthened what appears to have been a predilection of General Eisenhower's for a drive into central Germany to divide the Wehrmacht and to capture the Leipzig area. From then onwards he seemed to be less and less impressed with the advantages of advancing direct to Berlin across the north German plains. evening of 24 March, the day that the assault across the Rhine in the north was launched, the Supreme Commander, in a signal to the Combined Chiefs of Staff, gave it as his opinion that everything should be done to exploit the success in the southern bridgeheads and on the following day the First U.S. Army was switched from its former role of supporting Field Marshal Montgomery and was made available to support operations from the Remagen bridgehead.

See Chap. 5 p. 172

## Plan of the Twenty First Army Group

File D.S.C./H.12 21 Army Group Orders for the Battle of the Rhine 9 Mar 1945

Field Marshal Montgomery exercised command over all the forces taking part in the crossing of the Rhine north of the At his disposal were the Second British Army, the Ruhr. Ninth U.S. Army and the First Canadian Army. The airborne troops of the XVIIIth U.S. Airborne Corps comprising one British and one American Airborne Division were also placed under Field Marshal Montgomery but the planning and execution of Varsity, as the airborne operation was called, was

176

undertaken by the First Allied Airborne Army commanded by General Brereton and will therefore be dealt with subsequently.

The intention of Field-Marshal Montgomery was to cross the Rhine north of the Ruhr and secure a firm base from which he could carry out operations to isolate the Ruhr and deliver a thrust towards the capital of the Reich. This was in accordance with the plans of General Eisenhower approved by the Combined Chiefs of Staff in January of that year.

See Chap. 4 p. 109 et seq:

Field-Marshal Montgomery decided to cross the Rhine between Rheinberg and Rees with the Second British and the Ninth U.S. Armies. The River Lippe which meets the Rhine just south of Wesel was to be the boundary line between the British and the Americans. The Second British Army was to attack to the north of this line and the Ninth Army to the south.

See Chap. 5 p. 162

The main objective was Wesel, a very important communications centre, already much bombed, since it had been one of the principal crossing points of the German forces retreating to the east of the Rhine. Three highways extended from Wesel to north-west Germany. One led to Enschede and Bremen, another to Munster and Osnabruck, and the third to Hamm and Crossings by the Second British Army in Naval and other assault craft were to take place at Rees, Xanten and At the same time the Ninth U.S. Army was to assault between Rheinberg and Orsoy, its main objective being Dinslaken on the east bank. (1) It should be mentioned here that the role of the First Canadian Army during this phase was to protect the assaulting forces from the north and north-east, for it was possible for the Twenty Fifth German Army to threaten Antwerp and the Twenty First Army Group's main line of communication.

Operations to expand the bridgehead after the crossing were to be undertaken in three phases. The first task of the British was to secure the road centre of Wesel against enemy counter attacks; following this the Second and the Ninth Armies were to push inland in order to give sufficient protection for the bridge-building operations which were to take place at Wesel, Xanten and Rees. In the third phase all three Armies were to expand to the east and the northeast so that further offensive operations might be initiated as the Supreme Commander directed. Field-Marshal Montgomery intended the Second Army to advance to the north-east on the axis of Munster; the Ninth U.S. Army was to advance in a similar direction but south of the British and was to include Hamm as an objective. The First Canadian Army was to cross the Rhine at Emmerich and Arnhem and capture Deventer and Zutphen and it was to be responsible for opening up a supply and communications route through Arnhem to the north-east.

Air Plans for offensive operations

#### Allied Air Forces Available

Log D.S.C. 3.C.A.F.231 13 Mar 1945 As he considered that the crossing of the Rhine would be the last major operation in north-west Europe, General Eisenhower had laid down that the utmost support was to be given by the Strategic and Tactical Air Forces.

<sup>(1)</sup> This assault was known as Operation Flashpoint.

## 177

## The Air Forces concerned were as follows:

- 1. R.A.F. Bomber Command
- 2. The VIIIth Air Force
- 3. The 2nd Tactical Air Force
- 4. The IXth U.S. Transport Carrier Command
- 5. Nos. 38 and 46 Groups
- 6. The IXth U.S. Transport Carrier Command
- 7. R.A.F. Fighter Command.

In addition to these forces R.A.F. Coastal Command was to carry out diversionary operations on the Dutch Coast and units of the XVth U.S. Air Force operating from Italian bases were to make an attack on a tank factory in Berlin on D Day. It was hoped that these operations would assist in drawing away enemy fighters from the main area of operations.

## Enemy Air Forces available

Allied intelligence officers had reckoned that there were approximately 80 jet aircraft available for operations against the bridgehead but as these aircraft were able to use only a limited number of airfields the effort likely to be made was not thought to be very high. Night groundattack fighters were believed to amount to 135 aircraft which were centred in the Dortmund-Cologne area. But German orders of battle discovered lately show that there were in fact no more than 70 of these aircraft. Single engined fighters whose strength had been husbanded for some time were believed to number approximately 625 aircraft, of which 455 were within range of the bridgehead (150-160 miles). Out of this total 370 were presumed to be stationed in the Rheine-Achmer area. Research into the records of Luftwaffe Command West has revealed that there were, in fact, approximately 430 single engined fighters on the western front on 15 March 1945.

Although airfields in north-west Germany were in good condition, and, even if bombed, could only be put out of action for possibly 36 hours, shortage of fuel and aircrews and the steadily increasing pressure from the eastern front put the G.A.F. at a strong disadvantage. Allied air officers believed that only at night would it have a chance to interfere seriously with ground operations.

## Plans for air support to Operations Plunder, Varsity and Flash Point, 28 February to 21 March

The Air Officer Commanding-in-Chief, 2nd T.A.F., was placed in control of all air operations in support of the airborne landings - Operation Varsity. He controlled operations by the Strategic Air Force in so far as they were connected with support to the airborne operation. The plan for air operations in support of the assault across the Rhine by Twenty First Army Group (Operation Plunder) was also worked out by 2nd T.A.F. and included operations of the XXIXth Tactical Air Command which was then under its command.

H.Q.F.A.A.A. Revised Plan for Varsity App. C.

German Document. Luftwaffe West Order of Battle 15 Har 1945 A.H.B.6. Trans.

File 2nd T.A.F./30317/ 74/Ops.

178

But requests for heavy bomber support still had to be approved by S.H.A.E.F.(Air) in the normal manner. (1)

The first conference on the airborne operation and requirements for air support was held at S.H.A.E.F. (Forward) at Reims on 28 February. Air Chief Marshal Tedder, General Brereton (Commanding General First Allied Airborne Army), General Vandenberg (IXth Air Force), Air Vice Marshal Scarlett-Streatfeild (No.38 Group) and representatives from the VIIIth Air Force and Bomber, Fighter and Coastal Commands R.A.F. were present. (2)

D.S.C./T.S.100/9 Pt. 4 Encl.71A.

An exposition of the airborne operation was given by Major General Ridgway, Commander of the XVIIIth U.S. Airborne Corps. The main features of the plan were that the airborne operation, instead of being launched simultaneously with the ground assault, (to begin under cover of darkness) was to take full advantage of the great Allied air superiority in the west and was timed for the morning or early afternoon of D Day. (3) This was the first occasion on which the airborne assault was to follow upon the launching of a ground offensive. It would help to ensure a speedy junction with the ground forces fighting their way inland from the river. The dropping-landing zones were all to be within two or three miles of the Rhine so that the two forces should experience no difficulty in linking up on that same day.

There were three major tasks for the Air Forces. Firstly they were to protect the vulnerable troop carrier aircraft on their journey from the U.K. to the droppinglanding zones east of the Rhine. Secondly, they were to protect these zones from air and ground attack. bomber raids on G.A.F. airfields in the neighbourhood would safeguard them from the air while medium and heavy bomber attacks on all the nearby communication centres would prevent the arrival of enemy supplies and reinforcements. The 2nd T.A.F. was to provide for attacks on enemy troop movements towards the battle area - a feature which had been neglected during the Arnhem operation. The third task was the silencing of flak positions in the Wesel area which was The third task was to be the sole responsibility of 2nd T.A.F. Another task which had been neglected before the launching of Operation Market was that there should be an increase of photographic reconnaissance before the assault to discover both the location of flak and the movements of enemy reserves towards the battle area.

<sup>(1)</sup> On 22 March, Air Marshal Coningham stated at an "off the record" Press Conference that he was co-ordinating and directing all the Air Forces during the crossing. In fact operations by the Strategic Air Forces had been co-ordinated at S.H.A.E.F. on the previous day (see page 181). The Deputy Supreme Commander later confirmed that Air Marshal Coningham's claim was unfounded. (See S.H.A.E.F. Hist. Record and Diary Mar. 1944, Verbatim Report of A.O.C. in C. 2nd T.A.F.'S Fress Conference, 22 March and File A.E.A.F.33814/47/II).

<sup>(2)</sup> Representatives from 2nd T.A.F. and Twenty First Army Group were unable to be present because of bad weather.

<sup>(3)</sup> In addition the transport aircraft would not be subjected to attacks by German night fighters.

179

Air Marshal Coningham's Report on 2nd T.A.F. Ops. Page 49. Air Marshal Coningham had meantime charged the Air Officer Commanding No. 83 Group, Air Vice Marshal Broadhurst, with the planning of air cover in a semi-circular area stretching for 50 miles beyond the Rhine. He also made him responsible for the destruction of flak positions around the dropping-landing zones. At Air Vice Marshal Broadhurst's disposal were the resources of No. 84 Group and the XXIXth Tactical Air Command as well as No. 83 Group. These plans were concerted with the headquarters of the Second British Army. (1)

2nd T.A.F. O.R.B. App. No. 5 Mar 1945 On 5th March the Senior Air Staff Officer of 2nd T.A.F. Air Vice-Marshal Groom, sent a report both to S.H.A.E.F. and the Chief of Staff, First Allied Airborne Army on the progress of the planning. He stated that heavy bombers would be required to attack Wesel and Rees prior to the assault and enemy jet airfields both before and on the day of the airborne operation. He informed them that the destruction from the air of flak positions (a joint air-artillery effort) had increased in importance as it had been foreseen that the artillery would not be able to reach the enemy guns on the far side of the dropping zones. They would have to be attacked by medium as well as by fighter bombers with fragmentation bombs before the airborne landing began.

Other important points in his report included a criticism of the plan to drop dummy paratroops on the day of the operation which he believed would be ineffective in causing a re-deployment of enemy forces. Further, he asked that re-supply missions should be reduced to the minimum otherwise they would only complicate and interfere with tactical tasks such as escort attacks on flak positions and immediate support missions.(2)

Ibid Apps. No.34 and 38 Mar 1945. On 17 March a conference to co-ordinate the air plan for Operations Varsity, Plunder and Flash Point was held at the Main Headquarters of 2nd T.A.F. at Brussels. Present were Air Marshal Coningham and representatives from all Air Forces and Air Commands taking part in the operations as well as officers from First Allied Airborne Army and Twenty First Army Group. Air Marshal Coningham explained the general plan for ground and airborne operations and said that the ground forces were prepared to delay the attack for five days should weather conditions prove to be unfavourable. The Senior Air Staff Officer of No.83 Group, Air Commodore D. A. Boyle, then expounded the air plan, after which it was discussed in detail.

At the end of the conference the Brigadier General Staff Operations, Twenty First Army Group, Brigadier Belchem asked whether it might not be possible to start heavy bomber attacks three or four days before the assault in the area between Dusseldorf and Emmerich, as the enemy must know roughly where the attack would take place. He informed the conference that his Headquarters wanted as many enemy troops, guns and equipment to be destroyed as possible, and that communications should be disrupted. He stressed the difficulties of crossing a river like the Rhine, and said that once across it they had to face well tried divisions of

<sup>(1)</sup> Both the British Air and Army Headquarters were located at Eindhoven Holland.

<sup>(2)</sup> See the Arnhem Operation. Liberation of N.W. Europe Vol. IV. Chap. 7.

the First Parachute Army and the XIVIIth Panzer Corps. This was the climax of Allied strategy on the western front and nothing should be spared to make the operation successful. Air Marshal Coningham replied that the Air Forces would do all they could to assist the ground forces, but that only suitable and specific targets could be chosen. A meeting was then arranged to take place at the Headquarters of Second British Army on the following day to select suitable targets. Representatives from the Strategic Air Forces as well as from Nos.2 and 83 Groups were to be present.

0

The air plan for Operations Varsity, Plunder and Flash Point was issued by 2nd T.A.F. on 20 March. The tasks of the Air Forces has been summarized as follows:-

- (a) The establishment and maintenance of air superiority over the assault area and dropping-landing zones.
- (b) The neutralisation of flak.
- (c) Fighter protection of the troop carrier aircraft.
- (d) Close support of the ground and airborne forces.
- (e) The prevention of enemy movement in and between the battle area.
- (a) Fighter cover was to be provided by Nos. 83 and 84 groups, 2nd T.A.F. over the Second Army area and by the AXIXth Tactical Air Command south of the River Lippe over the Ninth U.S. Army zone. These operations were not considered sufficient to guarantee complete air superiority. therefore, decided to bomb all the airfields within fighter range of the bridgehead so that enemy aircraft would be unable to take off during the critical phases of the A number of these were believed to harbour both operation. jets and night ground-attack fighters. These were to be bombed by the VIIIth Air Force not only before the operation but also on D Day itself. In addition to this armed reconnaissances were to be carried out by the VIIIth Air Force beyond the fifty mile belt to prevent enemy aircraft reaching the bridgehead. This force was also to patrol G.A.F. airfields during D Day.
- (b) Flak amounting to about a thousand light and heavy anti-aircraft guns had been amassed in the Bocholt-Brunen area. Many of these guns had been drawn from the Ruhr where they had been used to combat the attacks of R.A.F. Bomber Command. The anti-flak programme(1) was to be carried out by medium and fighter-bombers and artillery. No.83 Group was to co-ordinate these operations for which purpose an anti-flak committee had been set up to consider suitable targets.
- (c) Escort tasks were to be carried out by R.A.F. Fighter Command and the Ninth Air Force. Aircraft of these Commands were not to proceed east of the Rhine as fighter protection could then be provided by 2nd T.A.F. and Tactical Air Command.
- (d) Close support was to be carried out by both heavy bombers and fighter-bombers. The capture of Wesel was the main objective of the Second Army and R.A.F. Bomber Command was to give close support in two attacks which were to be

2nd T.A.F. O.R.B. App. No.42 Mar. 1945 and No.83 Group O.R.B. App. C Mar. 1945 made on 23/24 March. Rocket-firing Typhoons of 2nd T.A.F. and fighters of the XXIXth Tactical Air Command were to assist both ground and airborne troops with attacks on prearranged targets and to answer requests from the advanced infantry formations.

(e) Attacks on enemy movement were to be made by both Tactical and Strategic Air Forces. The Tactical Air Forces were to cut all railway lines likely to be used by the enemy during the battle. Their medium bombers were to attack communication centres in the vicinity of Wesel up to D Day and on D Day itself. R.A.F. Bomber Command was to attack certain road/rail centres either on the eve of the assault or on D Day. Armed reconnaissances were to be continued throughout the preparatory phase and on D Day by the Tactical Air Forces. The VIIIth Fighter Command was to fly armed reconnaissances outside this area on D Day.

File 74/0ps

The plan for additional heavy bomber attacks was submitted to S.H.A.E.F. on 19 March. In the Second British Army area there were 26 targets, small towns or villages believed to be focal points in the enemy's defence system, 2nd T.A.F./30317/ all of which were north of the River Lippe. South of the Lippe 16 targets, mostly barrack areas were chosen for The object was to prevent the enemy from resting attack. or sleeping by successive attacks, to destroy communications, to delay the forward movement of reinforcements and supplies and finally to retard the preparation of defences east of the river.

> Targets south of the Lippe were to be engaged by heavy bombers because of the intensity of the flak which made medium bomber attacks too expensive. Both lists of targets were to be raided on equal priority so that the surprise element would not be lost. Each target was to be attacked at least twice every 24 hours, if possible by day and by night. Five of the targets were situated in Holland and were therefore to be cleared with the Dutch Government.

D.S.C/T.S.100/9 Pt.5 Encl. 11A para.4

D.S.C/T.S.100/12 Pt.2 Encl. 69A

This plan was discussed at the Air Staff Meeting at S.H.A.E.F. on 19 March. Air Marshal Robb pointed out, as Air Marshal Coningham had already done, that the heavy bomber force must not be wasted on area targets. On the following day the Deputy Supreme Commander sent a member of the G.3 Division, General Whiteley, to liaise with Headquarters, Twenty-First Army Group on this controversial point and he advanced the date of the next Air Commanders' conference by one day to ensure that the air plan was settled to the satisfaction of all concerned.

D.S.C/T.S.100/9 Pt.5 Encl. 13A para.14

At this conference, held on 21 March, Brigadier Belchem said in defence of the plan that the object was to destroy the enemy's morale(1) and that its essence was what he called 'continuity and diffusion of attack'. He was supported in his views by Air Marshal Coningham. The Deputy Supreme Commander, General Spaatz and General Vandenberg, on the other hand, were all agreed that the targets were too small and too numerous. Air Chief Marshal Tedder pointed out that 'spread and continuity of bombing were incompatible aims'. He directed that S.H.A.E.F. Air Staff should examine the list and select targets which were to be attacked by the

The Army's intention had changed somewhat since the conference on 17 March when it was destruction of troops and equipment.

182

heavy bombers after they had disposed of airfields and the large communication centres. Targets on Dutch territory were only to be attacked in the event of urgent military necessity.

File 2nd T.A.F. 30317/74/Ops.

See p. 188

No.38 Group Op. Order No.531 16 Mar. 1945

IXth T.C.C. F.O. No.5 16 Mar. 1945

No.38 Group Report on Varsity A new schedule of targets was circulated by S.H.A.E.F. to the Air Forces later that day. Eighteen out of the 26 targets in the British sector were approved of which three were to be attacked by R.A.F. Bomber Command and the remainder by British or U.S. medium bombers. In the Ninth U.S. Army sector nine out of 16 targets were approved and all were to be attacked by the VIIIth Air Force. Operations by heavy bombers began on 22 March. (1)

#### The Airborne Plan

General Brereton, Commanding General of the First Allied Airborne Army was responsible for the execution of Operation Varsity. He set up a Command Post at Brussels where he was in close touch with Air-Marshal Coningham and Field Marshal Montgomery. Major General Paul Williams commanded the troop carrier aircraft and he delegated to the Air-Officer Commanding No.38 Group command over the aircraft involved in the British part of the operation. A Combined Command Post was set up at Maison Lafitte(2) in order that close liaison between British and Americans might be maintained.

Nos.38 and 46 Groups together provided 440 aircraft and gliders and the 52nd Wing IXth Troop Carrier Command 243 aircraft to carry the British paratroop and Air landing Brigades. For this purpose all aircraft were moved to East Anglia shortly before the operation began. The remainder of the IXth Troop Carrier Command moved from England to the Chartre-Rheims area. A total of 908 aircraft made up of Dakotas and a number of C.46s and 906 gliders prepared to carry the American airborne troops. The 2nd Division of the VIIIth Air Force (240 Liberators) was detailed to carry out a re-supply mission immediately after the landings.

The two airborne divisions which made up the XVIII U.S. Airborne Corps were the 6th British and 17th U.S. Airborne Divisions.(3) They were to assist the main assault across the river by seizing the Diersfordter Wald which dominated the Rhine north of Wesel, the village of Hamminkeln and a number of crossings of the River Issel, a tributary of the Ijssel, already mentioned in Chapter 5. Parachute drops were to begin at 1000 hours (known as P. hour) on D Day, after the main assault(4).

- (1) The Supreme Commander was on leave during this week in the south of France and was kept informed of the situation by daily signals sent by A.C.M. Tedder. On the evening of 22 March he informed General Eisenhower that Twenty-First Army Group appeared to be satisfied with the air plan. D.S.C./T.S.100/12 Pt.2.Encls.69A-72A.
- (2) Main Headquarters of the First Allied Airborne Army, near Paris.
- (3) Major General Ridgway commanded the XVIIIth U.S. Airborne Corps, Major General E. L. Bols commanded the 6th and Major General W. M. Miley the 17th Airborne Division.
- (4) Further details of the planning for Operation Varsity may be found at Appendix No.3.

## Operations preparatory to crossing the Rhine

## Army and Naval Operations

See Chap 5 p.163 The operations conducted by First Canadian Army to clear the enemy from west of the Rhine ended on 10 March when his rearguard withdrew to Wesel on the east bank of the Rhine. Preparations by Second British Army and other forces for the long planned crossing which was due to take place on the 23/24 March had meanwhile been going forward. These included the transportation of a flotilla of Royal Naval landing craft by road across Belgium and southern Holland. The divisions destined for the assault carried out amphibious training on a quiet stretch of the River Meuse. Ammunition and stores accumulated in the rear areas and reserve divisions which would reinforce the bridgehead also began to arrive.

## Preparatory air operations. The isolation of the Ruhr 19 February to 24 March

See Chap.4 p.118 From the third week in February air attacks were made on bridges and viaducts south and east of the Ruhr. As the target date for Operation Plunder grew near these operations assumed an additional significance. Not only did they prevent coal and other industrial supplies flowing to the rest of Germany from the Ruhr but they isolated the future battle field north of the Ruhr. The arrival of the enemy's reserves from the rear areas to stem Field Marshal Montgomery's assault across the Rhine at Wesel was thus effectively delayed.

The medium bombers of the IXth Air Force were respon-

S.H.A.E.F. (Air) Daily Ops/Int. Summaries Feb. Mar. 1945

sible for the majority of the attacks. From 19 February to 24 March 23 separate attacks were made on bridges listed in the isolation programme, southeast of the Ruhr and 31 air-The bridges over the craft were lost in these operations. Weser (out of range of medium bombers) and the big railway viaducts inside the interdiction line carrying the principal trunk lines into the Ruhr were attacked by the heavy bomber forces. From 22 February to 23 March, the day before the main assault crossing took place, R.A.F. Bomber Command made 14 and the VIIIth Air Force made nine attacks on bridges or R.A.F. Bomber Command lost six aircraft as a lak. Its most notable attack was made on viaducts. result of flak. 14 March against the much bombed Bielefeld viaduct. Two spans were shattered by one 22,000 pound bomb(1) and thirteen 12,000 pound bombs wrecked the by-pass which had been erected

when intensive attacks on the Ruhr viaducts began(2).

R.A.F. Bomber Cmd. O.R.B. Feb. Mar. 1945 VIIIth Air Force Summary of Ops Feb. Mar. 1945

R.A.F. Bomber Cmd. O.R.B. Interp Rept. 1.64 Mar. 1945

S.H.A.E.F.(Air) Report on Allied Air Ops 1 Oct. 1944 -9 May 1945. p.20 A total number of 19 bridges or viaducts were chosen for attack. By 24 March, despite the energetic attempts of the enemy to keep them repaired, ten had been destroyed, two very seriously damaged and two others damaged but were believed to be passable. The latter bridges, at Vlotho and Colbe, were finally bombed by the IXth Air Force on 24 March and destroyed. A final attack was made on Fracht Bridge that day when it was seen that the enemy had repaired it. Two other bridges, at Neuwied and Dottesfeld, were suspended from attack when they came within range of artillery fire from U.S. troops in the Remagen bridgehead. They had already lost their importance

<sup>(1)</sup> Known as 'Grand Slam'.

<sup>(2)</sup> A photograph of the damage caused by R.A.F. Bomber Command may be seen at Appendix No.4.

184

No.2 Group O.R.B. Feb. - Mar. 1945 because the approach lines had been cut at Seigen and to the south. Fighter bombers also cut railway lines on the approaches to the bombed bridges and harassed the enemy's repair parties. Nor must it be forgotten that by night Mosquitoes of 2nd T.A.F. harassed relay movement within the area isolated by the heavy and medium bombers.

Below is a summary of air operations against bridges surrounding the Ruhr from 19 February to 24 March inclusive. (1)

	Number of Attacks	Effective Sorties	Short Tons of Bombs Dropped	Aircraft lost
R.A.F. Bomber Commar	nd 14	384	2,624	6
U.S. IXth Air Force	9	741	2,399	-
U.S. VIIIth Air Ford	e 23	958	1,924	31

Air Operations Against the Dortmund-Ems and litteland Canals

The attacks by heavy bombers on inland waterways must also be mentioned as they, too, played an important part on the isolation of the Ruhr. Attacks had been made at intervals since the autumn against these two canal systems which had assumed great importance when Allied air operations against the rail system of western Germany were intensified. This became evident when air reconnaissance revealed that the enemy was desperately trying to keep them open. The Dortmund-Ems Canal flows north from the Ruhr between Emden and the North Sea and is joined near Rheine by the Mitteland or Ems-Weser Canal, which runs from west to east. These two canals carried all the inland waterborne traffic between the Ruhr and central and eastern Germany. (2)

See Map No.24

The stretch of the Dortmund-Ems Canal between Datteln on the northern outskirts of the Ruhr and Rheine was a bottle neck where there was an inevitable congestion of traffic. The point chosen for attack was at Ladbergen, south of Rheine, where the canal is elevated to pass over the River Glane. Reference has already been made to attacks made by R.A.F. Bomber Command on the canal at this point during the autumn of 1944. At the beginning of January a further attack was made by the R.A.F. when it was discovered that the enemy was trying to put the canal into operation, in spite of the fact that it was normally blocked by ice during January and February. A final attack was made by R.A.F. Bomber Command on the night of 3/4 February.

See Chap.2. P. 31

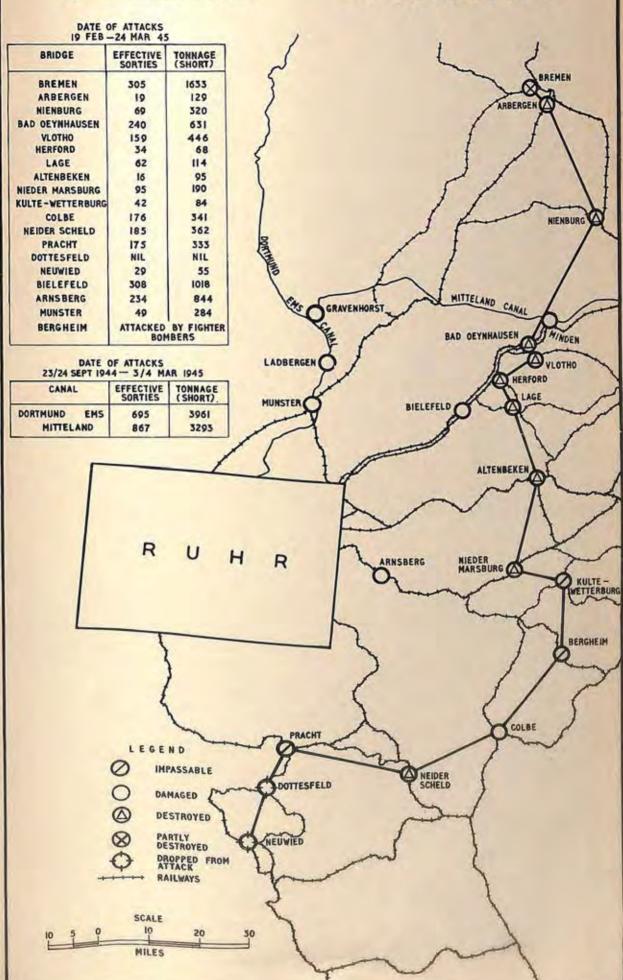
The Mitteland Canal was attacked by both R.A.F. Bomber Command and VIIIth Air Force. The latter bombed it at the point where it crossed the River Weser at Minden, during the autumn and early winter, but these operations were much hampered by poor visibility. R.A.F. Bomber Command made two attacks on the canal at Gravenhorst near its junction with the Dortmund-Ems Canal, one in November and the second on the night of 1/2 January. This last attack was particularly effective. By the beginning of March, ten attacks

R.A.F. Bomber Cmd. O.R.B. Jan. 1945

<sup>(1)</sup> Further details concerning number of attacks on each bridge, bomb tonnage, status of bridges, on 24 March may be found on Map No. 24.

<sup>(2)</sup> During 1943 it was estimated that the Dortmund-Ems Canal carried approximately 30 million tons of freight.

# ISOLATION OF THE RUHR 19 FEBRUARY — 24 MARCH 1945



A.H. B. I. DIAG. No 765

# 185

had been delivered against the two canal systems since the autumn, in which 1,562 sorties were flown and 7,254 short tons of bombs were dropped.

Attacks on the enemy communication system west of the line of interdiction 10 to 20 March

Meanwhile from the beginning of March until the 20th (the date on which air operations were concentrated in the immediate vicinity of the battle) the Strategic and Tactical Air Forces attacked communications targets inside the line of interdiction. (1) Poor weather and the concluding air action in support of Operations Veritable-Grenade did not allow these attacks to get under way until 10 March. For the next two weeks taking full advantage of the improving weather heavy bombers concentrated on targets in and around the Ruhr. The heaviest raids were made by R.A.F. Bomber Command in daylight, the first was on the important railway centre of Essen on 11 March when 1,055 aircraft dropped 4,651 tons of bombs the heaviest bomb load ever dropped on a single target in one attack. On the following day 1,079 Lancasters, Halifaxes and Mosquitoes dropped 4,848 tons of high explosives on Dortmund - thus beating their record for the previous day. In both these raids only five bombers were lost as a result of enemy action. Five other important targets were attacked by R.A.F. Bomber Command and 21 by the VIIIth Air Force in the period under review.

R.A.F. Bomber Cmd. O.R.B. Mar. 1945

> Photographic reconnaissance showed that permanent maintenance facilities were destroyed, railway lines were cut, sorting and marshalling yards in the bombed centres disrupted. Moreover, with all these attacks concentrated in a relatively small area the German communication system must have suffered immense dislocation during this fortnight. It was an admirable example of air attacks concentrated in space and time.

> As the armies in the north prepared for the assault 2nd T.A.F. and the XXIXth Air Command were free to make large scale attacks on communications north and south of the Ruhr within the line of interdiction. (2) They added considerably to the dislocation caused by the heavy bombers. attacks were made by the IXth Bombardment Division against towns, road and rail centres just south and east of the Ruhr valley. To the north No.2 Group flew 931 sorties against 13 rail centres between 10 and 20 March. Targets near Wesel

The fighter bombers of 2nd N.A.F. concentrated on cutting railways and in the same period made 284 rail cuts. Spitfire and Tempest squadrons maintained sweeps over north German air bases. In this phase attacks were begun on German Army Headquarters. On 17 March, No. 83 Group

Mosquitoes kept up the offensive by night.

such as Dorsten, Bocholt and Dulmen were bombed two or three

(1) Throughout February and early March attacks were directed against the synthetic oil and benzol plants until produc-tion was reduced to a bare minimum. On 23 March the

C.S.T.C. stated that it should be possible to maintain this stranglehold provided that prompt action was taken in the event of any of the major synthetic oil plants, such as Lutzkerdorf, resuming production.

(2) They operated in the area Arnhem - Zurolle - Lingen -Munster - Soest - Siegen - Betzdorf - Siegburg.

See Map No.25

S.H.A.E.F. (Air) Int/Ops. Summs. Nos.20-30 Mar. 1945

No.83 Group O.R.B. Mar. 1945

effectively attacked two headquarters near Wesel. next day No.84 Group made three separate raids on head-quarters in Holland. No.146 Wing struck against General Blaskovitz's headquarters (Army Group "H"), located at Ter Aar north of Gouda, the principle enemy headquarters in the northern sector. At Zegwald, a few miles west of Utrecht, 62 Typhoons of No. 123 Wing attacked the advanced headquarters of the Commander-in-Chief, the Netherlands, General Christiansen. No.145 Wing bombed another headquarters near Leiden. Investigations by the Operational Research Section of 2nd T.A.F. revealed that Army Group "H" Headquarters was occupied at the time of the attack and 62 of the enemy were killed. A radio transmitter was damaged. At General Christiansen's Head-

2nd T.A.F. O. R.S. quarters about 40 men and two high ranking officers were killed.

Report No.34

P.11

General Christiansen, meanwhile, was not left in peace and, on the 29th, Typhoons of No.84 Group raided his Headquarters in a villa near Hilversum. Four rocket projectile salvoes struck the building where the General and his staff were taking shelter. The top floor was destroyed but the house did not catch fire. Other military targets attacked during this week were a battalion headquarters, the headquarters of LXXXVIIIth Corps (where all bombs were reported to have fallen in the target area), and an ammunition 2nd T.A.F. O.R. S. dump and a vehicle repair depot at Doetinchem in western Report No. 34 Holland. The depot had been evacuated by the Germans that day before the attack. (1)

Report No.34 p.11

S.H.A.E.F. (Air) Ops. Int. Sum. No.29 Mar. 1945 and Analysis of IXth Air Force Ops. Mar. 1946 P.46

A notable exploit during this phase by two squadrons of the XIXth Tactical Air Command took place on 19 March when they bombed and put out of action the headquarters of the Commander-in-Chief West, near Bad Nauheim, north of Frankfurt. Field Marshal Von Rundstedt had been replaced by Field Marshal Kesselring on the previous day.

The effort made by Strategic and Tactical Air Forces against communications from 10 to 20 March were as follows:

	Effective Sorties	Short tons	Aircraft lost
R.A.F. Bomber Command	3,266	14,571	17
VIIIth Air Force	1,908	4,369	*
IXth Air Force (mediums)	1,955	2,875	2
2nd T.A.F. (mediums)	931	1,700	3

<sup>(1)</sup> Moves by Wings of 2nd T.A.F. to airfields east of the Maas to enable them to strike more deeply into enemy territory east of the Rhine were held up because of the slow advance on the ground and only three wings moved No. 121 (Typhoca) forward during this preparatory period. Wing moved from Volkel to Goch airfield on 21 Mar. No. 143 (Typhoon) Wing moved from Eindhoven to Goch on the No. 123 (Typhoon) Wing moved from Gilze Riejen to Kluis about two miles south of Nijmegen on 20 Mar.



Air attacks in the immediate vicinity of the future bridgehead 21 to 23 March

During the 72 hours preceding the launching of the assault air operations in the neighbourhood of Wesel were greatly intensified. There were three types of operation which will be considered in turn:

- (a) Air operations directed against the communication centres within and close to the proposed battle area.
- (b) Air attacks on enemy barracks, camps and other military defences;
- (c) Air attacks on the G.A.F. bases which would most likely be used against the assault.

Excellent weather attended these operations and permitted visual bombing at medium and high altitudes while targets of opportunity were easy to recognise. The only handicap to good bombing and observation of results was the smoke drifting from burning towns and villages across the Rhine and the dense smoke screen concealing preparations by the Allied ground forces.

# Air attacks against communication centres

R.A.F. Bomber Cmd. O.R.B. Mar. 1945

II 82/4 VIIIth Air Force Report on Ops. 21-24 Mar. 1945

S.H.A.E.F.(Air) Ops/Int Summaries No.31-35 Mar. 1945

2nd ToAoF. Daily Log Sheets No.2807-2837 and S.H.A.E.F.(Air) Ops/Int Summaries No.31-35 Mar. 1945

No.2 Group O.R.B. Mar. 1945 Heavy, medium and light bombers now concentrated their attacks in an even smaller area. R.A.F. Bomber Command raided Munster and Rheine, both towns being within a 70 mile radius of the future bridgehead. On 23 March the VIIIth Air Force attacked marshalling yards near the lower Rhine in great strength. Of these the most important were at Coesfeld, Recklinghausen, Gladbeck, Munster, Rheine, Dortmund, Hengstey and Geseke (the latter two being south of the Ruhr). The IXth Bombardment Division attacked 23 targets north of the Ruhr just east of Wesel. Nc.2 Group bombed Bocholt and Borken both important road or rail centres. (1)

The fighter bombers, meantime, redoubled their efforts to keep all railways leading to the Wesel area severed. The 2nd T.A.F. and the XXIXth Tactical Air Command working respectively north and south of the River Lippe made 257 rail cuts and claimed to have destroyed 76 locomotives, 1,795 goods wagons and 298 motor vehicles to say nothing of the moral superiority which they imposed over enemy territory east of the Rhine. By night the light bomber force flew 204 sorties, herassing road and rail transport, bombing towns near the proposed bridgehead and attacking lights and other objects with cannon and machine gun fire. (2)

<sup>(1)</sup> For results of these attacks see File D.S.C./H.20 Pt 4 Encl.69A based on photo reconnaissance up to 25 March.

<sup>(2)</sup> When bombing towns Mosquitoes were directed on to their targets by the Mobile Radar Control Post.

These operations are contained in the following summary.

	Targets Attacked	Effective Sorties	Short Tonnage
R.A.F. Bomber Command	2	262	1,005
VIIIth Air Force	10	1,248	3,484
IXth Air Force (mediums)	23	1,704	2,859
2nd T.A.F. (mediums)	2	63	103

Air attacks against camps, barracks and other military positions

II S2/4 VIIIth Air Force Report on Ops. 21-24 Mar. 1945

The VIIIth Air Force devoted the whole of 22 March to bombing this type of target in accordance with the air plan. All were situated south of the River Lippe in the built up area of the Ruhr. The most important concentration points were at Westerholt, Dorsten, Barmingholten, Mulheim and Hinsdeck. R.A.F. Bomber Command bombed Bocholt, Dulmen and Hildesheim north and Dorsten south of the Lippe on the same day.

No.2 Group O.R.B. Mar. 1945 No.2 Group made 21 attacks on camps, defended towns north of the River Lippe. Ijsselburg and Anholt were attacked several times but the enemy's flak and smoke screens prevented the Mitchells and Bostons from being very successful. The medium bombers of the IXth Air Force attacked 11 targets, the majority of them south of the Lippe, in addition to 19 flak positions in the battle zone. Dinslaken, a town on the axis of advance of the Ninth U.S. Army, was the most heavily bombed target.

S.H.A.E.F.(Air) Ops/Int Summaries Nos.31-33 Mar. 1945

British and U.S. fighter bombers went forward with prearranged attacks on headquarters, dumps and other prepared positions in response to requests by the ground forces. On the 21st No.84 Group made a number of raids on Wehrmacht targets in eastern Holland. During the morning four Typhoon squadrons of No.146 Wing attacked the headquarters of the German Twenty-fifth Army located in a hotel at Bussum on the shores of the Zuider Zee with rockets and bombs. Pilots saw the target 'enveloped in smoke and well on fire' and reported it destroyed. Air reconnaissance shortly confirmed their evidence.

2nd T.A.F. Daily Log Sheet No.2811 and No.84 Group O.R.B. Mar. 1945

During the afternoon No.123 (Typhoon) Wing attacked a paratroopers' barracks, alongside which was an ammunition and fuel dump, near Zwolle. This military area had been camouflaged by the Germans and resembled a sixteenth century village complete with church steeple. Fifty-four Typhoons and Spitfires took part in the strike. The Operational Research Section of 2nd T.A.F. discovered that about 16 buildings were hit and some 200 troops were killed and 400 wounded as a result of the raid. At approximately the same time No.131 (Spitfire) Wing bombed a hutted camp between Zwolle and Nunspeet on the Zuider Zee. The camp proved to be unoccupied at the time of attack but it had been used as a practice firing range. No.123Wing (Typhoons) attacked a petrol and ammunition dump hidden in a chateau south west of Groningen. Direct hits were claimed with rockets and cannon fire.

2nd T.A.F. O.R.S. Report No.34 p.10

2nd T.A.F. Daily Log Sheet Nos. 2811-2812 Thid Sheet No. 2831 2nd T.A.F. O.R.S. Report No. 34 p. 12

2nd T.A.F. Daily Log Sheet Nos. 2833

On 23 March No. 146 (Typhoon) Wing attacked an ammunition dump reported to be concealed in a tarmac factory near Zevenaar north west of Emmerich. This information subsequently proved to be false. On that day No.123 Wing raided a Dutch S.S. troops headquarters in the village of Bennekom west of Arnhem. A number of direct hits were Meantime No. 83 Group began its pre-arranged attacks on flak positions near the proposed landing-dropping zones of the XVIIIth Airborne Corps (near Anholt, Bocholt and Terborg) which were out of range of artillery fire.

There can be little doubt that all these attacks caused severe casualties among the German forces east of the Rhine and unnerved the troops before they were committed to battle. The summary of this type of operation is as follows:

	Targets attacked	Effective sorties	Short Tonnage
R.A.F. Bomber Command	6	825	3,920
VIIIth Air Force	11	753	1,834
IXth Air Force (mediums)	30 (19 flak posit:	ions <sup>320</sup>	476
2nd T.A.F. (mediums)	21	291	560

Attacks on G.A.F. bases within striking distance of the assault area

Force Ops. 21-24 Mar. 1945

The final preparatory task was to destroy airfield facilities and enemy aircraft based near the Ruhr. heaviest attacks were made by Fortresses and Liberators of the VIIIth Air Force operating from the U.K. The first took II S2/4 VIIth Air place on 21 March - the four major jet airfields in north west Germany, Hopsten, Rheine, Achmer and Hesepe were the main targets. Smaller airfields were also attacked in case jet propelled aircraft sought shelter on them after their normal bases had been bombed. During the morning ten airfields were attacked together with two diversionary targets. In the afternoon the airfield at Essen-Mulheim was bombed. In all cases extensive damage was done to runways and installations.

> Mustangs of the VIIIth Fighter Command made strafing attacks following the heavy bombers - they flew 743 effective sorties and claimed to have destroyed nine aircraft in the air and 48 on the ground. Enemy air reaction was very slight. German air activity centred over the Remagun bridge-head and the American break-through in the Saar Palatinate.

> On 22 March five airfields outside the Rheine - Hopsten net-work were attacked as it was thought that aircraft after being flushed out of their bombed bases might have sought shelter on airfields in the Frankfurt area which would accom-Airfields at Schwabisch Hall, modate jet propelled aircraft. Giebelstadt, Kitzingen and Frankfurt-on-main south of the Ruhr and Ahlhorn on the Dutch-German border were bombed. Fighter aircraft claimed to have destroyed a total of 17 aircraft. The effort made by the VIIIth Air Force heavy bombers during these two days was as follows:

Ibid

Effective Sorties Attacks

Short Tonnage

16

1,458

4,239

#### SECRET

190

2nd T.A.F. Daily Log Sheet Nos. 2814, 2825,

S.H.A.E.F.(Air) Ops/Int Summaries 31-33 Mar. 1945

A.H.B. 6 Trans. G.A.F. Int. Reports Mar. 1945

No.85 Group O.R.B. Mar. 1945

A.H.B. 6 Trans. G.A.F. Int. Reports Mar. 1945

2nd T.A.F. Daily Log Sheet Nos. 2816-17, 2823, 2830.

The 2nd T.A.F. and IXth Air Forces maintained sweeps over the German airfields near the Ruhr as had been their custom for the past three weeks. On 22 March 32 Tempests encountered 12 F.W.190's. Five of the enemy were shot down and three were damaged. On 23 March airfields at Plantlunne, Furstenau, Twente and Steenwijk were attacked but without result. The IXth Air Force claimed to have destroyed 40 aircraft in aerial combat and 74 on the ground during this 72 hour period.

All this time the only hostile air activity by day over the northern sector consisted of a few reconnaissance sorties and anattempt to shoot downU.S. Air Observation Post aircraft in the Dusseldorf area. The waning effort of the G.A.F. was pitted against the bridge-heads made by the Americans at Remagen and Oppenheim, and jet aircraft, as well as F.W.'s 190 and J.u.'s 87, desparately attempted to stem the flow of troops and equipment crossing the Rhine(1).

Defensive air operations over the battle area by night

The night operations of No.85 Group were uneventful when compared to the great activity of the day fighters and fighter bombers. Each night when weather conditions were favourable an average of 36 aircraft (Mosquitoes) covered the Twenty-First Army Group sector from the Scheldt to the Ruhr. In addition air/sea rescue work was performed along the Dutch coast when required.

The Mosquitoes encountered few enemy aircraft and between 10 and 23 March only one aircraft was claimed to have been destroyed (an Me.110) and two probably destroyed. This was not due to any lack of enemy air activity by night. For according to the G.A.F. Intelligence Reports 135 sorties were flown during this period over the Rhineland. They were usually attacks by F.W.'s 190 against targets of opportunity and a favourite time for their penetrations was between 1900 and 2100 hours. Bombs were dropped over Xanten, Cleve, Emmerich and Duisberg by forces numbering from seven to 29 aircraft. The enemy also attempted to discover the extent of Allied preparations for an assault across the Rhine in that area. Night reconnaissances were flown over roads in the Rhineland by solitary F.W.'s 189.

#### Reconnaissance by 2nd T.A.F. - 21 to 23 March

The fine weather during the period immediately before Operation Plunder was eagerly welcomed by the reconnaissance squadrons which were able to fulfil effectively all the tasks requested of them by the ground forces. From 21 to 23 March 2nd T.A.F. flew a total of 306 reconnaissance sorties. Only two difficulties were experienced by the pilots, and they were the smoke screens put up by both allied and enemy ground forces in the vicinity of the Rhine and the dust and smoke hanging over bombed targets.

<sup>(1)</sup> Occasional raids by jet propelled aircraft were still made behind the British front. On the morning of 19 March, for instance, 21 Ar.'s 234 were despatched to bomb the marshalling yards at Brussels. Four aircraft bombed targets of opportunity, among them the 2nd T.A.F. airfield at Melsbroek. Reports state that 22 aircraft were damaged (only four seriously).

A.H.B. 6 Trans. G.A.F. Int. Reports Mar. 1944.
S.H.A.E.F. Weekly Air Int. Summ. No.53.

No. 29 Wing

Nos. 35 and 39 Wings attached to the Composite Groups were concerned with covering the tactical area east of the Rhine. No. 39 Wing, working for the Second British Army, was especially active. Of primary importance was the location of gun positions, both for anti-aircraft as well as for ground artillery, and the list of anti-aircraft gun positions at Second Army Headquarters was kept up to-date. O.R.B. Mar. 1945. In addition photographs were taken of recently bombed marshalling yards in the rear of the proposed bridge-head, rail outs and suspected vehicle concentrations. On 23 March aircraft on tactical reconnaissance reported the extent of damage in bombed towns near the front and the conditions of railway centres in the same area. Other aircraft discovered that four out of five bridges spanning the Lippe Canal south of Wesel were destroyed. At first light on the 23rd a photographic reconnaissance sortie was flown over the dropping landing zones near Wesel. The photographs were developed, printed and interpreted as soon as the aircraft landed and a special report accompanied by the photographs was flown to the headquarters of the XVIIIth Airborne Corps in the U.K. by 2100 hours that evening. Photographs of their objectives, only 24 hours old, were subsequently distributed to platoon commanders in the airborne force.

No. 34 Wing 0.R.B. Mar. 1945.

No. 34 Wing was occupied with long range reconnaissance by day and reconnaissance of the tactical area by night. By day Mosquitoes and Spitfires photographed airfields, river lines, defensive positions, auto-bahns and dams in north west Germany and much useful information was passed on to Twenty-First Army Group. By night Mosquitoes and Wellingtons, the latter in particular, searched for ground movement whether mechanized or on foot east of the Rhine. On the night of 22/23 March the task for No. 69 (Wellington) Squadron was to search the roads between Munster and Bocholt for movement of 15 Panzer Grenadier Division. (1) Five aircraft carried 250 lb. bombs which were dropped on targets of opportunity and six took photographs. Nine Mosquitoes took photographs of road junctions in the same area.

# Operation Plunder: land operations - 23/24 March

On the afternoon of 23 March the weather forecast was favourable for the assault and, after consulting with Major General Williams, Air Vice Marshal Scarlett-Streatfeild and Air Marshal Coningham, General Brereton recommended to Field Marshal Montgomery that the operation should be launched. At 1730 hours a message was sent out from Headquarters, Twenty-First Army Group to all forces engaged in Operations Plunder, Flashpoint and Varsity that the assault would take place according to plan.

R.A.F. Bomber Cmd. O.R.B. 23 Mar. 1945.

During that afternoon troops in the forward localities opposite the Wesel were withdrawn one thousand yards from the At 1530 hours 80 Lancasters of Bomber Command made the first of two attacks on Wesel in preparation for the assault that evening. They used G.H. technique and heavy damage was caused.

A very heavy artillery barrage, designed to knock out enemy batteries on the east bank, began and mounted in intensity during the evening. The movements of the troops as they went forward to the starting line were obscured by a

<sup>(1)</sup> This division was eventually located in the Borken area.

dense smoke barrage which covered the entire front.

At 2100 hours the assault was begun by XXXth Corps on the left flank when the 51st Highland Division crossed over to Rees in assault craft. On their right, upstream, the 1st Commando Brigade, attached to XIIth Corps, crossed over in 'buffaloes' and formed up at the eastern end of the Wesel railway bridge to await the big attack by R.A.F. Bomber Command which was to begin an hour and a half before midnight.

# Air Operations - 23/24 March

Great importance was attached to the visual attack on Wesel by Bomber Command and the Army felt that if weather conditions were unsuitable the whole operation might have to be called off as so much depended on the success of the Commandos who were carrying out the assault.(1) Since these troops were only carrying tonmy-guns and light equipment it was essential that they should have the maximum support from the air.

The Commandos waited 1500 yards away from the target area during the bombing. This began at 2235 hours and 218 Lancasters and Mosquitoes from Nos. 5 and 8 Groups took part. Two hundred and two aircraft made successful sorties and 1,100 tons of high explosive were dropped. The main weight of bombs fell on the north-west part of the town. Photographs taken after the two attacks revealed that the streets were blocked with craters and debris from wrecked houses and that both the railway and the road bridges leading into Wesel from the west were shattered. The road bridge had already been partially destroyed by the enemy during his retreat across the Rhine some weeks before.

R.A.F. Bomber Cmd. Night Raid Report No. 874 24 Mar. 1945.

The air attack ended at 2245 hours and shortly after midnight the Commandos entered the town. Enemy resistance was to continue, however, for another two days. Field Marshal Montgomery in a message to the Air Officer Commanding in Chief, Bomber Command said that the attack was invaluable to the success of the operation.

2nd T.A.F. Daily Log Sheet No. 2836. Further to the east 96 sorties were made by No. 2 Group Mosquitoes against enemy transportation and assembly areas opposite the Second British and Ninth U.S. Army fronts. Thirty-six aircraft of No. 140 Wing left their base at 1910 hours and attacked Dorster, Haltern and Dulmen, all likely concentration areas. One hundred and thirty eight 500 lb, bombs and a small number of incendiaries were dropped. No movement was observed on the roads but attacks on towns, villages and woods were believed to have been successful. Notable among these was an attack on Weseke where flames were seen to rise to 1,000 feet.

Twenty-two out of 24 Mosquitoes of No. 136 Wing attacked Ijsselburg and Anholt, concentration points in the Second Army Tactical area. Sixty-six 500 lb, bombs were dropped and Ijsselburg especially was heavily damaged. Thirty-six aircraft of No. 138 Wing attacked Drovenack, Peddenberg and Raesfeld, rail junctions likely to be used by reinforcements during the operation. The targets were identified and good results were obtained. Sorties were flown until 0614 hours and no aircraft failed to return,

<sup>(1)</sup> It was decided at S.H.A.E.F. that if weather conditions were unfavourable for the night bember attack No. 2 Group Mosquitoes would undertake this mission.

# SECRET

# 193

Defensive operations conducted by No. 85 Group were less eventful. Patrols were made by 23 aircraft from No. 148 Wing and 17 from No. 149 Wing starting from 1840 hours. These covered an area extending from northern Holland to the Ruhr.

German Document Luftwaffe West Sit. Rep. 24 Mar. 1945 A.H.B. 6 trans. Although the enemy had despatched a force of 27 F.W.190s to carry out free-lance attacks in the Rees - Wesel area during the early hours of 24 March only three sightings were made by British aircraft. One enemy aircraft was observed attacking Wesel at 0430 hours but it made off when challenged. At 2115 hours a Mosquito of No. 219 Squadron shot down a F.W.189 which had been making an armed reconnaissance in the Duisburg area.

Earlier in the evening two reconnaissance missions were carried out by No. 34 Wing. One of the Wellingtons saw what was probably a F.W.190 but successful evasive action was taken by the British aircraft.

Operation Varsity - The Airborne Operation and Resupply Mission

The 6th British Airborne Division carried in 440 aircraft and gliders of Nos. 38 and 46 Groups and 240 Dakotas of the 52nd Wing IXth U.S. Troop Carrier Command began to take off from their bases at 0600 hours. In addition to the troops and their personal equipment, jeeps and trailers, six and seventeen pounder anti-tank guns, mortars, motor-cycles, bicycles and ammunition were carried by the aircraft. Weather conditions were excellent over east Anglia and only one glider of No. 38 Group failed to take-off (1).

The airborne stream crossed the English coast near Hawkinge and at Wavre joined the IXth Troop Carrier Command with the 17th U.S. Airborne Division. 298 troop carrying, 610 tug aircraft and 906 gliders made up the American columns.

The leading aircraft came over the battle area at 0954 hours, seven minutes earlier than had been planned. This interfered with the attacks on the flak positions by fighter-bombers of 2nd T.A.F. Heavy to slight flak was encountered by the troop carrying aircraft and this continued until the airborne troops began to consolidate themselves on the ground and had captured enemy gun positions.

The British gliders came in at 2500 feet and the Americans at 600 to 700 feet, although the latter did not always adhere to this ruling. But in fact gliders released at low altitudes suffered less casualties than those released at a greater height.

In spite of the smoke and dust very accurate landings were made by the gliders of Nos. 38 and 46 Groups. These compared most favourably with the Americans whose landings tended to be scattered. The British gliders frequently landed within 20 or 30 yards of their selected points and Air Vice Marshal Scarlett-Streatfeild later pointed out that their success was largely due to the thorough training and careful briefing of all air crews before the operation. The paratroops of the 6th Airborne Division dropped close to their objectives and the coup de main parties carried in fifteen gliders seized the two bridges over the Ijssel intact.

No. 20 R.S. Section 21 Army Group and 2nd T.A.F. O.R.S. Joint Report No. 4.

Lecture on Varsity A.M.W.1313 (May 1945).

No. 38 Group Report on Varsity.

<sup>(1)</sup> A detailed account of the planning and execution of this airborne operation taken from the R.A.F. Monograph, History of Airborne Forces prepared by A.H.B.1 will be found at Appendix No. 3 of this volume.

17th U.S. Airborne Div. Report on Op. Varsity. In the Diersfordt area the American paratroops were dropped, some near, others some distance away from their selected areas. One battalion became entangled with the British airborne troops, while another discovered its whereabouts from a Prisoner of War. Gliders came up against fairly heavy flak and much opposition was met by the troops once they had landed. Some units did not capture their objectives until 1730 hours.

Losses to aircraft were light considering the weight of anti-aircraft artillery concentrated in the area. Seven aircraft of Nos. 38 and 46 Groups were shot down; 14 of the American Dakotas which had carried British paratroops and 32 tug and troop carrier aircraft of the IXth Troop Carrier Command were lost. Damage to gliders was considerable. 160 British gliders suffered serious or minor damage and the American total was as high as 381.

By 1300 hours some 8,200 airborne troops had been landed in the Varsity area and were speedily taking their assigned objectives. Hamminkeln was occupied by the 6th Airborne Division, elements of which now attempted to gain contact with the troops fighting inland from the Rhine. At 1434 hours the Americans joined hands with the 15th Scottish Division.

## The Resupply Mission

2nd Air Div.
Report Annex 2
VIIIth Air Force
Report on Ops.
21 to 24 Mar.
1945.

Supplies were dropped to the two airborne divisions between 1310 and 1330 hours. They were delivered by 240 Liberators of the 2nd Air Division, the VIIIth Air Force. The bombers had flown from England preceded by five Mustang weather scouts in the wake of the troop carrier aircraft. They experienced no difficulty in recognizing the dropping/landing zones.

Flak was fairly intense both from the Wesel area and from guns mounted on trucks posted at points inside the dropping area. Nevertheless the drops were put down accurately; the 17th Division reported 75 per cent recovery with many bundles scattered over a wide area. The 6th Airborne Division reported 85 per cent recovery and the Americans claimed that an additional 10 per cent was close enough to be easily retrievable. Drops were made at only 300 feet with the aircraft travelling at 145 m.p.h. It is not surprising that casualties were high. Seven aircraft were known to have been shot down by fire from automatic weapons and seven others were lost, probably due to flak, although it is possible that some may have hit obstructions such as pylons over the dropping area. One aircraft, for example, had to avoid two 400 foot towers carrying high tension cables near Xanten.

Only three aircraft dropped their loads west of the Rhine and 235 aircraft made successful sorties. No enemy aircraft interfered with the operation although four groups of VIIIth Air Force Mustangs on armed reconnaissance beyond the Ruhr were available had this been necessary.

# Ground Operations - 24 March

At 0200 hours on the morning of 24 March the main crossing by XIIth Corps at Xanten began when troops of 15th Scottish Division crossed over to the east bank. At the same time troops of the XVIth U.S. Corps crossed over at Ossenburg. An hour later another U.S. Division assaulted across the river from a point south of Rheinberg. Apart from a few casualties the landings on the eastern bank of the Rhine were accomplished successfully and bridging and ferrying operations began when daylight showed,

Around Wesel the enemy was thrown into confusion by airborne landings during the morning and the advance of the British and American forces was greatly accelerated. Army troops entered Dinslaken during the evening and by nightfall forward troops had reached the line of the Dinslaken - Wesel road. North of the Lippe street fighting continued in Wesel and the 15th Scottish Division captured Mehr and Haffen, small villages north of Wesel. there was stubborn resistance from German paratroops well dug-in in fortified villages, and it will be related how support from 2nd T.A.F. proved to be invaluable in turning out the enemy. At the end of the day the 51st Highland Division had taken Esserden and Speldrop and leading elements had entered Bienen. Bridging and ferrying operations continued throughout the day, except opposite Rees where the river was covered by fire from enemy weapons.

Air Operations in support of Plunder and Varsity - 24 March

# Escort and Cover

R.A.F. Fighter Cmd. O.R.B. 24 Mar. 1945. pp. 6 - 7.

See p. 204.

Escort of the troop carrier aircraft and gliders from their bases to the west bank of the Rhine was carried out by 24 Mar. 1945 and 140 Mistangs and 73 Spitfires of No. 11 Group R.A.F. Fighter S.H.A.E.F. Daily Command and 676 fighters of the IXth and XIXth Tactical Air Int. Ops. Summary Commands. None of these aircraft flew east of the Rhine as they would have interfered with the artillery bombardment and the strafing of flak positions by the Tactical Air Forces.

> These missions were accomplished without incident and only five sightings of enemy aircraft were claimed by R.A.F. Fighter Command. These were seen supposedly attacking the Liberators engaged on the resupply mission but American pilots reported that no enemy aircraft had been observed by

Over 900 sorties were made by 2nd T.A.F. in cover operations east of the Phine. Tasks were carried out as follows :-

- (i) Standing patrols over the Rhine from Rees to Wesel to cover bridging and ferrying operations.
- (ii) Patrols in the Dorsten Bocholt Winterswijk area.
- (iii) Front line patrols to give cover to the assaulting formations.
  - (iv) Free lance patrols.
  - (v) Standing patrols in the early morning over the northern G.A.F. airfields.

Two squadrons of Spitfires were kept at readiness to meet an emergency. South of the River Lippe protection was given to the troop carrier aircraft and gliders by 142 Thunderbolts and Mustangs of the XXIXth Tactical Air Command,

Second T.A.F. No. 122 Wing of No. 83 Group carried out the first of Daily Log Sheets these tasks throughout the day. Two flights of Tempests No. 2850 to 2853. which were to operate at 5,000 feet took off for the first mission shortly before 0600 hours. The number of Tempests was increased during the time of the airborne operation to No enemy aircraft interfered with the bridging operations and there was little to report save the destruction of a staff car travelling to Vreden. One Tempest was hit by flak and made a forced landing safely.

> High cover at 12,000 feet was carried out by Spitfires of Nos. 126 and 127 Wings from Winterswijk to Dorsten. Vo shortly after 0630 hours 120 Spitfires were active. Free lance patrols, also operating at 12,000 feet, were provided by Nc. 125 Wing and kept a look-out for targets of opportunity. On the first of these patrols Nos. 41 and 402 Squadrons attacked a convoy near Zutphen and strafed a machine-gun post. At 0920 hours No. 66 Squadron spotted three enemy aircraft flying east in the Geldern area.

From 1000 to 1200 hours two additional squadrons were brought in to operate over the Emmerich-Wesel area at 10,000 feet; altogether 63 Spitfires were employed in giving cover during this period. A small concentration of motor vehicles was observed in some woods east of Altschermbeck and at Brunen reinforcements appeared to be arriving. was no movement on the Dusseldorf-Cologne Autobahn or in the villages of Bocholt and Aalten - both probable concentration areas.

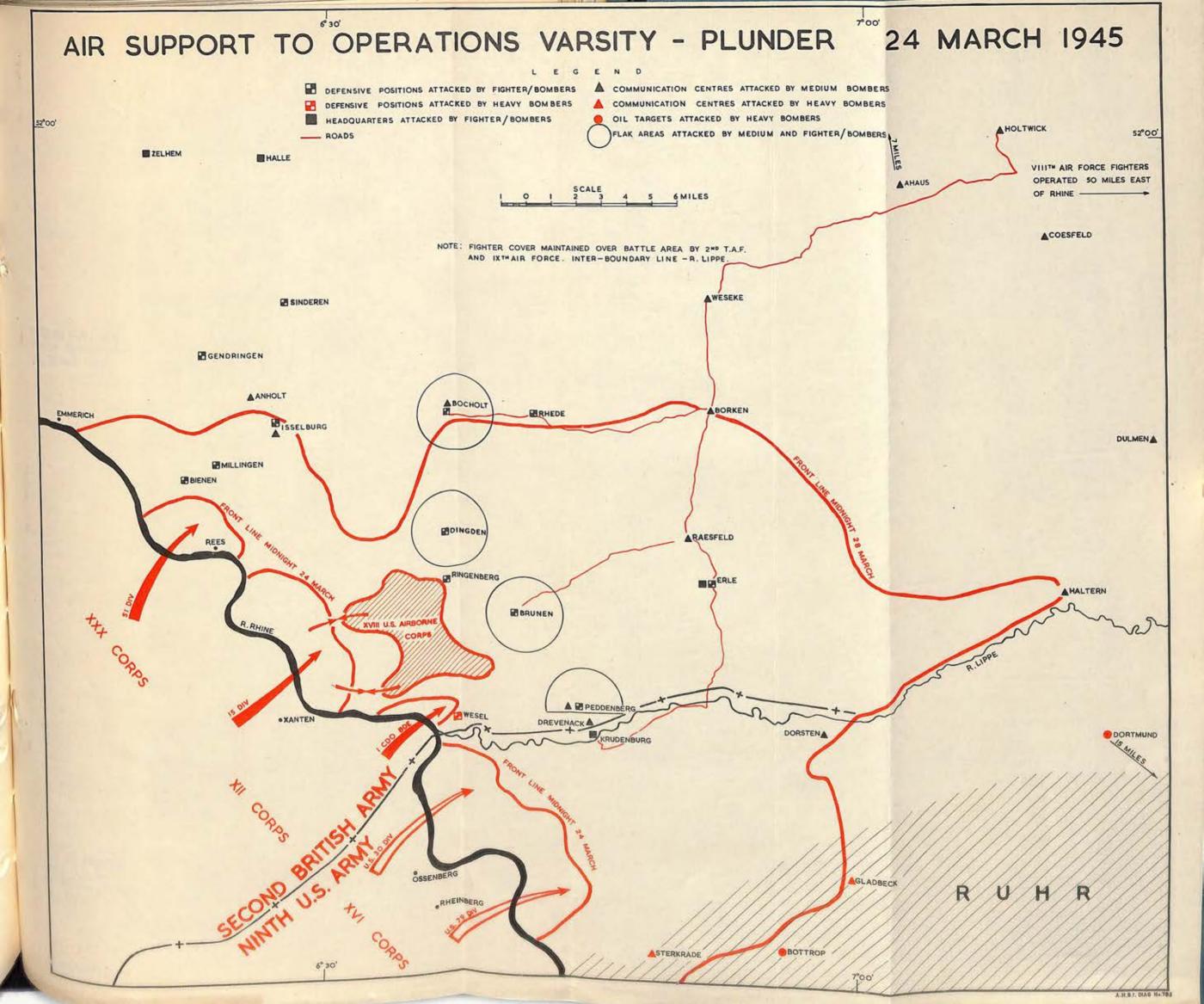
Free lance patrols operating during the same period observed a small amount of enemy movement through Raesfeldt. In the early afternoon some tanks and motor transport began to concentrate in the woods south of Bocholt. Patrols operated until shortly after dusk but they saw nothing further of interest.

The patrols over the Rheine-Achmer airfields were provided by Tempests of No. 135 Wing until the arrival of the VIIIth Air Force fighters. Thirty three Tempests were in the air shortly before 0600 hours and during the sweeps three aircraft including an F.W.190 were seen at Twente-Enschede attempting to take off. They were successfully prevented from doing so. Apart from this no enemy air activity took place. Two Tempests were lost, one was shot down by flak and the other lost through unknown causes.

German Dooument Luftwaffe West Sit. Rept. 23 Mar. 1945.

Indeed the G.A.F. appears to have been more successful against the Third U.S. Army bridgehead which had been made on 23 March and attacks on the Oppenheim bridgehead and targets in the vicinity were delivered by 54 Me. 109's both at dawn and dusk.

Forty six Me. 109's were despatched to make a sweep of the Bocholt area but they seem to have been broken up by the VIIIth Air Force fighters before reaching the battle area. Four Ma. 109's succeeded in carrying out a reconnaissance of the Wesel bridgehead between 1900 and 2030 hours.



South of the River Lippe 142 fighters of the XXIXth Tactical Air Command carried out patrols over the Ninth Army which was attempting to reach Dinslaken. No enemy aircraft were seen in the air but five American aircraft were shot down by flak.

The cover operations by fighter aircraft were, therefore, on the whole uneventful since the enemy found difficulty either in taking off from his airfields or in penetrating the strong screen of Allied fighters. Nevertheless their cover was indispensable for the protection of the bridging operations and the vulnerable transport aircraft during a most critical phase of the battle.

Attacks on airfields by heavy bombers and on flak positions by the Tactical Air Forces

VIIIth U.S. Air Force Operations 24 March 1945.

The attacks on jet and night ground-attack fighter airfields which had been begun on 21 March were continued during the morning and afternoon of D Day by heavy bombers of the VIIIth Air Force. (1) Twelve primary targets were attacked in the morning and four in the afternoon. When deciding upon these targets full use was made of aerial photographs to ensure that on no airfield would the enemy be able to use his jet aircraft during the morning of D Day. Four of the airfields detailed for the morning operation had already been bombed on 21 March. Reconnaissances revealed, however, that the enemy was desperately attempting to repair the runways at Achmer and Hopsten and two Groups of Fortresses were instructed to attack these airfields. The Hesepe and Rheine airfields were considered to be equally important to the enemy and were attacked by one Group each despite the fact that they were still unserviceable. Two Groups attacked Zwischenahn as air photographs showed that one runway might still be of use.

Twenty seven Groups of Fortresses from the 1st and 3rd Air Divisions, and one Wing of Liberators from the 2nd Air Division were available for the morning operation. The reason for the small force supplied by the 2nd Air Division was due to the fact that it also had to carry out the midday supply drop. The heavy bombers were escorted by two squadrons of Mustangs and one Thunderbolt unit. A small force of Mustangs acting as weather scouts preceded both morning and afternoon missions.

The airfields attacked in the morning were as follows:-(2) Vechta, Steenwijk, Plantlunne, Varel, Varrelbusch, Zwischenahn, Furstenau-Vechtel and Nordhorn. The 1050 heavy bombers were divided into four forces. They left the east Anglian coast between 0730 and 0900 hours on the morning of D Day. Their time of attack was to be immediately before and during the airborne landings. Very slight flak was encountered between Zwolle and Bad Ocynhausen and, as the weather was fine, the journey to the targets was uneventful.

R.A.F. Fighter Cmd. O.R.B. 23/24 Mar. 1945. pp. 2-3.

<sup>(1)</sup> Mention should also be made of Intruder Bomber Support Operations made by R.A.F. Fighter Command on 23/24 March. 21 Mosquitoes flew at low level over airfields in N.W. Germany and made several attacks on ground targets.

<sup>(2)</sup> Map No. 25 shows the position of the mirfields.

198

Force I (179 Fortresses) bombed Vechta north of Dummerlake at 0849 hours and aerial photographs taken later showed that some 150 craters were made on the runway and a number of buildings were damaged. Seven aircraft parked on the runway were also wrecked.

Force II which consisted of 518 Fortresses attacked Steenwijk (in Holland), Plantlunne, Varel, Varrelbusch and Zwischenahn between 0845 and 0930 hours. Only one squadron failed to drop its bombs correctly. It should have attacked Steenwijk but, as it was unable to pinpoint the target, an airfield at Wittumundhafen-Ardorf near Wilhemshaven was attacked in its place. In this rorce 496 aircraft dropped 1575.1 tons of bombs on primary targets and the results were later discovered to have been highly satisfactory. At Steenwijk the runways were pot-holed with craters and a few aircraft were damaged; the landing grounds and runways at Varel, Varrelbusch, Plantlunne and Zwischenahn were all made unserviceable.

Force III attacked Achmer, Hopsten, Furstenau-Vechtel, Rheine and Hesepe from 1000 to 1030 hours. These targets had, with the exception of Furstenau-Vechtel, all previously been attacked. Two hundred and seventy seven aircraft attacked the primary targets and dropped 643.6 tons of bombs. One squadron again failed to identify its target, which was Hopsten, and instead dropped its bombs on Plantlunne. At Achmer photographs confirmed that repair work was under way at the time of the attack and many craters had been filled in. No such repair work had been carried out at Hesepe. At Rheine, Hopsten and Furstenau-Vechtel runways were cratered and buildings damaged.

The last airfield to be attacked during the morning was at Nordhorn. This was bombed by Force IV consisting of six squadrons of Liberators and concentrations amounting to 121.8 tons fell on the target making it temporarily useless.

During these operations five Fortresses were lost. One was shot down by an enemy aircraft (later destroyed by a Fortress). Flak was not severe and only three aircraft were shot down in this manner. One aircraft was lost through unknown causes.

That afternoon it was the object of the VIIIth Air Force to attack as late as possible while allowing time for formations to return to their English bases before nightfall. Little enemy opposition was expected and, apart from three Mustang squadrons detailed as escort, American fighter aircraft carrying out armed reconnaissances east of the Ruhr were on call if their assistance was needed. Six Groups of Liberators from the 1st and 2nd Air Divisions and seven Groups of Fortresses from the 1st and 3rd Air Divisions took part.

Airfields at Kirtorf, Stormede, Twente-Enschede and Ziegenhain were attacked. The latter was attacked in place of Breitscheid as it had been discovered that a G.A.F. unit had recently moved there. The 446 heavy bombers were divided into four forces and attacks were carried out between 1715 and 1748 hours. Kirtorf and Stormede were attacked by three Groups each of Liberators and Ziegenhain by three groups of Fortresses. These two airfields lay south-east of the Ruhr and involved the deepest penetration of the day by the heavy bombers. All aircraft carried out their tasks unmolested.

At Stormede the entire force of Liberators dropped its bombs successfully but at Kirtorf two squadrons failed to discover the primary target. One squadron attacked Ziegenhain and another unable to pinpoint the target made a somewhat fruitless attack on the railway line at Treysa. Another squadron detailed to attack Ziegenhain experienced technical trouble over the target and instead attacked the marshalling yard at Siegen but this, too, met with failure.

Just after 1730 hours four groups of Fortresses making the last operation of the day attacked Twente-Enschede on the Dutch border. Despite smoke and haze in the area all the 152 aircraft bombed the target.

As with the morning attacks, reconnaissances and photographs proved that all the airfields were, at least temporarily, put out of action. Four hundred and forty two aircraft dropped a total of 1109.5 tons of bombs. This is not surprising when it is craft were lost. considered that the only enemy ground opposition met by the heavy bombers was at Twente-Enschede. Nor was the attention of enemy fighter aircraft drawn. The only evidence of enemy aircraft in the area covered by the Eighth Air Force occurred when a Mustang unit was diverted to attack a mixed force of 35 Me. 109's and F.W. 190's at 1525 hours. A running fight lasting half-an-hour took place near Kassel in which the Americans claimed 27 aircraft destroyed and seven damaged. No record of this action has so far been discovered in enemy documents. Five Mistangs were shot down.

VIIIth Air Force Report on Operations 24 Mar. 1945, p. 27.

The return flight to England was uneventful and a small force of R.A.F. Spitfires and Mosquitces provided protection while the bombers returned to their bases in the gathering dusk.

#### Neutralisation of flak positions

It is true to say that the most important task of the Tactical Air Forces during the morning was to neutralise flak in the vicinity of the Dropping/Landing Zones. As already explained in the air plan, artillery, fighter/bomber and medium bombers took part.

The artillery zone extended from the east bank of the Rhine as far as the uncompleted autobahn which ran in a north-westerly direction through Wesel almost parallel to the Rhine. It was calculated that there were 231 light anti-aircraft and 108 heavy anti-aircraft guns in position here and in the farther zone possibly 668 light anti-aircraft and 78 heavy anti-aircraft guns. Later examination proved that this was an overestimate but owing to the reluctance of the enemy gumners to reveal their positions and the hindering of reconnaissance by bad weather, counter-battery intelligence was hard to obtain.

2nd T.A.F. Daily Log Sheet No. 2840. Operations against flak positions were begin by the medium bombers of No. 2 Group and the IXth Bombardment Division. (1) Seventy two Bostons and Mitchells from Nos. 137 and 139 Wings took off shortly before 0800 hours from their bases at Vitry and Melsbrock to attack four large flak positions in the Brunen area which lay just over two miles from the landing/dropping sones. The attacks took place as planned between 0900 and 0950 hours and one hundred and

<sup>(1)</sup> For location of positions see Map No. 26.

2nd T.A.F., 21 Army Group O.R.S. Joint Report No. 4. twenty-six 500 pound bombs and 6708 twenty pound fragmentation bombs were dropped. Investigations after the battle showed that two out of the four positions received good concentrations. One of those batteries was situated about a mile to the east and the other the same distance to the north of Brunen. Poor reception of control signals is believed to have been the cause for the failure to achieve satisfactory results on the other two batteries situated in the neighbourhood of Krudenburg and Peddenburg.

Two hundred and sixty five bombers of the IXth Air Force attacked eight positions in the Bocholt area. Five hundred and seventeen tons of fragmentation and G.P. bombs Most of the gun positions were were dropped on the targets. attacked a little earlier than those by No. 2 Group; four were engaged between 0744 and 0802 hours and the remainder at approximately 0900 hours. Two of the positions were subsequently found to have been unoccupied during the time of the attack; one of these had contained four 83 mm. guns. Guns had fired from three other positions during 24 March but were removed by the enemy later in the day. No battery was actually hit, but on one position damage to nearby houses was observed and on another it is believed that two machine guns and three wagons were destroyed. Besides these attacks in the battle zone the IXth Bombardment Division made attacks on seven other flak positions scattered over a wide area. Two were situated north of Emmerich and the others lay near Munster. No casualties were incurred either by British or American bombers during these operations.

Air Staff S.H.A.E.F. Daily Int/Ops. Summary No. 34 24 Mar. 1945. P. 5.

Nos. 121, 123, 124 and 146 Wings of 2nd T.A.F. were engaged in anti-flak patrols during the period of the airborne landings. Many of these aircraft were later engaged in close support during the afternoon. They were equipped with rockets or cluster bombs in addition to their normal armament of 20 mm. cannon shells.

2nd T.A.F. Daily Log Sheets No. 2841 - 43. The first flights of Typhoons from No. 123 Wing took off from Gilze-Riejen before 0915 hours in order to be over the battle area half an hour before the paratroops dropped. Each flight was given an area of operation and had been instructed to dive down and attack any anti-aircraft gun seen to be firing. If no batteries were observed pilots were to attack a pre-arranged target before returning to base. All attacks took place to the east of the autobahn so as to avoid inflicting casualties on the airborne troops.

The artillery barrage on flak positions to the west of the autobahn opened up at 0930 hours, the same time as fighter/bomber operations were due to begin. But owing to the early arrival of the paratroops this part of the programms was somewhat curtailed.

After 1000 hours an average of 37 aircraft flew up and down the flak area and during the first half hour of the landings there were as many as 60 Typhoons in the air.

Visibility was poor and smoke and dust mixed with the ground haze. It is not surprising, therefore, that many pilots reported that they had not seen any guns firing at all. Furthermore the gun positions themselves presented an extremely difficult target. Few direct hits were claimed by pilots and examination after the battle showed that only one direct hit on a 3.7 cm. light anti-aircraft gun was soured. This was situated a mile west of Brunen. Rockets landed close to a number of positions and two multiple

L.A.A. guns showed signs of damage which might easily be attributed to fighter/bombers. A fragmentation bomb was discovered to have landed inside a 88 mm. gun pit and had killed the crew. Craters were observed round a number of positions and the bombs dropping so near must have had a disturbing effect on the guncrews.

Interrogation of P.O.Ws by 2nd T.A.F. and Twenty First Army Group Operational Research Sections after the battle showed that many of the men did not appear to have been frightened by the fighter bombers. This may be put down to the marge number of aircraft which were operating over the battlefield and also to the fact that the Germans were probably more anxious about the airborne troops coming down directly above them.

Altogether 92 gun positions situated in the area of Bocholt, Brunen, Dingden and Peddenburg were attacked by 2nd T.A.F. and a total of 316 sorties were made. Only two aircraft were shot down during these hazardous operations. Damage to gliders and aircraft prove that there was no slackening of flak during the peak of the fighter effort; this did not occur until the paratroops had actually captured gun positions. (1) Despite this, the operations should not be accounted a failure as their persistence must have made the gunners inaccurate and they therefore contributed to the excellent protection given to the troop-carrier aircraft.

No. 266 Squadron continued anti-flak patrols after the operation from 1400-1500 hours and twenty-four 500 pound bombs were dropped on positions north of Bocholt. Other attacks on anti-aircraft artillery were made in the course of close support operations.

One hundred and twenty one aircraft of the XXIXth Tactical Air Command took part in anti-flak patrols south of the Lippe and a number of gun positions were attacked.

#### Armed reconnaissance and close support

Armed reconnaissance in the tactical area was carried out by 2nd T.A.F. north of the River Lippe and by the XXIXth Tactical Air Command south of this line. Fighters of the VIIIth Air Force patrolled beyond the tactical area. North of the Lippe No. 84 Group carried out the major part of armed reconnaissance during the morning. Nos. 131, 132 Wings and three squadrons of No. 145 Wing took part. During the latter part of the afternoon Nos. 121 and 124 Wings of 83 Group whi oh had been engaged in close support and anti flak attacks in the morning were also involved.

2nd T.A.F. Daily Log Sheets No. 2838 - 39. Interdiction of the battle area by 2nd T.A.F., began shortly after 0900 hours. Nineteen sorties by Nos. 317 and 127 Squadrons were made to the east of Aalten from 0900-1400 hours. These Spitfires made a small number of attacks on railway lines and two direct hits were observed. They also destroyed three motor vehicles. During the same period a squadron of Spitfires patrolled further to the east from Enschede to Minster. Little of interest occurred except for a large fire and explosion in a wood north of Holsterhausan caused by strafing.

<sup>(1)</sup> These probably amounted to about fifteen positions in close proximity to the landing/dropping somes.

202

The Typhoons of Nos, 121 and 124 Wings No. 83 Group carried out armed reconnaissance closer to the battle area but without much success for little movement was seen and pilots occupied themselves by attacking flak positions east of the landing/dropping zones. A butted camp near Bocholt and gun positions north of Gendringen in the Rees area were also attacked.

Spitfires of No. 403 Squadron were more fortunate in coming upon a small party of cyclists proceeding from Groenlo to the battle area and they strafed several M.T. vehicles on the same road.

Tempests also took part in armed reconnaissance during the afternoon and evening. No. 3 Squadron patrolling the road from Bocholt to Borken caught a lorry towing a gun and set the lorry on fire. No movement on roads leading from the Dutch border towards Wesel was noticed. Tempests operating again in the Bocholt-Borken area at 1800 hours attacked a number of M.T. vehicles. During the day 2nd T.A.F. flew 212 sorties; eight rail cuts were made, 29 M.T. believed destroyed and 22 damaged.

Apart from this effort by 2nd T.A.F., 92 sorties were flown over western Holland. Nos. 131 and 132 Wings took part in operations from first light until dusk in the region of Utrecht - Amersfoort - Apeldoorn. Barges were attacked, a few rail cuts made and eleven motor vehicles were presumed destroyed. 178 aircraft of the XXXth Tactical Air Command carried out armed reconnaissances in the Dortmund-Dusseldorf-Wesel area. An important attack was made on an airfield north-west of Dorsten and 24 aircraft were claimed to have been destroyed and 28 damaged without loss to the American aircraft. Other claims were 270 motor vehicles, 20 armoured vehicles, 416 trucks destroyed and 31 rail cuts.

Air Staff S.H.A.E.F. Daily Int/Ops. Summary No. 34 24 Mar. 1945. p. 7.

VIIIth Air Force Report on Air Cps. 21-24 Mar. 1945 pp. 24 - 28.

Vilith Air Force Monthly Summary of Operations Mar. 1945. D. 73. On 24 March the VIIIth Air Force had 14 Mustang Groups (1) (two of which were based on the continent) and one limited size Thunderbolt Group (2) available for operations east of the Rhine. They were supplied by the 65th, 66th and 67th Fighter Wings and the VIIIth Fighter Command.

It will be recalled that the tasks of these fighter aircraft were in the first place to give air protection to operations in the bridgehead, secondly to protect the operations of the Eighth Air Force heavy day bombers and thirdly to attack movement to and from the battle area.

The area of operations which extended eastwards from the arc Zwolle - Siegen had been divided into an inner and outer defensive perimeter. The bulk of the fighter strength (12 Groups) operated in the inner perimeter and their main task was that of interdiction. The perimeter was divided into six patrol areas, each approximately 30 miles square. The outer perimeter was divided into two large zones both roughly 100 miles long and 25 miles wide. Here the remaining two groups kept watch for enemy aircraft proceeding to the inner perimeter and from thence to the bridgehead.

<sup>(1) 884</sup> aircraft,

<sup>(2) 27</sup> aircraft,

The day had been divided into five periods. In the inner perimeter half the number of Groups operated within a single period during the morning. Priority was given to the task of interception during the vital period of the airborne landings and while the attacks by the American heavy bombers were in progress. It was therefore necessary for all units to make double sorties.

Six fighter Groups operated from 0730-1945 hours. They took over from the Tempests of 2nd T.A.F. which had been out before first light. The remaining six Groups operated during the second period from 0945-1200 hours. The Groups which had operated during the first period refuelled and returned for their second sortie in the same area for the third period from 1145-1445 hours. The fighters which had flown sorties during the second period returned to carry out the afternoon patrols. These were from 1430-1600 hours and from 1600-1800 hours.

In the outer perimeter patrols were carried out continuously from 0630-1930 hours. Periods overlapped so that two units would patrol in the same area for some time. The Mustang groups based on the continent undertook all sorties for this perimeter.

An elaborate account of the armed reconnaissance sorties would be of little value as road and rail movement in the rear areas was on such a small scale that ground targets were few and far between. Claims were made for 39 locomotives, 117 trucks and 51 M.T. destroyed. But for the most part pilots were engaged in shooting up observation towers, high tension wire pylons and radar installations. Larger targets were a military camp which was attacked by eight Mustangs and a small marshalling yard strafed by six aircraft.

There were, however, several encounters with enemy aircraft, these being mainly Me.109's and F.W.190's and claims were made for the destruction of 53 enemy aircraft.

German Document, Inftwaffe West Sit Reps. p. 125 A.H.B.6. Trl. Shortly after mid-day 46 Me.109's were sent out to make armed reconnaissances in the Bocholt-Wesel area. Eighteen of these aircraft encountered a number of Mistangs near Gutersloh. Enemy reports state that eleven of their own aircraft were shot down, two were missing and four damaged. There is no reference to the operations of the remaining 28 aircraft.

At 1300 hours VIIIth Air Force fighters operating near Hamm saw 15 Me.109's attempting to land at Eikelon airfield. They claimed to have destroyed 12 aircraft but no record of this action appears to have been made by the G.A.F. to confirm this.

During the afternoon there were two further engagements which took place over Kassel and Soest. At Kassel a Mistang unit supporting a force of heavy day bombers on its way to attack airfields was diverted to intercept a large force of 20 F.W.190's and 15 Me.109's. A fierce action then took place in which 27 enemy aircraft were thought to have been destroyed and seven damaged for the loss of five of the Mistangs. Two Me.109's were claimed to have been shot down over Soest. Two other Mistangs were destroyed and four were missing from these operations. In passing, it is interesting to note that only two jet aircraft were recognized during the whole day.

204

The results of armed reconnaissances carried out by fighter/bombers might appear to be disappointing considering that 1653 sorties were flown over a wide area of northwest Germany. But it seems evident that the enemy fully appreciated the great superiority of the Allied Air Forces and was not going to take foolish risks in moving large quantities of either men, vehicles or equipment during the hours of daylight. As for his fighter aircraft, a large proportion of them were either grounded through lack of fuel or else were unable to take off due to the bombing of their airfields.

#### Close support

Close support was given to the ground and airborne troops by fighter/bombers of 2nd T.A.F. and XXIXth Tactical Air Command and also by medium bombers of No. 2 Group. Attacks were either made on pro-arranged targets or in response to calls from the contact cars operating with the assault formations. No. 83 Group was responsible for the latter task in the Twenty First Army Group zone. Nos. 174, 175, 245, 184 Squadrons of No. 121 Wing and Nos. 182 and 247 squadrons (124 Wing) and Nos. 439 and 440 squadrons (143 Wing) took part. With the exception of the two last named squadrons, all carried rocket projectiles.

2nd T.A.F. Daily Log Sheet Nos. 2840-2849. For the 2nd T.A.F. the first of the pre-arranged tasks was the destruction of four headquarters shortly after 0630 hours. The first of these was at Erle and Typhoons of No. 440 Squadron claimed to have scored two hits on the buildings. The second lay in Zelhem north of Emmerich; nine Typhoons of No. 197 Squadron dropped eighteen 500 pound bombs and caused a large fire. No. 263 Squadron attacked the third situated in the village of Halle with rocket projectiles and succeeded in setting fire to a large building. Nos. 193 and 266 Squadrons attacked the fourth headquarters in the village of Krudenburg. Here buildings were wrecked by high explosive and a large fire was seen burning at the conclusion of the attack.

Aircraft engaged in immediate support were active shortly after 0600 hours. The main centre of opposition to the assault proved to be in the Rees area which was occupied by seasoned enemy paratroops. No. 121 Wing was engaged in all these missions. Three attacks with rocket projectiles were made on Bienen which had been made into a strongpoint and was also a concentration area for reinforcements. Operations were conducted by the Forward Control Post.

From 1000-1230 hours pre-arranged support was given east of Hamminkeln in support of the airborne landings. Artillery positions and strong points occupied by infantry were attacked by 44 Typhoons. At Peddenburg, to the south of Hamminkeln, three 88 mm. guns were attacked, and a farmhouse in the same area containing several light A.A. guns was partially demolished. Salvoes of rockets were fired at another flak position hidden in the church steeple of Ringenburg but falling debris prevented any results being seen. Other Typhoons made attacks on transportation targets during the same period as well as on the concentration areas at Bocholt, Brunen and Erle.

In the Rees area pre-arranged attacks were made in the rear of the fighting line. Two flights of Typhoons fired 31 rocket projectiles into gun positions near Ijsselburg which were harassing troops crossing the river and a

number of light flak posts hidden in woods near Werthe south of Ijsselburg were also attacked.

Aircraft detailed to take on requested targets were also operating in the Ringenburg - Bocholt area during the period of the airborne landings but poor visibility hampered the pilots considerably. A headquarters at Ringenburg was hit with rocket projectiles and two attacks were made on Bocholt. On one of these missions 30 motor vehicles were attacked south of Dingden and at Brunen an 82 mm. gun was strafed.

During the afternoon constant attacks, both pre-arranged and impromptu were made in the Rees area where opposition was stiffening considerably. From 1530-1830 hours 41 Typhoons from Nos. 123 and 146 Wings continued to make pre-arranged attacks. Smoke and haze also obscured operations in this area and a requested target of infantry on a road south of Werthe was not located. A search for tanks believed to be lying up in the vicinity was made. Targets further to the north were also attacked by these aircraft. They included an attack on a radar installation north of Emmerich which proved to be abortive.

2nd T.A.F. Daily Log Sheet No. 2844. No. 193 Squadron made a powerful raid on a strongpoint equipped with mortars and otherwweapons at Millingen, north of Rees, which had been obstructing the advance of the 51st Division. Twelve 500 pound H.E. and four 500 pound armour piercing bombs were dropped. Pilots reported that there were five direct hits on a building which was seen to burst into flames.

Tanks were now being brought up to support the enemy paratroops in this area and No. 197 Squadron was detailed to attack a concentration of A.F.V.S. and M.T.(1) in a wood near Ijsselburg. The attack was made under direction of the Mobile Radar Control Post but most of the bombs fell short of the target.

2nd T.A.F. Daily Log Sheet No. 2842. No. 2 Group was also called in to support operations in the Rees area. Three medium gun positions south of Ijsselburg were required to be destroyed and 18 Bostons of No. 137 Wing attacked them between 1400 and 1500 hours. One thousand and eight 20 pound fragmentation bombs were dropped from a height of 12-13000 feet. Aircraft were directed by the Mobile Radar Control Post and good results were believed to have been obtained on two targets and fair on the third.

Aircraft engaged on immediate support were also kept busy near Rees. Further attacks were made on Bienen and an observation post and troops defending buildings were attacked. Attacks were made on the concentration of tanks and motor transport at Werthe but no results were observed.

Attention was also paid to the Bocholt - Brunen - Dingden area where the airborne troops were in the process of consolidating their newly won ground. Flak positions were strafed and rockets fired on motor transport at Dingden.

Sixty four Typhoons of No. 83 Group operated in a "oab rank" from 1500-1800 hours engaging targets on instructions from the Group Control Centre. On four occasions targets were not located due to poor visibility and alternative targets were taken on. Troop concentrations in the villages

<sup>(1)</sup> Armoured fighting vehicles and motor transport.

of Rhede, Krudenburg, Gendringen and Sinderen were attacked with some success while in the Groenlo area stationery railway trucks in the railway station were strafed.

Casualties to aircraft during these operations were Four hundred and fifty fighter/bomber extremely low. sorties were made in close support tasks and only one Tempest and four Typhoons were shot down by flak.

S.H.A.E.F. (Air) Daily Int./Ops. Sum. No. 34 24 Mar. 1945.

The XXIXth Tactical Air Command was also active throughout the day. A force of 288 aircraft supported the two assault divisions of the IXth U.S. Army in its effort to enlarge the bridgehead up to the Dinslaken-Wesel road. They attacked 44 defended positions and nine armoured fighting vehicles were destroyed. Five aircraft were lost as a result of these operations.

0

## Reconnaissance

2nd T.A.F. Daily Log Sheet

A total of 180 recommaissance sorties were flown by 2nd T.A.F. on 24 March, out of which just over 100 were flown by No. 83 Group alone. The effort of No. 39 Wing (No. 83 Group Reconnaissance Wing) was divided into 19 tactical, 14 artillery, 11 contact and 12 photographic reconnaissances. Log Sheet Tactical reconnaissances were flown over the battle area
Nos. 2844 to 2845. between the River Ijssel in the north and the River Lippe in the south. Apart from a number of cyclists moving towards the front after midday, very little movement was seen by pilots but they reported considerable damage from aerial attack at various points.

No. 39 Wing

For an hour and a half before the airborne landings began, special patrols were flown over the landing/dropping zones to discover unidentified flak positions and five guns were located. Other sorties were flown over ground and O.R.B. Mar. 1945. anti-aircraft artillery in the vicinity of the dropping zones. Smoke and haze made observation of pinpoint targets extremely difficult and it was found impossible to direct zones. Second Army batteries on to enemy positions from the air.

> The task of aircraft flying contact reconnaissances was to provide information for the leading elements of the ground forces. Sorties were on the whole uneventful. Typhoons were informed by reconnaissance pilots of the position of a few motor vehicles; a sortie, north of Wesel, revealed that a bridge near Mehr, reported intact the day before, had been destroyed. Other aircraft reported tanks moving towards the battle in the Ijsselburg-Bocholt area.

> Spitfires of No. 400 Squadron (Photographic Reconnaissance), which prior to the start of the battle had been taking photographs of road and rail centres north of the Ruhr, flew sorties east of Wesel, their task being to check the latest position of the airborne troops. A few sorties were flown over communication centres such as Haltern and Osnabruck.

No. 35 Wing

No. 263 Squadron O.R.B. Mar. 1945.

No. 35 Wing (No. 84 Group) was not directly concerned with the battle raging around Wesel. Tactical reconnaissances No. 35 Wing were flown over Emmerich and along the Dutch-German border O.R.B. Mar. 1945. to discover any movement of troops towards the Rhine. Photography of the company o recommaissances were flown over the Rheine airfields. Artillery reconnaissances, flown by No. 263 Squadron, were more successful than those flown by No. 83 Group and Canadian artillery effectively shelled and hit several gun positions as a result of spotting from the air.

No. 34 Wing O.R.B. Mar. 1945.

No. 34 Wing, concerned with strategic reconnaissance, flew 15 Mosquito and two Spitfire sorties, the former extending from the bridgehead area to Hanover and the Frisian Islands. A number of enemy aircraft were identified over airfields at Hopsten and Enschede during the morning. Shortly before 10.00 hours four Me.262's were seen over Winters Wijk. The Spitfires flew weather reconnaissances behind the front. That night, Headquarters Twenty-First Army Group asked that the Wing should cover roads and road junctions behind the bridgehead. Sorties were flown by ten Wellingtons and 13 Mosquitoes. One of the latter was directed by the Mobile Radar Control Post (the first occasion on which it was used for a night reconnaissance). Excellent results were obtained and about 70 vehicles were distinguished on the photographs.

## Attacks on Communications and Troop Concentrations

These operations were carried out by both medium and heavy bombers and brought to a conclusion the heavy preparatory attacks made before D Day. R.A.F. Bomber Command, No. 2 Group and the Ninth Air Force were involved.

The most ambitious of the attacks were made by R.A.F. Bomber Command on troop concentrations and defended positions in Gladbeck and the large communication centre of Sterkrade in the Ruhr, Both targets were in the Ninth Army tactical area and the operations were designed to stop enemy movement towards the front. R.A.F. Bomber Command had undertaken these tasks because the commitments of the Tactical Air Forces were so heavy.

R.A.F. Bomber Cmd. O.R.B. Ops. 24.3.45.

R.A.F. Bomber Cmd. O.R.B. Interp. Reports H. 2308 H.2311 Mar. 1945.

One hundred and seventy five Lancasters, Halifaxes and Mosquitoes took part in the attack on Gladbeck at 1300 hours and 177 bombers attacked Sterkrade forty miles to the west, a quarter of an hour later. No escort accompanied the bombers as the targets lay within the zone in which Allied fighter aircraft were operating in large numbers. Weather conditions were excellent and the results proved to be most satisfactory. At Gladbeck roads were blocked and railway lines cut. At Sterkrade rail tracks in the passenger station and in the sidings were cut and the northbound line to Wesel was blocked by a crater. In addition heavy damage was caused in the Later in the afternoon Bomber Command once again visited the Ruhr, this time to attack oil targets with 185 aircraft. The Harpenerweg Oil Refinery at Dortmund and the Mathias Stinnes Benzol Plant at Bottrop were both damaged and put out of action until the arrival of the Allies on 28 March.

Summ. No. 34 24 Mar. 1945.

The widespread attacks on communications and defended localities were continued by the IXth Air Force and No. 2 Group, both in the Second and Ninth Army tactical areas. S.H.A.E.F. (Air) One hundred and thirteen medium bombers of the IXth Air Force Daily Int./Ops. took part in attacking possible concentration points. were, Ahaus, Bocholt, Holtwick, Coesfeld and Borken - small towns which roughly formed a parallelogram in the rear of the South of the Lippe, Dorsten and Reden were fighting zone. South of the Idppe, Dorsten a attacked by 52 bombers both with good results.

Second T.A.F. No. 2842.

No. 2 Group undertook targets nearer the battle zone. A force of 24 Mitchells from Nos. 137 and 193 Wings which had Daily Log Sheet already taken part in the morning attacks on flak positions bombed Brunen from 1405 to 1412 hours. Here enemy troops were gathering in an attempt to throw back the airborne divisions. A smaller force consisting of 18 Mitchells

attacked another troop concentration at Raesfeld between 1418 and 1420 hours, dropping one hundred and sixteen 500 lb. bombs. Good results were obtained on both targets. Five Mitchells unable to find Raesfeld flew to Erle and dropped a good concentration on it as an alternative target.

0

O.

Second T.A.F. Daily Log Sheet No. 2855. During the night of 24/25 March a large force from No. 2 Group (94 aircraft) set out to disrupt movement and communications. The targets which had been bombed by the Ninth Air Force during daylight were now bombed by Mosquitoes. In addition to these targets, Seigen, Dulmen and Meppen were attacked.

A number of targets in proximity to the battle area were visited by the Ninth Air Force. These were Boar, a small defended locality still holding out on the west bank of the Rhine, Rosbach another military target near Pracht and two communication centres - Elbefeld and Paderborn.

Further attacks on the Ruhr line of interdiction were made by the Ninth Air Force on the afternoon of D Day.

Reconnaissance had shown that three railway bridges - at Pracht, Colbe and Vlotho - were still in a passable condition although they had been previously attacked. A total of 208 aircraft took part in attacks on the bridges. Two attacks were made on Colbe bridge, subsequently found to have been destroyed, and one each on the bridges at Pracht and Vlotho.

Diversionary Operations

The Fifteenth U.S. Air Force and R.A.F. Coastal Command carried out operations which, although not directly connected with the assault across the Rhine north of the Ruhr were planned to divert enemy aircraft from this sphere of operations. A brief description of their widespread activities should therefore be included.

Six hundred and sixty Fifteenth Air Force heavy bombers escorted by 394 fighters flying from bases in Italy made a series of attacks deep into Germany, thus undertaking the normal role of the Eighth Air Force then fully engaged in operations in the Rhine area. The largest of these was on operations in the Rhine area. The lar the Daimler-Benz Tank works in Berlin. One hundred and forty nine Fortresses made an all round journey of 1500 miles and dropped 356 tons on the target. Stiff opposition from enemy fighters was met over Berlin. Three airfields in southern Germany were attacked and some 40 aircraft were destroyed on the ground. One hundred and five Liberators attacked railway centres at Plattling and Budejovice. Losses of the Fifteenth Air Force were 17 bombers and nine fighters. Closer to the battle zone 31 Beaufighters of R.A.F. Coastal Command made a reconnaissance in force along the Frisian Islands during the morning, thereby keeping the enemy engaged in that quarter. In the course of operations a coaster was sunk but apart from this the sorties were without incident.

Summary of air operations 24 March

By nightfall on 24 March the British and American Forces had secured a firm lodgment on the east bank of the Rhine. Heavy fighting was to continue, especially in the northern sector, where enemy paratroops were trying desperately to hold their ground.

Air Staff S.H.A.E.F. Daily Int./Ops. Summary No. 34 24 Mar. 1945. p. 6.

Air Staff S.H.A.E.F. Daily Int./Ops. Summary No. 34 24 Mar. 1945. p.10.

R.A.F. Coastal Cmd. O.R.B. Ops. 24 Mar. 1945. The issue of the battle had already been decided and without doubt this was due to the great effort which the Allied Air Forces were able to bring to bear. The threat to the airborne landing had not materialised and although enemy aircraft attempted to attack the bridgehead during the following two nights, bridging operations and the passage of reinforcements over the Rhine continued unabated.

The G.A.F. was thoroughly disorganised by the heavy bomber attack on airfields and his attempts to break into the ring made by British and American fighters had been hopeless. Although flak in the battle area had been severe in spite of the strenuous effort made by medium and fighter bombers only 57 out of a fleet of 1,500 troop carrier aircraft were destroyed.

The effort made by fighter aircraft in support, reconnaissance and cover operations was remarkable. For instance a number of fighter squadrons of 2nd T.A.F. made as many as 52 sorties in the day. The total number of sorties on 23/24 and 24 March flown by the Allied Air Forces have been summarised as follows:

Air Force	Effective Sorties	Short tonnage	Losses
R.A.F. Bomber Command	719	3,429	4
VIIIth U.S. Air Force Bombers Fighters	1,721 1,404	4,096	14 9
XVth U.S. Air Force Bombers Fighters	660 394	1,415	15
2nd British T.A.F.	2,223	511	17
IXth Air Force	2,747	1,623	12
1st T.A.F.	1,095	314	
First French Air Force	263	94	-
R.A.F. Fighter Command	338	-	-
R.A.F. Coastal Command	31	per	-
Nos. 38 and 46 Group, R.A.F.	440	-	7
IX U.S. Troop Carrier Command	1,149	-	46
	13,184	11,482	129

This was a striking demonstration of the great superiority of Allied air power during the last phase of the campaign in north-west Europe.

#### Ground-Air Operations: 25-29 March

The expansion of the bridgehead progressed steadily. Two bridges capable of bearing heavy traffic were thrown across the Rhine thus enabling amoured formations and reserves to take part in the battle. The Ninth U.S. Army cleared Dinslaken and advanced elements struck out towards

#### SECRET

210

Kirchellen and Gladbeck reaching the Dortmund-Ems Canal on 27 March. The Second British Army crossed the autobahn (running north from the Ruhr) and entered Ringenburg on 26 March. In the Rees area slower progress was made owing to the stout resistance of three enemy paratroop divisions but British troops had taken Raesfeld and Bocholt by 26 March.

Air Staff S.H.A.E.F. Daily Int./Ops. Summary No. 35.

2nd T.A.F. Daily Log Sheets No. 2856 - 60.

Tbid Sheets No. 2873 - 2878.

2nd T.A.F. Daily Log Sheets No. 2861 - 65.

2nd T.A.F. 0.R.B. Ops. 25 Mar. 1945. Page 106. 2nd T.A.F. Daily Log Sheets No. 2879 - 83.

A.M. File C.33814/47/II Enol. 9A.

2nd T.A.F. Daily Log Sheet Nos. 2917 - 2926. The 2nd T.A.F. and XXIXth Tactical Air Command gave unceasing support to the ground forces although the fine weather which had continued during the assault deteriorated on 26 March. The XXIXth Tactical Air Command carried out 742 armed reconnaissances from Dortmund to Witdorf on 25 March and on the next day 674 sorties were flown. Armed reconnaissances on 25 March by Nos. 83 and 84 Groups (465 sorties) were also on a far larger scale than on 24 March as enemy transport was more active and tanks were deployed in an attempt to hold up the Allied advance. Sixty-five motor vehicles and eight tanks were claimed to have been destroyed.

On the next day, the 26th, the enemy showed distinct signs of collapse. Aircraft engaged on armed reconnaissance along the Dutch border and from Dorsten to Munster found no shortage of targets. Convoys of motor vehicles including a large number of petrol tankers were caught as they made their escape from the battlefield. 2nd T.A.F. increased its numbers of sorties to a total of 671 and 139 vehicles were claimed as destroyed. Aircraft engaged on other tasks, including fighters on return from patrol, claimed 383 vehicles.

Close support operations, although on a smaller scale as compared with 24 March, were of great value throughout the next two days. On 25 March a powerful effort was made by 2nd T.A.F. to knock out medium guns in the Ijsselburg - Anholt area. Flights of fighter/bombers directed by contact cars made frequent attacks on batteries and also bombed and fired rockets at mortar positions and strong points.

No. 2 Group also took part and made 605 sorties on gun positions. By that evening Second British Army reported that only two batteries were still firing into Rees. On 26 March another 48 sorties were made by No. 2 Group and fighter/bombers continued to attack gun positions and strong points.

During the period of the next five days (27-31 March) the enemy withdrew from the Wesel area in some haste. As was usual, after a reverse, there was an inevitable increase of movement during daylight and this was most noticeable along the roads running north-east along the Dutch frontier. There was a steady stream of motor and horse-drawn vehicles among which a few tanks and tank transporters mingled. Unusual activity was also noted on the railway lines leading east from Wesel. Reasonable weather, with the exception of the 27th, enabled the pilots of 2nd T.A.F. to harry the withdrawal. Evidence of the success of their operations came from members of the Dutch Resistance who reported that they had observed excellent air to ground attacks on the roads Oldenzaal—Donrekamp and Nordhorn-Oldenzaal-Bentheim. Operations reached a climax on 31 March and the following night when 2nd T.A.F. claimed to have destroyed 279 and damaged 527 motor vehicles.

Further valuable attacks were made on enemy headquarters by No. 84 Group. On 25 March the second attack on the Dutch S.S. troops headquarters located in a castle west of See p. 189
2nd T.A.F. Daily Log
Sheet No. 2861, 2880,
and 2nd T.A.F. O.R.S.
Report No. 36
p. 12.

2nd T.A.F. Daily Log Sheet No. 2911 - 12.

A.M. File C.33814/47/II Encl. 9A.

2nd T.A.F. O.R.S. Report No. 34 p.13.

Inftwaffe West Sit. Reps. p. 126.

2nd T.A.F. Daily Log Sheets No. 2867 - 70.

Luftwaffo West Sit. Reps. pp. 131, 135.

R.A.F. Bomber Cmd. Report on Day Ops. No. 21. Mar. 1945.

Ibid No. 22 Mar. 1945.

Arnhem was made by No. 131 (Spitfire) Wing. On the next day Typhoons of No. 123 Wing re-attacked the castle which was discovered to have been gutted by fire. On 30 March another attack was made on General Blaskovitz! headquarters (Army Group H) near Oldenzaal by rocket carrying Typhoons of A member of the Dutch Resistance Movement No. 164 Squadron. reported that the building was burned down with all material. Members of 2nd T.A.F. Operational Research Section confirmed that the building had been used as a staff headquarters and that General Blaskovitz had worked there during the previous week. On the same day Spitfires of No. 123 Wing attacked the headquarters of the Commander in Chief Netherlands in the Bussum (Zuider Zee) area. (1) All bombs were reported to have fallen in the target zone.

Enemy aircraft sent to attack ground troops were ineffectual against the large number of fighters operating over the bridgehead. During daylight on 25 March 74 sorties were made by F.W.190's from Rees to Kirchellen. They were intercepted by Tempests and Spitfires engaged on cover operations and 12 were shot down. That night four more aircraft were destroyed and on 26 March only 15 fighters and a few reconnaissance aircraft ventured as far as the Rhine. Meanwhile the headquarters of Inftwaffe Command West was evacuated to southern Germany.

R.A.F. Bomber Command continued to assist the land battle by attacks on communications. On 25 March 607 bombers attacked Hanover, Munster and Osnabruck using 'Oboe' technique and 895.4 tons of H.E. were dropped. The next day the IXth Bomb Division returned to the scene of operations and attacked three marshalling yards in the Frankfurt area. On 27 March R.A.F. Bomber Command, in spite of the poor weather, sent 276 aircraft to attack Paderborn. By 29 March Twenty First Army Group had broken out from the bridgehead; 14 divisions were now operating north of the Ruhr and enemy resistance was rapidly becoming disorganised.

<sup>(1)</sup> Attacks on these three headquarters were made before the crossing of the Rhine (See pp. 186-188).

# CHAPTER 7

#### THE ADVANCE TO THE ELBE AND THE CAPTURE OF BREMEN

#### Strategy for the final phase

Log D.S.C. S.C.A.F. 246 25 Mar. 1945

See Chap. 5, p. 172.

Tbid S.C.A.F. 247 25 Mar. 1945

Tbid S.C.A.F. 252 26 Mar. 1945

Eyes only C. in C. 21 Army Group to S.A.C. Ref. No. M.562 27 Mar. 1945

Eyes only S.A.C. to C. in C. 21 Army Group S.H.A.E.F. F.W.D. 18272 28 Mar. 1945 On 25 March, the day after the northern crossing of the Rhine, General Eisenhower made the First U.S. Army available to the Central Group of Armies in order that the success gained by the Americans in the Remagen bridgehead might be fully exploited. It will be remembered that this Army had originally been intended to operate with Field Marshal Montgomery's forces north of the Ruhr.

General Eisenhower issued orders to the commanders of Army Groups for the first phase of operations east of the Rhine on the same day. The main task to be accomplished was the isolation of the industrial Ruhr from the rest of Germany. This was to be undertaken by the First U.S. Army striking to the north from the Remagen bridgehead and joining hand with the Northern Group of Armies heading eastwards from their bridgehead at Wesel.

Plans for developing an offensive into the heart of Germany were now developed by S.H.A.E.F. The Supreme Commander believed that these must be closely co-ordinated with the Russians and he determined to discover their intentions. On 26 March he sent a personal message to Marshal Stalin, as Commander in Chief of the Russian Armies. The plan which he divulged to the Marshal was as follows. Once the Ruhr had been encircled the main effort of the Anglo-American forces was to be contained in an advance across central Germany on the line Erfurt - Leipzig - Dresden with the object of joining hands with the Russians. It was in the centre rather than in Berlin that the Wehrmacht must be given a crushing blow. A secondary thrust was to be made in the south to link up with the Russians in the Regensburg - Linz area. In return for this information General Eisenhower asked Stalin to give him an outline of the Russian strategy.

In the meantime Field Marshal Montgomery had issued new orders to his Army commanders. The Second British Army and the Ninth U.S. Army were to make an all-out dash to the River Elbe, at the same time linking up with U.S. forces advancing from south of the Ruhr. Once across the Elbe the Field Marshal envisaged a rapid thrust on Berlin.

This was not in accordance with the ideas of the Supreme Commander who at once informed Field Marshal Montgomery of his strategy. He added that when the Ruhr had been out off, the Ninth Army was to be returned to General Bradley's command in order to give him the maximum support for the central thrust. At the same time signals were sent to the American Army Commanders informing them of the change of plan.

The Prime Minister (and the British Chiefs of Staff) were greatly perturbed when they learned of this change and the Prime Minister telephoned the Supreme Commander on the evening of 29 March and asked for further information. He also informed the Combined Chiefs of Staff in Washington of his views. These were officially conveyed by General Marshall to the Supreme Commander in a cable. The British were disturbed

Log D.S.C. Gen. Marshall to S.A.C. W.60507 30 Mar. 1945 not only by the procedure adopted by General Eisenhower in communicating with the head of a foreign state before informing the Combined Chiefs of Staff but also in his change of plan hitherto unknown to them. (1) They maintained that a swift advance should be made from the Wesel bridgehead across the plains of north-west Germany which would end at Berlin. The following advantages would accrue:-

- (i) A subsidiary attack would open German ports in the west and north and a new line of communication would be available to the western Allies.
- (ii) The capture of these ports would hasten the end of the U- boat war.
- (iii) The Allies would be able to liberate Denmark and open up communications with Sweden. This would free nearly two million tons of neutral shipping.
  - (iv) The relief of the Dutch would be facilitated.

The U.S. Chiefs of Staff, on the other hand, supported both General Eisenhower's action in communicating with Marshal Stalin and his strategy and they considered that the maximum number of divisions had been deployed north of the Ruhr. On 31 March the Combined Chiefs of Staff instructed the Supreme Commander to inform the Military Mission in Moscow that they were not to divulge further details of his plan to Marshal Stalin and asked him for a full explanation of his strategy. (2)

F.A.C.S. 170

31 Mar. 1945

Ibid

Ibid S.C.A.F. 260 31 Mar. 1945 General Eisenhower stood by his original plans and was fully prepared to make an issue of the matter. In his reply he stated that his intention was to divide and destroy the main German forces. This could only be achieved by his Armies carrying out operations in Germany phase by phase. There were three broad areas which contained the remaining troops of the Wehrmacht: around Kiel and Hamburg in the north, Leipzig in the centre and the Nurnberg - Regensburg - Munich area in the south. Berlin, as he had already informed Stalin, had lost its importance as the Nazi ministries were on the move to central and southern Germany. Moreover Berlin lay within easy grasp of the Russians standing on the banks of the Oder. General Eisenhower reiterated that the main thrust should be into central Germany for these reasons:-

- (i) The Wehrmacht would be split into two parts.
- (ii) The Allies would capture the enemy's last industrial area around Leipzig.
- (1) For details of the Supreme Commander's strategy for 1945, see Chap 4, p. 109 et seq.
- (2) An amplification of the Supreme Commander's plan had been requested by General Deane, Military Mission Moscow, and this was sent to him. On 31 March General Eisenhower instructed him that it must not be passed on to Marshal Stalin.

(iii) An advance across the central plateau of Germany would prove easier because the main German rivers would be crossed at their head waters and not on the main streams. An advance across the northern plains would be arduous because of their waterlogged state at this time of year.

With regard to the two other areas of strategic importance, a drive on Bremen and Hamburg would rank next in importance although these ports would not be available to the Allies until the Frisian Islands and Heligoland, dominating the estuaries of the Weser and Elbe, had been reduced by Naval and Air Forces. In the south it was important that an early junction with the Russians should be made in order that German attempts to hold out in the Bavarian mountains might be frustrated.

File D.S.C/H.12 A.M.M.S.O. to S.H.A.E.F. Ref. No. 2072 31 Mar. 1945. The Prime Minister remained adamant in his belief that it was Berlin and not Leipzig that was the important objective. He pointed out the political significance of the capture of the city by the western Allies. The Russians were about to enter Vienna and if they were first into Berlin this event would only strengthen their conviction that they had achieved everything. Further, a march on Berlin by British as well as U.S. troops would avoid "the relegation of His Majesty's forces to an unexpected restricted sphere".

Log D.S.C. Military Mission Moscow to S.H.A.E.F. M.X. 23588 1 Apr. 1945. Marshal Stalin, on the other hand, replied that the plans of General Eisenhower entirely coincided with those of the Russian High Command. The main Russian forces were to be directed into the Leipzig - Dresden area and would also link up with U.S. forces in the Linz - Regensburg area. 'Secondary forces' were to launch an attack against Berlin.

Eyes only C. in C. 21
Army Group to S.A.C.
Ref. No. 1562/1
29 Mar. 1945
and
S.A.C. to C. in C. 21
Army Group S.H.A.E.F.
F.W.D. 18389
31 Mar. 1945

In the meantime further telegrams had been exchanged between General Eisenhower and Field Marshal Montgomery as the latter had requested him not to remove the Ninth U.S. Army from his command. But General Eisenhower firmly adhered to his strategy and the Combined Chiefs of Staff decided to allow him to proceed with his revised plan giving him freedom to change them if the current situation so demanded.

The effect of the rapid advance east of the Rhine on heavy bomber operations

In the first fortnight of April the area of Germany still occupied by enemy forces was rapidly decreasing in size. By 11 April the Ninth U.S. Army had already reached the Elbe in the region of Magdeburg. In the central sector the Third U.S. Army was making towards Leipzic. The pressure from the west was reciprocated by the Red Army in the east. On 22 March it had launched a new offensive in Silesia which was to bring it to the banks of the Elbe within a month. In the south east other Russian forces were sweeping into Austria and its capital fell into their hands on 9 April.

D.S.C./T.S.100/9 Pt.5 Encl.19A para. 12. The Deputy Supreme Commander stated, after the crossing of the Rhine, that the list of priorities for the Strategio Air Forces should remain the same but that it would be necessary to protect the Allied spear heads thrusting across Germany and the vulnerable transport aircraft required to supply them, by further heavy air attacks on the G.A.F. bases. On the same day, the Deputy Chief of Air Staff informed the Strategic Air Forces that since the recent air attacks on German airfields in connection with Operation Plumder had been so successful, heavy bombers were to intensify operations against this type of target instead of bembing aircraft production centres.

D.S.C./T.S.100 Pt.9 Encl. 87A.

DS 96326/4(223)

#### SECRET

216

Ibid Encl. 93A. In view of the changed ground situation, a plan for the employment of the heavy bombers was drawn up by S.H.A.E.F. (Air) and issued on 3 April. It concluded that the railway system in the Halle-Leipzig-Chemnitz area (1) should be attacked for the following four reasons. Military traffic proceeding either to the eastern or the western fronts would be disrupted. Equally, evacuation traffic from the threatened area behind the two fronts would be affected. A delay would be imposed on industrial products such as brown coal briquettes, steel, aircraft, armament components etc. Finally troop movements and supplies into the National Redoubt (2) would also be hindered. Yet another reason was that concentrated air attacks in this area might well disorganise government departments and Nazi organisations which were believed to be assembled there before withdrawing into the Redoubt. This plan was guided by the principle of concentration of attack in time and space which had recently proved its worth in the Ruhr.

Key rail centres chosen for attack were at Dessau, Halle, Leipzic, Gera and Nordhausen. In addition 24 towns and pinpoint targets (some of them also in the list of communications targets), believed to be connected with the evacuation of O.K.H. from the Berlin area to the Redoubt, were chosen for attack. They included the towns of Weimar, Ohrdoff, Nordhausen and Bad Berka, all in central Germany.

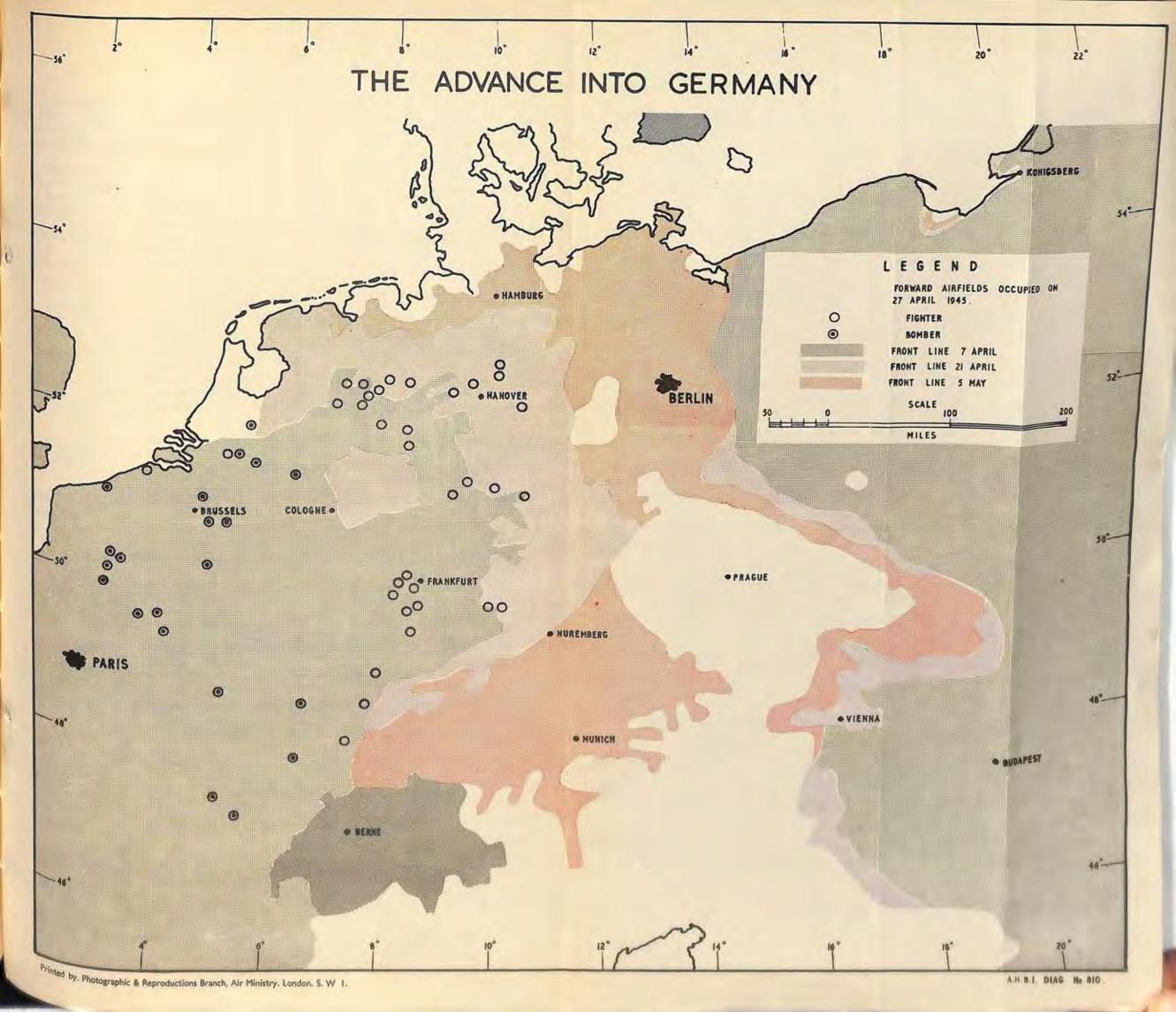
D.S.C./T.S.100/9 Pt.5. Encl.26A. Discussion on a new target system for the heavy bombers took place at the Air Commanders Conference on 5 April. Air Chief Marshal Harris, Commander in Chief, R.A.F. Bomber Command admitted that targets for the heavy bombers were becoming difficult to find and said he believed that the Strategic Air Forces had completed their task. In the immediate future he thought that they might be used either against enemy troops in the Ruhr or against key towns such as Halle and Leipzic. The Deputy Supreme Commander maintained, as before, that the list of bomber priorities still fitted the current situation but that there must be more attacks on airfields and concentrated bombing in the Leipzic - Halle district.

Tbid Encl. 29A para. 3 and S.H.A.E.F. (Air) Hist. Record & Diary p.2. Apr. 1945.

D.S.C./T.S.100/9 Pt.5 Encl. 23A 31A. But Air Chief Marshal Tedder's contention was not accepted unanimously. The VIIIth and IXth Air Forces were anxious to give a death blow to the G.A.F. and a big attack by U.S. heavy bombers against airfields in the Berlin area took place on 4 April. The War Office and Army Groups, in particular, General Bradley's Headquarters, wanted attacks on ordnance depots. All three opposing points of view were argued at the meetings of the Air Staff at S.H.A.E.F. and of the Combined Strategic Targets Committee in London during this week.

<sup>(1)</sup> The targets selected for attacks were enclosed in an area which resembled the shape of a dumbbell, from Magdeburg in the north to Leipzig and the National Redoubt.

<sup>(2)</sup> This was an area about 240 miles in length which included western Austria. It was bounded on the south by the Alps and Dolomites and on the north by the Bavarian plains.



217

R.A.F. Bomber Command O.R.B. Apr. 1945 See Chap 8, p.253.

VIIIth Air Force Monthly Summary of Ops. Apr. 1945.

D.S.C./T.S.100 Pt.9 Encl.90A.

Tbid Encl.96A.

Thid Encl. 97A.

D.S.C./T.S.100/9 Pt.5 Encl.33A para.12

See Chap. 4, p. 112 and Chap. 5, pp. 151, 170.

S.H.A.E.F. (Air) Hist Record & Diary App. 1E Apr. 1945. Meanwhile R.A.F. Bomber Command was engaged in attacking the remaining oil refineries held by the enemy and towns believed to contain headquarters or government departments evacuated from Berlin, such as Nordhausen. The VIIIth Air Force, however, was bombing a large number of ordnance depots and several munitions factories which S.H.A.E.F. considered would have little immediate effect on ground operations. General Strong (S.H.A.E.F. G2) therefore urged the Deputy Supreme Commander that he should not permit the heavy bombers to slacken in their attacks on communications, which had all along been a battle winning factor, especially when the enemy might stage a withdrawal into the Redoubt. (2)

Four days later the Deputy Supreme Commander, who had just returned from a conference with the British Chiefs of Staff in London, expressed the same point of view, more strongly, in a signal to the Deputy Chief of Air Staff, stating that he was "gravely concerned lest during this crucial period we allow ourselves to wander from the agreed bombing policy." He noted that the Combined Strategic Targets Committee had objected to attacks on transportation and requested that they should submit a list of suitable transportation targets in the Leipzic area.

Air Marshal Bottomley, replying on the 11th, agreed that the main object of the Strategic Air Forces was to assist the ground forces although he believed that the completion of the oil offensive would directly benefit the land battle. He considered that S.H.A.E.F. should direct heavy bomber operations outside oil and G.A.F. commitments. That evening he met General Spaatz and the Deputy Supreme Commander to consider a revision of the current directive to the Strategic Air Forces. A draft was sent to the Chief of Air Staff and General Arnold.

At the Air Commanders Conference on the next day,
Air Chief Marshal Tedder declared that the Strategic Air
Forces would now concentrate on attacking transportation
targets and a small effort would make 'policing' attacks on
the oil industry. As for ordnance depots, they were to be
regarded as tactical rather than strategic targets.
S.H.A.E.F. officially announced that it would select
communication targets, in a signal to the Strategic Air Forces
on 13 April. These were to take place south and east of the
line Dresden - Hof - Waldsassen - Augsberg - Ulm as the
recent advances into the Leipzic area prohibited attacks
west of the bombline, Potsdam - Dresden - Hof. Thus the
long standing dispute over the selection of targets affecting
the ground battle between S.H.A.E.F. and the Air Ministry
was finally settled.

In the meantime the Deputy Supreme Commander, General Spaatz and Air Marshal Bottomley agreed that their revised directive to the Strategic Air Forces, so far approved by the British Chiefs of Staff, but not yet sanctioned by the Combined Chiefs of Staff, should govern

<sup>(1)</sup> At Lutzkendorf, Molbis, Harburg and Regensburg.

<sup>(2)</sup> It must be remembered that there was a strong belief at S.H.A.E.F. at this time that the enemy would make a last ditch stand in south Germany and Austria. Even as late as 19 April A.C.M. Tedder believed that heavy bomber attacks would continue for another two months.

D.S.C./T.S. 100 Pt.9 Encl. 99A.

1

heavy bomber operations as from 16 April. (1) In place of a directive, orders to their respective commands were issued by Air Chief Marshal Harris and General Spaatz on that date, in which they declared that the main purpose of the Strategic Air Forces was henceforward to afford direct support to the ground forces and to continue the bombing of naval targets. The following three priorities were later expanded in the fourth and final directive: -

- (a) Oil supplies (with special emphasis on petrol).
- (b) Enemy lines of communication.
- (c) Other missions which might be requested by the Supreme Commander.

Thid Encl. 91A

Another measure, due to the rapid contraction of enemy territory, was taken on 9 April when the British Chiefs of Staff day, was taken on 9 April when the British Chiefs in Staff decided to stop area attacks on towns and cities in Germany (2) Germany. (2) the full effect of such attacks would not be felt before the They believed that at that stage of the war end of the campaign and that they must spare accommodation which might campaign and that they must spare accommodation which might be required to house the future army of occupations to this rule were They were as follows:-Certain exceptions to this rule were specified

- (a) If enemy resistance should swiffen on the western or eastern fronts.
- (b) When the time factor did not allow precision attacks on central and southern German communication
- (c) Towns known to be occupied by the German High Command or Government departments were open to attack
- (d) Attacks on naval targets would also involve heavy destruction on naval targets would also involve heavy destruction to civilian property as, for example, at

DS 96326/10

D.S.C./T.S.100/9 However, the Deputy Supreme Commander found it Encl.32

A para.5 Strategic Air Force commanders and at the Air Staff Meeting that, April reminded General Spaatz and other air officers were intended to on 11 April reminded General Spaatz and other air officers ass. heavy he that heavy bomber attacks on rail centres were intended to recommenders and suggested that U.S. assist the Army, when they had suggested that U.S. reconnaissance elements should be withdrawn from Halle to the VIII. allow the VIIIth Air Force to bomb it. On the following

Directive No. 4 to the Strategic Air Forces was approved to the Strategic Air Forces was combined Chiefs of Staff and is: approved No. 4 to the Strategic Air Forces was 5 May (8 by the Combined Chiefs of Staff and issued of the Strategic Air Forces was 5 May (8 by the Combined Chiefs of Staff and issued of the Strategic Air Forces was 5 May (See S.H.A.E.F. (Air) Hist Record & Diary App. 1E Apr. 1945). (2) After

Comment of state of

I A I

Toid Encl. 33A.

See p. 227.

R.A.F. Bomber Cmd. Night Raid Rept No. 887 April 1945.

Toid Day Raid Rept. No. 35 April 1945.

Log D.S.C. S.C.A.F. 264 5 Apr. 1945.

Ibid A.M.M.S.O. to S.H.A.E.F. Ref. No. 2183 6 Apr. 1945.

Toid A.M.M.S.O. to J.S.M. Washington C.O.S.(W) 748 11 Apr. 1945.

Tbid S.C.A.F. 275 12 Apr. 1945. during a discussion on a proposed raid on Berchtesgaden he banned an attack on the neighbouring city of Salzburg. (1)

Notable operations by the Strategic Air Forces early in April were the extensive attacks on U-boat construction yards and port facilities at Hamburg and Kiel. U-boats (particularly the Schnorkel type) had still been very active around the shores of the U.K. (2) Attacks were also made by Bomber Command on surface craft. The pocket battleship Admiral Scheer was sunk and the cruisers Admiral Hipper and Emden damaged in the raid on Kiel on 9/10 April. Mosquitoes made several attacks on the cruisers Lutzow and Prinz Eugen which were located at Swinemunde. Direct hits were scored on the Lutzow on 16 April after several attempts which were frustrated by bad weather.

# Liaison with the Russians

Early in April the Supreme Commander became concerned over the prevention of incidents in the air and on the ground between the Anglo-American and Russian forces. An encounter between U.S. and Russian aircraft on 2 April in the Berlin area gave some point to his anxiety. He drafted a message which was to be sent to Stalin urging him to define a procedure which might be adopted on the contact of the two forces and also a system of mutual identification. British Chiefs of Staff did not approve of the wording of the signal and the Deputy Supreme Commander met them in London to discuss the matter on 7 April. It was decided that no mention should be made of the inter-zonal boundaries that the Allies had agreed to take up on the occupation of Germany both for military and political reasons. When the Armies had gained contact, boundary lines were to be fixed by the Army Group Commanders on the spot. A signal was sent to Stalin by S.H.A.E.F. along these lines and the Supreme Commander stated that he was prepared to send Air Chief Marshal Tedder or another senior officer to discuss the problem with the Russians.

- (1) By the middle of April members of S.H.A.E.F. had become anxious about the continued destruction of locomotives, rolling stock and shipping in central and northern Germany. The cessation of attacks on the former was considered impracticable but it was held that the sinking of ships in the Weser and Elbe would merely block the ports of Bremen and Hamburg at a time when they would be required by the Allies. Instructions to cease attacks on shipping in ports, estuaries and inland waterways were subsequently dispatched to 2nd T.A.F. (D.S.C.T.S.100/9 Pt.5 Encl. 40A).
- (2) The VIIIth Air Force attacked Kiel on 3 and 4 April.

  Bomber Command attacked Hamburg on 8/9 and 9 April and
  Kiel on 9/10 April. Great devastation was caused to
  Hamburg, six months loss of production being estimated
  by the Germans.

218

D.S.C./T.S. 100 Pt.9 Encl. 99A.

heavy bomber operations as from 16 April. (1) In place of a directive, orders to their respective commands were issued by Air Chief Marshal Harris and General Spaatz on that date, in which they declared that the main purpose of the Strategic Air Forces was henceforward to afford direct support to the ground forces and to continue the bombing of naval targets. The following three priorities were later expanded in the fourth and final directive: -

- (a) Oil supplies (with special emphasis on petrol).
- (b) Enemy lines of communication.
- (c) Other missions which might be requested by the Supreme Commander.

Thid Encl. 91A

Another measure, due to the rapid contraction of enemy territory, was taken on 9 April when the British Chiefs of Staff decided to stop area attacks on towns and cities in Germany. (2) They believed that at that stage of the war the full effect of such attacks would not be felt before the end of the campaign and that they must spare accommodation which might be required to house the future army of occupation. Certain exceptions to this rule were specified. They were as follows: -

- (a) If enemy resistance should stiffen on the western or eastern fronts.
- (b) When the time factor did not allow precision attacks on central and southern German communication centres.
- (c) Towns known to be occupied by the German High Command or Government departments were open to attack.
- (d) Attacks on naval targets would also involve heavy destruction to civilian property as, for example, at Kiel.

Pt.5 Encl. 32 A para.5

However, the Deputy Supreme Commander found it necessary to restrain the destructive impulses of the D.S.C./T.S.100/9 Strategic Air Force commanders and at the Air Staff Meeting on 11 April reminded General Spaatz and other air officers that heavy bomber attacks on rail centres were intended to assist the Army, when they had suggested that U.S. reconnaissance elements should be withdrawn from Halle to allow the VIIIth Air Force to bomb it. On the following day

<sup>(1)</sup> Directive No. 4 to the Strategic Air Forces was approved by the Combined Chiefs of Staff and issued on 5 May (See S.H.A.E.F. (Air) Hist Record & Diary App. 1E Apr. 1945).

<sup>(2)</sup> After consultations with the Deputy Supreme Commander and the Deputy Chief of Air Staff.

Toid Encl. 33A.

See p. 227.

R.A.F. Bomber Cmd. Night Raid Rept No. 887 April 1945.

Tbid Day Raid Rept. No. 35 April 1945.

Log D.S.C. S.C.A.F. 264 5 Apr. 1945.

Ibid A.M.M.S.O. to S.H.A.E.F. Ref. No. 2183 6 Apr. 1945.

Tbid A.M.M.S.O. to J.S.M. Washington C.O.S.(W) 748 11 Apr. 1945.

Total S.C.A.F. 275 12 Apr. 1945. during a discussion on a proposed raid on Berchtesgaden he banned an attack on the neighbouring city of Salzburg. (1)

Notable operations by the Strategic Air Forces early in April were the extensive attacks on U-boat construction yards and port facilities at Hamburg and Kiel. U-boats (particularly the Schnorkel type) had still been very active around the shores of the U.K. (2) Attacks were also made by Bomber Command on surface craft. The pocket battleship Admiral Scheer was sunk and the cruisers Admiral Hipper and Emden damaged in the raid on Kiel on 9/10 April. Mosquitoes made several attacks on the cruisers Lutzow and Prinz Eugen which were located at Swinemunde. Direct hits were scored on the Lutzow on 16 April after several attempts which were frustrated by bad weather.

# Liaison with the Russians

Early in April the Supreme Commander became concerned over the prevention of incidents in the air and on the ground between the Anglo-American and Russian forces. An encounter between U.S. and Russian aircraft on 2 April in the Berlin area gave some point to his anxiety. He drafted a message which was to be sent to Stalin urging him to define a procedure which might be adopted on the contact of the two forces and also a system of mutual identification. British Chiefs of Staff did not approve of the wording of the signal and the Deputy Supreme Commander met them in London to discuss the matter on 7 April. It was decided that no mention should be made of the inter-zonal boundaries that the Allies had agreed to take up on the occupation of Germany both for military and political reasons. When the Armies had gained contact, boundary lines were to be fixed by the Army Group Commanders on the spot. A signal was sent to Stalin by S.H.A.E.F. along these lines and the Supreme Commander stated that he was prepared to send Air Chief Marshal Tedder or another senior officer to discuss the problem with the Russians.

- (1) By the middle of April members of S.H.A.E.F. had become anxious about the continued destruction of locomotives, rolling stock and shipping in central and northern Germany. The cessation of attacks on the former was considered impracticable but it was held that the sinking of ships in the Weser and Elbe would merely block the ports of Bremen and Hamburg at a time when they would be required by the Allies. Instructions to cease attacks on shipping in ports, estuaries and inland waterways were subsequently dispatched to 2nd T.A.F. (D.S.C.T.S.100/9 Pt.5 Encl. 40A).
- (2) The VIIIth Air Force attacked Kiel on 3 and 4 April.

  Bomber Command attacked Hamburg on 8/9 and 9 April and
  Kiel on 9/10 April. Great devastation was caused to
  Hamburg, six months loss of production being estimated
  by the Germans.

The Russians considered that the matter was too urgent to wait for an officer to come to Moscow and they submitted a draft of identification signals and markings for aircraft and vehicles. S.H.A.E.F. and the Russian High Command came to an agreement on this matter on 21 April. Anglo-American infantry, tanks and aircraft were to identify themselves by firing a succession of green rockets and Soviet troops were to be recognized by a series of red rockets. Aircraft of the three Allied nations would be recognized by their normal markings. (1)

Tbid S.C.A.F. 282 17 Apr. 1945. General Antonov of the Russian General Staff suspected that the zones of occupation had been changed because the Supreme Commander had stated that boundary lines should be agreed upon by Army Group Commanders. General Eisenhower assured him that this referred only to tactical areas. The Combined Chiefs of Staff approved of this action and on 21 April laid down the policy that the two Armies should halt when and where they met and that after fighting had ceased dispositions should be made with regard to the tactical situation and not to inter-zonal boundaries. They gave the Supreme Commander authority to negotiate with the Russians over these matters but in the event of a delicate situation advised him to communicate with them before informing the Russians as there might be far reaching political and military repercussions.

Ibid S.C.A.F. 292 21 April 1945

Ibid Mil. Mission Moscow to S.H.A.E.F. MX 24032 24 April 1945.

File D.S.C./T.S./ 100/9 Pt.5 Encl. 32A 11 April 1945.

Log D.S.C. S.H.A.E.F. Fwd. to Mil. Mission Moscow 19 Apr. 1945.

Mil. Mission Moscow to S.H.A.E.F. MX 24019 23 Apr. 1945.

Thid MX 24032 24 Apr. 1945. The Russians, although they had agreed on the recognition signals, made no comment on the procedure to be adopted on the contact of the two Armies until General Eisenhower proposed that the boundary of the Elbe and Mulde should form a natural boundary line. The Russians agreed to this on 24 April and their troops pushed on to the Dresden area.

Another problem which arose with the approach of the Red Army and the western Allies was the prevention of air attacks on troops and clashes between the aircraft of the respective Allies. On 11 April S.H.A.E.F. decided that all targets for the Strategic and Tactical Air Forces would have to be cleared with Moscow 48 hours in advance.

By 19 April the Tactical Air Forces under command of S.H.A.E.F. were finding that the bombline was hampering cover and reconnaissance operations and attempts were made by S.H.A.E.F. to fix a bombline in addition to clearing targets in advance. The Russian breakthrough had just taken place in the Oder and the situation was very fluid. S.H.A.E.F. did not agree to the bombline proposed by the Russians which was too restrictive and the Russians still refused the offer made by S.H.A.E.F. to send them a liaison officer. By the 23rd the Russian advance had gained momentum and the following bombline was proposed by the Russians and agreed to by S.H.A.E.F. From the Baltic - Warnemunde - Rostock - Karow - Sandua - along the River Elbe - Tarnemunde - Genthin - Ziesar - Koswig - along the River Elbe - Dresden. From this point the area south of the Elbe was free to attack by Anglo-U.S. forces. When the boundary on the Elbe and Mulde had been established this bombline was advanced about 40 miles to the west in order to include the River Mulde, Chemnitz and Prague.

<sup>(1)</sup> A change in recognition signals was made on 1 May after the capture of a German tank bearing the Soviet recognition markings. After agreement by S.H.A.E.F. the Russians then identified themselves by firing a series of white rockets.

# Air-Ground Operations from the Rhine to the Elbe

In his first directive for operations east of the Rhine, Field Marshal Montgomery had intended that the Second British Army should go all out to secure the line of the Elbe between Hamburg and Wittenberge. The Ninth U.S. Army, having linked up with Twelfth Army Group, was to secure a foothold on the Elbe between Wittenberge and Magdeburg. The First Canadian Army was to liberate north east Holland, open up a supply route to the north east through Arnhem, isolate western Holland and clear the coastal belt of north Germany.

File D.S.C./ H.12 28 Mar. 1945.

Draft Dispatch by Air Marshal Coningham on operations by 2nd T.A.F. in N.W. Europe p. 37 From the air point of view the significant passage in the Commander in Chief's orders was his instruction that the capture of air fields should be one of the major objectives of the Army. Air Marshal Coningham had warned him that in the event of a rapid advance by the Army, the Tactical Air Force would not always be able to give the fullest amount of cover and support. Air Marshal Coningham had also counted on using air fields round Munster, but when the Ninth U.S. Army was returned to General Bradley's command, this area lay within the U.S. zone. At the end of the month, however, Celle and Wunstorf were allotted to 2nd T.A.F. although in the Ninth U.S. Army area.

#### Dispositions of 2nd T.A.F.

During the first week of April the Main Headquarters of 2nd T.A.F. moved from Brussels to Suchteln near Krefeld, where it was adjacent to the Main Headquarters of Twenty First Army Group. Here it remained until the end of hostilities. But Air Marshal Coningham during that week sent a reconnaissance party to find a more advanced location for his Headquarters at Bad Eilsen in the province of Schaumberg-Lippe. British Intelligence had discovered that important members of the firm of Focke-Wulf had been evacuated there, and so the party had a twofold mission to fulfil. Although the place was in the U.S. zone permission was obtained by the R.A.F. party to go ahead. They seized Bad Eilsen before the arrival of U.S. forces, and captured the chief designer of Focke-Wulf while he was at a conference. (1)

No. 83 Group, under Air Vice Marshal Broadhurst, supported all Second Army operations, and bore the brunt of the air war east of the Rhine. It was therefore the first group of 2nd T.A.F. to move to bases in Germany. But owing to enemy resistance on the Dortmund-Ems Canal no moves were possible until the following week. Prior to 12 April squadrons were based at Eindhoven, Helmond, Petit Brogel and Volkel, all in south west Holland, and about 170 miles from the Weser - the first big river obstacle. (2)

Further details of this operation will be found in 2nd T.A.F. O.R.B. April 1945.

<sup>(2)</sup> Composition of 2nd T.A.F. on 6 April 1945
No. 83 Group Total 32 Sqdns.
Typhoons, Tempests, Spitfires IX, XI, XIV, XVI, Austers
10 4 4 5 4 4
No. 84 Group Total 34 Sqdns.
Typhoons, Tempests, Spitfires IX, XI, XIV, XVI, Austers
9 7 1 7 5
Neteor 1/III
No. 85 Group Total 9 Sqdns.
Mosquito XXX XIII A.S.R. Sqdn. etc.
3 No. 2 Group Total 14 Sqdns.
Mitchell II/III Boston IIIA/IV Mosquito VI
No. 34 Wing (attached to No. 2 Group) 4 Sqdns.
Spitfire P.R.XI Wellington XIII Mosquito P.R.IX/XVI

#### 222

No. 2 Group Headquarters under Air Vice Marshal Embry remained at Brussels. The Mitchell and Boston squadrons were based at Vitry and Melsbroek, and the Mosquito squadrons at Coxyde, Epinoy and Rosieres. No. 85 Group, under Air Vice Marshal Steele, had its Main Headquarters at Ghent and its squadrons were at Knocke, Glisy and Lille-Vendville. (1)

## Dispositions of the G.A.F. east of the Rhine

Luftflotte Reich which had once been the enemy's strategic air force now assumed control over tactical operations, and the much battered Luftwaffe Command West was withdrawn to southern Germany, leaving behind two Flieger-divisions. The jet fighter force (FliegerKorps IX (J)), was also in the north, but it gradually moved south into Czecho-Slovakia during April. On the division of Germany by the Allies, Luftflotte Reich took over command of air forces on both eastern and western fronts, and in Denmark and Norway. The major part of the air force operated against the Russians. The main types of aircraft were Me's 109, Fw's 190, a small number of Ju's 88 and 188, and a few jet propelled aircraft - Me's 262 and Ar's 234.

On 1 April the strength of Luftflotte Reich was as follows:

German Document Luftflotte Reich Order of Battle A.H.B.6 Trans.

Strength	Serviceable
1,076	739
896	748
227	169
2,278	1,704

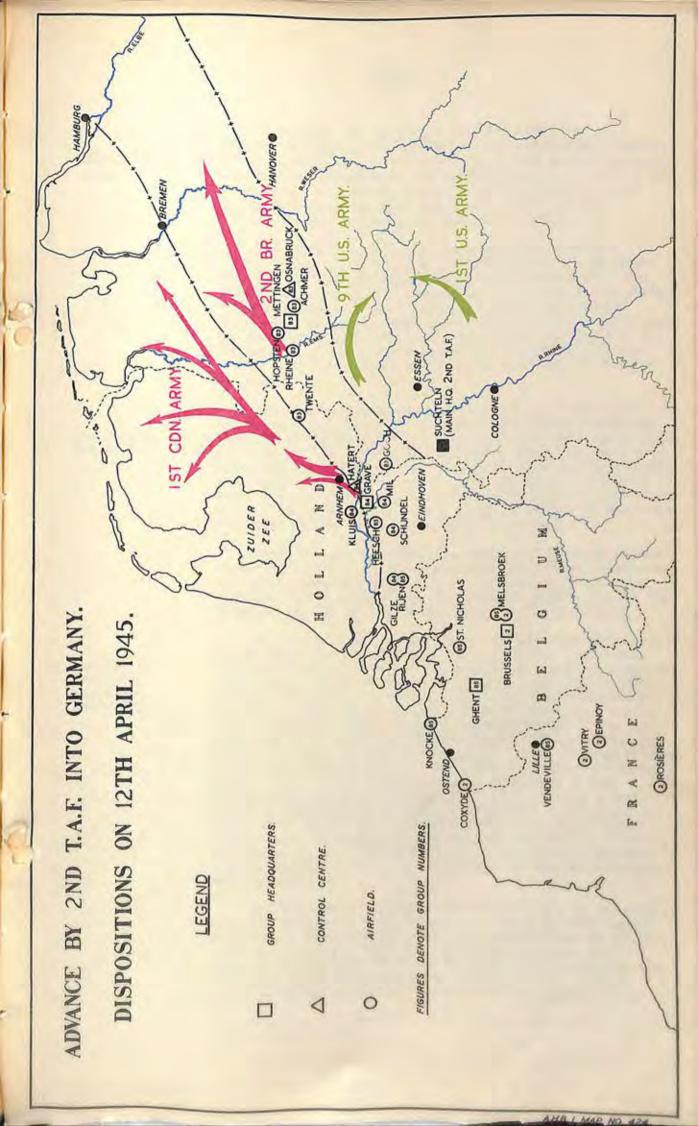
S.H.A.E.F. J.I.C. (45/17) On the ground Allied Intelligence believed that there were about 21 divisions, including several Panzer divisions, of poor quality in Holland, north-west Germany and Denmark. The bulk of the troops in north Germany, like the air force, were operating on the eastern front. The toughest troops facing the British were the fanatical paratroop divisions which had already offered considerable resistance to the Second Army during the Rhine crossings.

#### Air operations in support of Second British Army

The encirclement of the Ruhr was completed on 1 April when the First U.S. and Ninth U.S. Armies met at Lippstadt about 20 miles to the east of Paderborn. The entire German Army Group B and two corps of Army Group H were thus trapped. The Supreme Commander now ordered the great central thrust to take place. Ninth Army was to be returned to the command of General Bradley on 4 April as already foreshadowed. In the north Field Marshal Montgomery's forces were to advance to the Rivers Weser, Aller and Leine, capture Bremen and afterwards were to make a thrust to the Elbe with the intention of pressing on to the Baltic coast. In the centre, part of General Bradley's forces were to remain behind and mop up the Ruhr pocket while the bulk of the First Army was to advance on Leipzig and Third Army was to make for Chemnitz. Protection on the right flank was to be given by Sixth Army Group which was to advance on the axis Numberg - Regensburg - Linz.

Log D.S.C. S.C.A.F. 261 2 Apr. 1945.

<sup>(1)</sup> No. 84 Group dispositions will be found in the section on Operations in Holland. (Page 229)



File D.S.C./ H. 12.

On 4 April the Ninth U.S. Army was taken over by General Bradley and the XXIXth Tactical Air Command returned to the command of the IXth Air Force. Field Marshal Montgomery issued a new directive on the following day. He ordered the Second Army to cross the Weser, capture Bremen and secure bridgeheads over the Aller and Leine. Canadian Army operations remained basically the same as before.

The first British troops over the Weser were from VIIIth Corps. They crossed at Petershagen north of Minden on 5 April, where the river was about 250 feet wide. XIIth Corps crossed at Stolzenau about 15 miles to the north of Petershagen on 7 and 8 April. They met with little opposition, and the advance continued to the Aller and Leine. Further north, XXXth Corps met considerable opposition in the Enschede area, where the enemy sought to withhold the airfields from the British, and slow progress was made towards Bremen.

Ead weather during the first week of April prevented extensive air operations. Low cloud and sudden rainstorms obscured the battlefield, and the enemy made good use of these conditions. On 1 April 26 fighters of 2nd T.A.F. were shot down, and 24 damaged by flak as they flew low to the ground over enemy troops on the march. No. 83 Group carried out close support and armed reconnaissance whenever possible, but much of the enemy movement took place at night, and Spitfires and Typhoons had to scour the roads for targets.

> Cover for the first Weser crossing was flown by Tempest squadrons from No. 83 Group, from Steinhuder Meer to Dummersee, two large lakes on either side of the Weser. A few enemy fighters darted in to attack the bridging operations, but the Tempests claimed to have destroyed seven of the enemy.

On 7 and 8 April fighter cover was increased over Second British Army and No. 84 Group also took part. 2nd T.A.F. made 628 sorties over the two bridgeheads. But the enemy was intimidated by this increase of strength, and another reason for his non-appearance was that on 7 April the VIIIth Air Force began heavy attacks on airfields in north Germany. During that week No. 83 Group moved to German airfields. No. 125 Wing, made up of Spitfire squadrons, was the first across the Rhine, and moved to Twente on 8 April. This airfield had been taken over by the R.A.F. the day after its capture by Second Army. On 10 April Air Vice Marshal Broadhurst's Main Headquarters moved in company with General Dempsey's Headquarters (Second British Army) to Mettingen, a few miles to the east of Osnabruck. On the same day the Group Control Centre began to operate at Rheine. By 12 April No. 83 Group was operating from four bases east of the Rhine at Hopsten, Twente, Rheine and Achmer, and two west of the Rhine at Gooh and Heesch. (1)

Now that it had secured forward airfields, No. 83 Group was able to cover a wider area in its armed reconnaissance missions. The principal zones of operation were on the main roads to Bremen and Hamburg. Large enemy forces were observed moving from the Weser to the Elbe and many vehicles were shot up or destroyed. No. 2 Group, which had been inactive during daylight because of the bad weather in the

2nd T.A.F. Daily Log Sheet Nos. 2966-2973

<sup>(1)</sup> See Map No. 28.

first week of April, despatched 110 Mitchells on 10 and 11 April to Cloppenburg, west of Bremen, and also to Soltau and Rotenburg, the two latter towns lying south west of Hamburg. Good concentrations were reported on all the targets and hardly any flak was met by the medium bombers.

Mention should be made here of the valuable work carried out during this period by the tactical and photographic reconnaissance squadrons. No. 39 Wing made tactical reconnaissances for the Second British Army over the River Weser and No. 35 Wing kept the First Canadian Army informed of enemy dispositions and movements in Holland. No. 34 Wing carried out strategic reconnaissances over Denmark and Schleswig-Holstein; they reported on shipping in the Baltic, and on the G.A.F. then concentrating on airfields in the Danish peninsula.

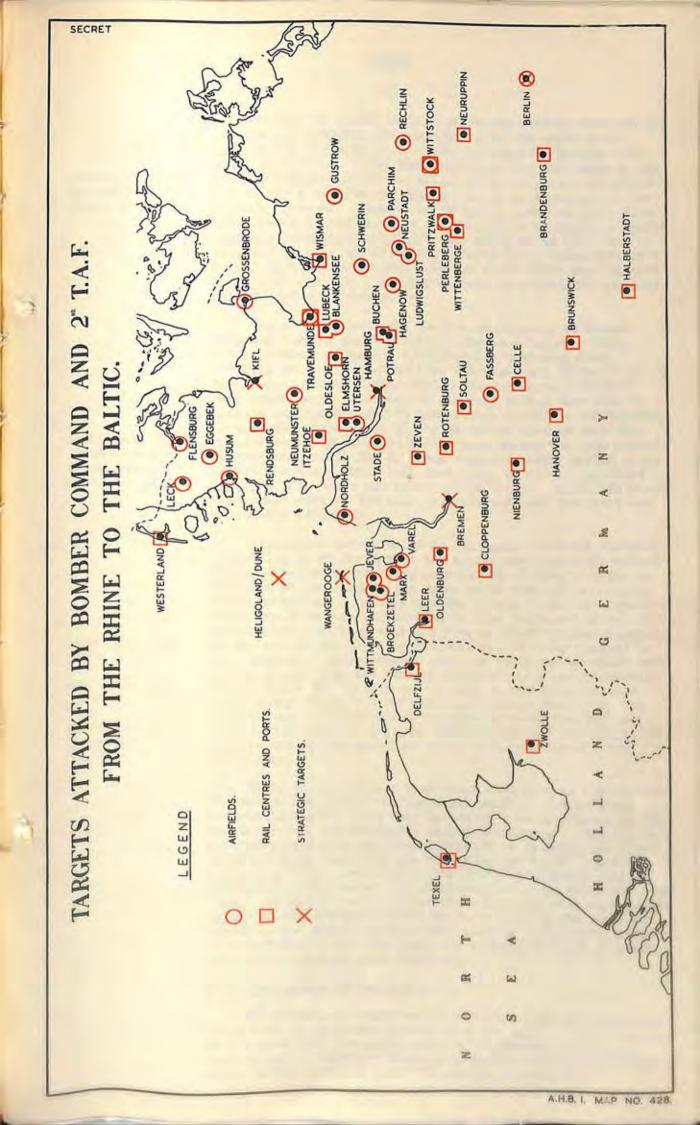
The VIIIth Corps continued its rapid advance from the east bank of the Weser and by 10 April Celle had been captured and bridgeheads established on the river Aller - the next large water obstacle. Some resistance was met at Uelzen and while operations were proceeding to reduce the town, armoured elements had pressed forward on the left and seized Luneberg on the 18th. The VIIIth Corps then advanced in force to the west bank of the Elbe which was cleared by 24 April. In the centre, XIIth Corps crossed the Aller at Rethem, captured Soltau on 18 April and arrived opposite Hamburg on the far bank of the Elbe on 23 April. At the same time XXXth Corps on the north flank advanced on Bremen with the object of making an assault on this great sea port.

See Map No. 27

The most important event on the American front that week had been the elimination of the Ruhr Pocket by the Twelfth Army Group. The troops under Field Marshal Model had made several attempts to break out but shortage of ammunition and equipment and the wretched state of the The elan communication system made their attempts useless. of the troops gradually evaporated and in spite of orders to hold out from Hitler they gave themselves up in ever increasing numbers. On 18 April the total number of prisoners amounted to 325,000 and altogether 21 divisions were destroyed. The collapse of this 'fortress' within the Reich itself showed that the end of the campaign could not be far off. The Third U.S. Army bypassing the pocket had reached Chemnits and hours to the Danube walley reached Chemnitz and began to thrust down the Danube valley on 22 April. Sixth Army Group had cleared the Nuremburg area and was about to cross the Danube in a thrust on Augsberg to crush any attempt by the enemy to bring forces into the National Redoubt. The Russians had launched their offensive from the river Oder and were about to join hands with the Americans on the Elbe.

The Second British Army was now within easy range of the enemy's air bases east of the Elbe. But the organisation of the G.A.F. had broken down, their airfields were becoming congested with aircraft both from the western and eastern fronts; shortage of fuel prevented many of the aircraft from flying, and strafing and bombing by the VIIIth Air Force had caused heavy casualties. On 13 April aircraft of No. 83 Group reported that the enemy was burning aircraft on the airfield at Luneberg. In the north as well as in the Ruhr the enemy's will to resist was decreasing.

2nd T.A.F. Daily Log Sheet 3033(C) Apr. 1945.



German Document Luftwaffe Sit. Reps. Apr. 1945.

During the second week in April the weather improved and greater air activity was possible after the usual early morning fog had dispersed. This spring-like weather held until 21 April. A few ineffective sorties were made on the British bridgeheads on the Aller and Leine rivers and F.W. 190's and Me. 109's carried out ground attacks on transport either From 14 to 19 April, enemy aircraft flew at dusk or dawn. 239 sorties during daylight and 75 sorties by night, a feeble effort, considering their effective strength at that date amounted to over 800 aircraft. On 16 April three hits on a Second British Army bridge over the river Aller were claimed by Ju's 88 and 188. Fighter-bombers also attacked armoured columns and motor transport.

2nd T.A.F. Log of Casualty Claim, Sheet Nos. 198 - 205.

No. 83 Group was able to give ample cover to Second Army and fighter patrols flew in the area Verden - Celle -Quackenbruck - Lengerich - Salzwedel - Luneburg, thus covering an area extending from the west bank of the Weser to the Elbe. German losses during the period 14 - 19 April were reported to have been 18 aircraft either shot down or missing and six damaged in combat with Spitfires and Tempests. On the other hand, Nos. 83 and 84 Groups claimed that they had destroyed 44 aircraft in the area during the same period. Fighter-bombers of No. 83 Group were frequently called in to assist the Army, their main task being to attack fortified villages with bombs and rocket projectiles. Airfields were also swept east of the Elbe and rail and road transport was constantly attacked.

Big claims were made by No. 83 Group for enemy aircraft,

especially on 20 April, when the G.A.F. were unusually active. The practice of maintaining patrols near Luftwaffe bases in the hope of pouncing on the enemy as he took off had become most profitable. At the end of the day's operations, No. 83 Group claimed to on the ground) for the loss of seven of their own fighters. This brought the total score claimed by the Group to over 1,000 enemy aircraft destroyed since 6 June 1944. next day rain and low cloud returned to cover the tactical

On this day the pilots of No. 401 Squadron were very fortunate and claimed to have destroyed 18 Me. 109's and F.W. 190's as they took off from an airfield near Hagenau. have destroyed altogether 39 aircraft (only two of which were area, but in spite of this, No. 83 Group carried out 161 fighter sorties and claims were made for the destruction of seven F.W. 190's.

While their aircraft were being shot down in the air and strafed on the ground, officers and staff of O.K.L. (Ober Kommand Luftwaffe) fled from Berlin to a small village in the mountains near Berchtesgaden called Wasserberg. Reports on air operations were not issued from 20 to 25 April, so there Reports on is no means of verifying the claims of 2nd T.A.F. members of O.K.L. remained in the north to maintain liaison with O.K.W. which moved into Schleswig-Holatein about the same Although radio contact was maintained with Headquarters in the south, further reports on operations in the northern sector do not appear to have been issued. The Headquarters of Luftflotte Reich, the enemy air command in north Germany was now at Schwerin near Flensburg.

Night Operations by 2nd T.A.F.

The paucity of enemy movement during daylight during the first week in April has already been mentioned. to the fact that the major moves of the German army were This was due Although a few Intruder sorties were carried out at night. flown by the IXth Air Force, it was No. 2 Group that

Ibid Sheet Nos. 205 - 206.

See Chap. 5, p. 152.

2nd T.A.F. Daily Log Sheet No. 207.

2nd T.A.F. Daily Log Sheet Nos. 2931 to 2981.

maintained Allied pressure from the air during the night hours. Enemy communications were harassed all through the month of April but operations were very fruitful during the first two weeks after the Allies had crossed the Rhine. Large convoys were then moving east in the direction of Bremen and Hamburg.

Sorties were undertaken by Nos. 136, 138 and 140 Wings equipped with the Mosquito VI. The Mosquito squadrons continued to be based in Belgium but, by the end of April, No. 176 Wing had moved to Volkel in the Eindhoven area. During the first week in April, No. 2 Groups' area of operation by night stretched from Groningen in north east Holland, along the bomb line of the Second British and Ninth U.S. Armies towards Stendal and Magdeburg. In this area were the rail and road junctions of Brandenburg, Halberstadt, Brunswick, Hanover and Nienburg. During daylight, medium bombers of the IXth Air Force carried on the task of attacking communication centres, frequently the same as the ones attacked at night. Besides these attacks on well frequented centres, No. 2 Group bombed small towns and Besides these attacks on well villages on the ground forces axis of advance where enemy troops and transport were believed to be located. Railway lines were cut and trains, rolling stock and motor transport were attacked.

See Map No. 29

#### Defensive Operations

The main tasks for No. 85 Group were to protect by night the vital Rhine bridges and to provide cover over Twenty First Army Group area by night. In addition to these tasks, it took over from No. 84 Group on 1 April the responsibility for providing fighter protection east of a line drawn north and south through Dunkirk in the area within 40 miles of the continental coast. Nightly anti-O.R.B. Apr. 1945. shipping patrols off the Dutch coast were carried out by No. 157 Wing.

No. 85 Group

The cover patrols made by No. 85 Group Mosquitoes were very uneventful because few enemy intruders made sorties into the battle area. From 1 to 20 April they flew from the mouth of the river Scheldt along the Lower Rhine to the Ruhr and from that line as far east as Hanover. period, only three enemy aircraft - a Me. 110, an He. 177 and a Ju. 188, were claimed to have been shot down.

On 21 April the airfield at Rheine was given up by No. 83 Group and No. 148 Wing moved there from Lille Vendeville.

Operations by the VIIIth Air Force in Northern Germany:

At the same time as the Second Army was advancing into Germany, extensive operations were carried out around Bremen and east of the Elbe by the VIIIth Air Force. Apart from maintaining the watch over the oil installations still in German hands, the main task of the Strategic Air Forces at this date was to give a death blow to the German Air Force in order that the Allied armies might move freely in Germany and heavy bombers and transport aircraft might carry out their It had become apparent that the missions unopposed. Luftwaffe was gathering into two areas: in Schleswig Holstein and around the ports of Bremen and Hamburg in the north and around Munich and Nuremburg in the south. in the north that the Allies would first come within close range of the Luftwaffe.

VIIIth Air Force Monthly Summary of Ops. April 1945.

German Document Luftwaffe Sit. Reps. April 1945 A.H.B.6 Transl. The remnants of the German Navy had also concentrated in Kiel now that the southern shores of the Baltic were threatened by the Russians and an impressive number of battleships, cruisers and U-boats presented a perfect target for the heavy bombers. On 3 April the VIIIth Air Force raided the U-Boat works at Kiel (728 sorties) and, on the following day, a combined attack on the same targets and surrounding airfields was made by a force of about 1,400 heavy bombers accompanied by a large escort of Mustangs and Thunderbolts from the VIIIth Fighter Command. (1) Kiel itself suffered great devastation, about 100 people being killed and a large number of houses were badly wrecked or damaged. The U-Boat yards were put out of action and it was estimated that there was six months loss of production.

The enemy still had his jet fighter force, consisting of Me.262's, in reserve for the interception of heavy bombers, but they did not fly against the U.S. force during the first raid. On the second attack, however, they retaliated strongly and about 49 Me.262's went into action. Escorting U.S. fighters claimed to have shot down 25 of the enemy, but the Luftwaffe situation reports stated that only seven were destroyed and five missing. American losses amounted to two bombers and four fighters.

Seven airfields which formed a perimeter stretching from Bremen to Hamburg, including those at Perleburg, Parchim and Fassberg, were attacked with fragmentation bombs which caused a good deal of damage to hangers and runways.

On 7 April 591 heavy bombers renewed the attack on the same targets in conjunction with attacks on marshalling yards. Workshops and other installations were heavily damaged and The airfield about 30 aircraft were destroyed on the ground. at Parchim suffered severe damage, although the Germans, in their situation report, stated that the runways would be A desperate effort was serviceable again within three days. made by the jet fighter force on this occasion and about 59 Me. 262's took part. The morale of the pilots was whipped up by broadcasts of the Horst Wessel song and patriotic appeals made to them by their fighter controllers. by this they shot down 20 U.S. bombers, but the American air gunners claimed the destruction of 62 and the VIIIth Fighter Command claimed to have shot down 65 enemy aircraft. Strangely enough, German records maintain a silence on this air action.

On 10 April the last big attack by the VIIIth Air Force in north Germany was made on ten airfields north and south of Berlin. Over 60 enemy fighters came up against them but at great cost, as over half of them were accounted destroyed or missing. American Mustangs and Thunderbolts strafed airfields at the same time over a wide area from Fassberg and Celle in the Hanover area, Reohlin east of the Elbe and Juterbog and Werde in central Germany. According to the German reports, 191 aircraft were destroyed and 278 damaged on the ground, but the Americans claimed 356 destroyed and 278 damaged.

VIII Air Force Summary of Ops. pp. 74, 85, Apr. 1945.

German Document Luftwaffe Sit. Reps. Apr. 1945.

VIIIth Air Force Monthly Summary of Ops. pp. 76, 86 Apr. 1945.

<sup>(1)</sup> See Map No. 30.

Thid, p.86.

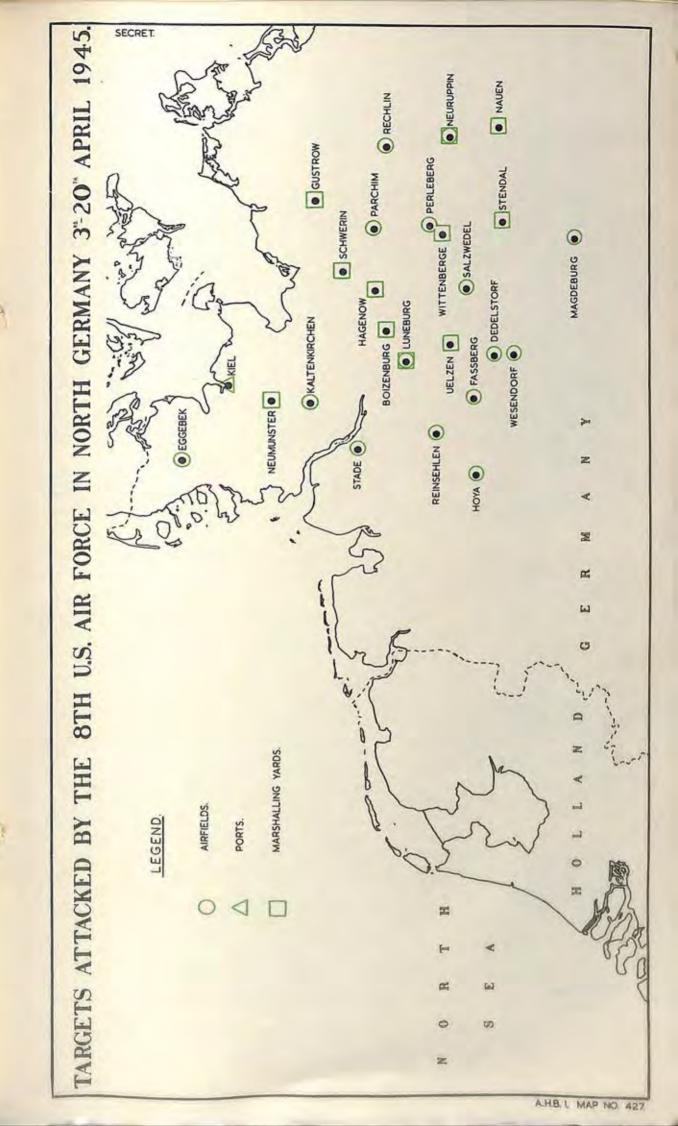
Most of the enemy jet fighters, except for forces protecting Hamburg and Bremen, had moved south by 13 April and no opposition was made to a force of U.S. heavy bombers which raided north German marshalling yards on that day. The VIIIth Fighter Command roamed at will over the congested airfields and landing grounds and returned with the enormous claim of 278 aircraft destroyed and 27 damaged on the ground.

S.H.A.E.F. (Air) Historical Record and Diary p.7 Apr. 1945.

From 4 to 13 April the VIIIth Air Force heavy bombers flew 1,946 sorties and dropped about 4,800 tons on airfields in north Germany. Their fighters flew about 2,700 sorties and over 800 enemy aircraft were claimed to have been destroyed either on the ground or in the air. The vast claims made by the American Air Forces was the subject of comment by the Senior Air Staff Officer, 2nd T.A.F., Air Vice Marshal Groom, at an Air Commanders' Conference. He suggested that some of the aircraft which had been claimed as destroyed on the ground were really dummies as many had been discovered on airfields captured by the British. German records do not always give full details of these ground attacks as the Luftwaffe was in such a disorganised state at this period, so that it is hard to verify claims. It is known that with other targets such as transport the claims of the U.S.A.A.F. were frequently exaggerated and so, in the case of aircraft, large figures should be treated with caution. (1) But the purpose of these operations had been achieved, the Luftwaffe had been rendered innocuous and although Allied ground forces operated within easy range of occupied airfields the enemy could do nothing to halt them. (2) In the air, unarmed transport aircraft were them. (2) In the air, unarmed transport aircraft were able to fly without fear of attack.

VIIIth Air Force Summary of Ops. Apr. 1945. The marshalling yards both east and west of the Elbe used by the enemy to reinforce his armies in north west Germany were bombed by the VIIIth Air Force on 7 and 13 April. Attacks were made against Luneberg, Uelzen west of the Elbe, Neumunster in Schleswig-Holstein and Schwerin, Wittenberge and Boizenburg east of the Elbe. Another attack was made on 20 April when railway centres north of Berlin at Brandenburg, Nauen, Neuruppin and Oranienburg were attacked by 232 heavy bombers and 538 tons of bombs were dropped in support of the Russian Armies who had now begun their offensive west of the Oder.

- (1) It should also be remembered that, due to the rapid Allied advance, the enemy's airfields, already crammed with aircraft belonging to training units and obsolescent machines, had also to accommodate operational units. The latter were undoubtedly given the best dispersal facilities while the remaining aircraft were parked out in the open. A large number of Allied claims must inevitably have included non-operational aircraft, (See 2nd T.A.F. O.R.B. Int. App. No. 6 Apr. 1945).
- (2) On 12 April the strength of serviceable aircraft in Luftflotte Reich had fallen from 1,704 to 875 (A.H.B.6 Trans. G.A.F. Order of Battle).



# Air-Ground Operations in Holland and the German Coastal Belt: 25 March to 20 April

See Chap. 6, p. 176. In the meantime satisfactory progress had been made by Canadian troops in Holland and on the road to Oldenburg. It will be remembered from the last chapter that IInd Canadian Corps was to cross the Rhine at Emmerich on the left flank of the Second Army. The First Canadian Army had two tasks to perform after the crossing of the Rhine; it was to open up a supply route to the north through Armhem and then clear north east and western Holland. North-east Holland may be defined as an area bounded on the east by the Zuider Zee and on the south by a line stretching from Bussum on the southern shores of the Zuider Zee to Emmerich on the Rhine. On the east a natural boundary is formed by the Rivers Ijssel and Ems.

Map No. 28

See Chap. 5, p. 145 and Chap. 8, p. 240.

2nd T.A.F. Orders of Battle, May 1944 to June 1945.

See Chap. 4, p. 129.

A.M. File C.33814/47/II Encl. 2A. No. 84 Group, under Air Vice Marshal Hudleston, supported all the First Canadian Army operations. His main Headquarters was at Grave, to the south of Nijmegen until the third week of April. Squadrons were placed at Gilze Riejen, Schijndel and Melsbroek in south west Holland. No. 616 Squadron, equipped with Meteors III, the single jet fighter squadron in 2nd T.A.F. was by this time attached to No. 84 Group. Hitherto it had been used in a defensive role at Brussels, but as no opportunity arose for it to engage enemy aircraft in Holland (1), at the end of the month, it was moved to a forward airfield on the Elbe. No. 2 Group also gave extensive support during operations in Holland.

Air operations in Holland were naturally planned with great care so that the least amount of harm might befall the Dutch people who, in the western district, had been suffering from lack of food for some/months. By the beginning of April the long range rocket offensive was over and the heavy attacks which had been made on road, rail and water communications were consequently reduced. In an order originating from S.H.A.E.F. on 29 March, attacks on bridges were prohibited, locomotives and rolling stock within a fifty mile belt in front of the bomb line were forbidden to be attacked and military targets in built up areas were to be bombed only if they were already within medium artillery range and under fire. The Canadians advanced so rapidly that the airfields in north east Holland and the coastal belt were no longer of use to the enemy and there was hardly any fighting in the air. Constant support was given to the Army by No. 84 Group but its main task was to stop the enemy escaping from Holland to the Bremen - Hamburg area.

# The Assault Over the Rivers Ijssel and Ems

The troops of II Canadian Corps which had crossed the Rhine at Emmerich on 24 March struck to the north on the right bank of the Ijssel towards Zutphen and Doesburg with the object of clearing north east Holland. After they had crossed the Twente canal on 5 April, an armoured division thrust northwards into Germany on the axis Meppen - Oldenburg and crossed the river Ems on 8 April. It had to fight its way forward against fierce opposition by paratroop divisions. Another division of II Corps then attacked towards Groningen in the north. On the west bank of the Ijssel the 3rd Canadian Division seized Deventer on

<sup>(1)</sup> During April Meteors flew 142 sorties and destroyed or damaged 22 road and rail vehicles.

16 April and held the line of the river Ijssel facing west. The 1st Canadian Division launched an attack across the Ijssel in the direction of Apeldoorn on 11 April.

# Airborne Operations (1)

Two airborne operations by S.A.S. troops were planned to assist the First Canadian Army, firstly by causing confusion behind the enemy lines and secondly by helping the Resistance in Holland and thirdly to obtain information and to assist the advance of the ground troops.

The first and largest operation was known by the code name Amherst. This was designed to assist II Canadian Corps in its advance into north east Holland. Two battalions of French S.A.S. troops, already well versed in clandestine warfare, under the command of Brigadier J. M. Calvert were to be dropped in a triangular shaped area south of Groningen about 30 miles wide, formed by the villages of Assen, Emmen and Meppel. No. 38 Group was detailed to carry the force into action. The operation was due to take place on the night 6/7 April but the Canadian troops met little opposition in their advance from the Twente canal and the operation was postponed for 24 hours.

On the night of 7/8 April low cloud and fog covered the dropping area and it was decided that the drop would have to take place from 1,500 feet. In the original plan jeeps were to have been dropped with the troops but this part of the operation had to be abandoned. Forty seven Stirlings carried the force and their containers and 46 of them released their troops successfully. The troops were dropped blind because of the poor visibility but the average error was only about three and a half miles. The remaining aircraft dropped its party on the next night. Great enthusiasm was displayed by the French troops and they linked up with the Canadians on the 8th; their mission was practically completed by 10 April. No. 84 Group resupplied the S.A.S. troops with weapons and equipment which were dropped by Typhoons on 8 and 12 April.

2nd T.A.F. Daily Log Sheet No. 2994.

2nd T.A.F. File

30317/86/0ps.

2nd T.A.F. File 30317/86/0ps. The second airborne operation was known by the code name Keystone. It was designed to assist the crossing of the river Ijssel, and 130 British S.A.S. troops, equipped with jeeps and wireless sets, were to drop on the west side of the river and advance in the direction of Utrecht, on the axis Deventer - Apeldoorn - Otterloo, seizing bridges and providing information for the Canadians. Operation Keystone had originally been intended to take place at the same time as Operation Amherst, but it was postponed until the Canadians were due to assault across the Ijssel on 11/12 April. Low cloud and mist lay over the dropping zone and the operation was cancelled that night. (It had previously been decided that drops would take place only if contact had been made with the troops engaged in Operation Amherst). On the next night equally bad weather conditions prevailed, and it was decided to abandon the operation altogether.

<sup>(1)</sup> For further details of the airborne operations, see Appendix No. 3 Extract from R.A.F. Monograph, History of Airborne Forces, page 20.

Operation Amherst was highly successful considering the poor weather conditions in which it was carried out. from this the troops were well trained and had already operated before in enemy territory. Enemy resistance was slight and disorganised so that there was little chance of the parties being cut off from the advancing ground troops. The Canadian advance proceeded with great rapidity and Groningen and the area up to the North Sea had been cleared by 16 April.

# Air operations in north-east Holland

No. 84 Group in the meantime had been assisting the Allied operations in north-east Holland by armed reconnaissances extending as far north as Groningen and in the coastal belt as far east as Oldenburg and Bremen. Vehicles and troops retreating into Germany were destroyed or damaged. Cuts were made on the railway lines from Amersfoot to Zwolle Close support to the ground troops was given and Meppel. and during preparations for the Ijssel crossing (7-8 April) 148 sorties were flown. Sudden storms and low cloud during the first week of April made air operations very hazardous and great credit is due to the pilots of No. 84 Group who were able to maintain a high number of daily sorties.

Mitchells of No. 2 Group flew 110 sorties in support of IInd Canadian Corps on 4 and 9 April when they attacked six gun positions in the Zutphen - Deventer area.

#### Air operations in the advance to the Grebbe Line

While these operations were proceeding in north-east Holland 1st Canadian Corps had been clearing the area between Nijmegen and the Lower Rhine. An attack was now launched on Arnhem from the right flank by Canadian troops who crossed the Lower Rhine near its confluence with the Ijssel northeast of Arnhem. On 12 April 36 Mitchells of No. 2 Group and Nos. 3013 - 3014. fighter-bomber squadrons of No. 84 Group attacked 88 m.m. gun positions, strongpoints and infantry concentrations. On the night 12/13 April an assault crossing of the Lower Rhine was made and Arnhem was cleared of the enemy by the 15th. Canadian troops now pushed on towards the Zuider Zee, captured Apeldoorn and cut the road from that place to Amersfort (the railway line had already been cut by No. 84 Group). The Zuider Zee was reached on 18 April and by that date Zwolle, Meppen and Steenwijk had fallen into Allied hands. Fighting in Holland now assumed a more static nature and the Canadians did not attempt to penetrate beyond what was called the 'Grebbe Line' formed by the rivers Eem and Grebbe stretching from Wageningen, due west of Arnhem, through Amersfoort to a point just east of Bussum on the shores of the Zuider Zee. Reports had reached the Allies that the Germans were preparing to open up more dykes and the Supreme Commander decided that further operations in western Holland would only increase the plight of the Dutch people.

> The Germans had placed a garrison of Russian 'volunteers' on Texel Island at the mouth of the Zuider Zee. These troops had grown weary of the semi-siege conditions which they had been forced to undergo and revolted against the German regular troops. This battle was waged far from the major operations in Germany, but No. 84 Group was able to divert some of its aircraft to assist the rebels by attacking heavy gun emplacements which had been firing on Texel from the Hook of Holland. Two squadrons of Typhoons dropped forty-ciont 1,000 lb. bombs on 13 April, and reconnaissances afterwards

2nd T.A.F. Daily Log Sheet Nos. 2973 - 1986.

Ibid Sheet

2nd T.A.F. Daily Log Sheet No. 3028.

DS 96326/1(239)

showed that at least one of the guns had been damaged by a near miss. Little else could be done but the rebels on the island added one more problem to the many which the enemy now had to face. (1)

# Air operations in the coastal belt

See Map No. 31.

No. 84 Group had moved to airfields east of the Rhine by 19 April. Air Vice Marshal Hudlestons' Main and Rear Headquarters were situated at Delden near Enschede and the Group Control Centre was set up at Brogbern. Nos. 123 and 131 Wings were based at Plantlunne and Nordhorn; Nos. 35 and 132 Wings at Twente; No. 135 Wing at Quackenbruck and Nos. 145 and 146 Wings were at Drope. Air operations could now be carried into Schleswig-Holstein and Denmark and as far east as the shores of the Baltic. These dispositions remained almost the same until the German surrender.

The main effort of the First Canadian Army was now directed to the coastal belt in northern Germany. It was to operate against Oldenburg and capture Emden and Wilhemshaven. There had been heavy fighting on the road to Oldenburg, and No. 84 Group fighter-bombers were frequently called in to give support. The village of Friesoythe south of Oldenburg, in particular, was defended stubbornly by paratroops and on 12 April Typhoons set the place on fire with rockets. A message was sent to No. 84 Group from the commander of the troops assaulting the village which expressed his appreciation of the fighter-bombers' effort. Shortly afterwards it was captured by the Canadians.

No. 84 Group O.R.B. Apr. 1945.

Oldenburg was the key town to the peninsula formed by the Weser and the Ems and was a convenient concentration area for the enemy. No. 84 Group attempted to cut it off from the ports of Wilhelmshaven and Emden and attacked road and rail routes, but by 23 April the enemy was still using the railway line connecting Wilhelmshaven to Oldenburg. No. 2 Group made three attacks on the town from 17 to 21 April (154 sorties) and hits were scored on the barracks and marshalling yards.

No. 2 Group 0.R.B. Apr. 1945.

> As the Canadians advanced towards Oldenburg a number of reconnaissances were carried out by No. 84 Group over the enemy airfields along the coast line and orders were given to pilots to shoot up airfields whenever they saw a big concentration of aircraft. On 11 and 12 April airfields in the general area of Oldenburg at Jever, Marx, Varrelbusch, Broekzetel, Rotenburg and Wittmundhafen were strafed and claims were made for 16 aircraft destroyed on the ground. Combats in the air were few but on 12 April about 15 Me. 109's took No. 84 Group Tempests by surprise in the Hamburg area and shot down two of them. The Tempests claimed three Me. 109's. With the establishment of No. 84 Group east of the Rhine, extensive attacks on airfields in the Weser - Elbe peninsula were carried out, in particular, on Stade and Nordholz on the west bank of the Elbe and sweeps were also made over Utersen, Lubeck and Tarmewitz east of the Elbe. From 16 to 30 April 40 aircraft were claimed to have been destroyed by pilots of No. 84 Group are claimed to have been destroyed by pilots of No. 84 Group for the loss of 37 of their own aircraft.

See Map No. 29.

<sup>(1)</sup> The mutiny soon flickered out.

233

Armed reconnaissances were extended as far east as possible in order to cover the estuaries of the Weser and Elbe. By 17 April the enemy land routes from western Holland to Germany had been severed but the Germans were determined to remain in 'Fortress Holland' and also to form a redoubt in the coastal belt. Communications between these two areas was now restricted to the sea. No. 84 Group was therefore ordered to attack shipping whenever possible from the Hook of Holland to the mouth of the Elbe; embarkation and debarkation points were strafed, particularly at Delfzijl and Harlingen. No. 34 Wing assisted in these operations by making photographic and visual reconnaissances at sea. The weather during the third week of April was never very satisfactory over No. 84 Group area and fog and mist frequently hampered operations.

# R.A.F. Bomber Command Operations Against Heligoland and Wangerooge

File 301402/4/ Plans 2nd T.A.F.

The planning staff of S.H.A.E.F. had recognised for some time that when the Allies captured the German ports, they would be useless until the islands lying off the coast had Coastal batteries had been built on the been reduced. Frisian islands and Heligoland - the latter being the keypoint of the long range artillery system, which would hinder any mine-sweeping operations being carried out by the Allies. The plateau of Heligoland is about one-fifth of a mile wide and rises out of the sea to a height of 190 feet with vertical The island was honey-combed with undersandstone cliffs. ground shelters and magazines interconnected by tunnels. A system of 12 inch and 6 inch coastal guns and a number of heavy anti-aircraft batteries had been built into the About a mile away was the island of Dune on which sandstone. an airfield had been constructed.

See Map No. 29.

The Navy believed that a bombardment would be too costly for men and ships and as an assault by Commandos was too risky, it was decided by Air Staff, S.H.A.E.F. to launch an aerial attack. The planning was carried out by R.A.F. Bomber Command and the Admiralty. Two attacks were to be made: the first would swamp the flak defences and coastal batteries with normal calibre bombs, while the second attack would be made with specially trained Lancaster crews with very heavy bombs. The attack was planned to take place in the week before the assault on Bremen.

R.A.F. Bomber Command O.R.B. Day Raid Rept. No. 37 Apr. 1945.

Clear weather was forecast for 18 April and 981 heavy bombers of R.A.F. Bomber Command carried out the first part of the operation escorted by 10 Spitfire and one Mustang squadrons from Fighter Command. The enemy did not attempt to resist the forces in the air and 4921 tons of H.E. were dropped, destroying several of the guns. The airfield at Dune was heavily cratered and severe damage was caused to naval installations. Three bombers were lost to flak. Visibility remained good on the next day and 36 Lancasters carried out the precision attack using 22,000 pound and 12,000 pound bombs. Several gun positions were confirmed to have been either damaged or destroyed. After the first raid the Germans reported that every building on the island had been destroyed; radar and location instruments were put out of action, as were 60 per cent of the flak defences, and all the vessels and small oraft in the harbour were sunk. No further operations were required to complete this thorough devastation.

234

R.A.F. Bomber Command Day Raid Rept. No. 43 Apr. 1945. It was also believed that resistance would be made on the Frisian Islands and the responsibility for their reduction was passed to the 1st Canadian Army and No. 84 Group. The Navy then made a request for the bombing of Wangerooge, the most easterly island, which dominates Wilhemshaven and the Weser estuary, and on 25 April 482 R.A.F. Bomber Command aircraft dropped 2169 tons of H.E. on the coastal defences. About 17 gun emplacements were damaged and the airfield there was heavily cratered.

#### The Assault on Bremen

Log D.S.C. S.C.A.F. 280 14 Apr. 1945. The Supreme Commander's plan for operations east of the Elbe was that Twenty First Army Group assisted by the XVIII U.S. Airborne Corps should thrust towards Lubeck on the Baltic and cut off the Danish peninsula. In the south U.S. troops were to occupy the Danube basin and link up with the Russians. In the central sector the communications of the Twelfth Army Group had become so strained that General Eisenhower left it to the Russians to take Dresden. As for an advance on Berlin this would not be possible until the flanks of the Allied Expeditionary Force were secure.

File D.S.C./T.S.100/ 12 pt.2 Encl. 79 C. in C. 21 Army Group Orders 22 Apr. 1945.

Field Marshal Montgomery issued orders for Twenty First Army Group to capture Bremen, Hamburg, Lubeck and Emden on 22 April. Accompanying these orders was the procedure to be adopted on contact with the Russians.

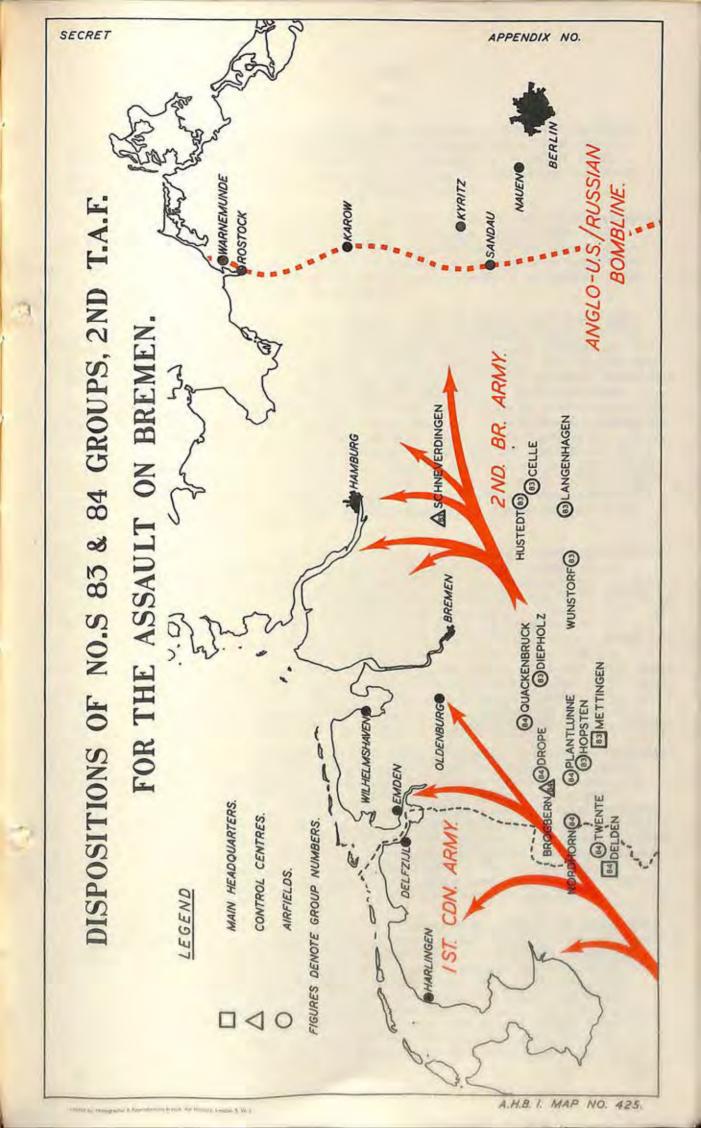
The Twenty First Army Group plan for the capture of Bremen was that XXX Corps should cross the Weser and carry out an assault from the east, while a holding frontal attack was to be made from the west. Both Bremen and Hamburg were urgently needed as ports by the Allies (Bremen had been allocated to the U.S. forces and Hamburg to the British) and naturally S.H.A.E.F. wished to capture the ports intact as far as possible. The Army insisted, however, on having a number of heavy bomber attacks laid on for them, although the Deputy Supreme Commander pointed out that the port facilities were urgently required as soon as the city had been captured.

# Operations by 2nd T.A.F. and R.A.F. Bomber Command

2nd T.A.F. Orders of Battle May 1944 to June 1945. No. 83 Group in the meantime had been keeping pace with the Second Army troops who had lined up on the Elbe in the third week of April. On the 23rd the Group Control Centre was at Schneverdingen some miles north of Soltau and squadrons were disposed at Hopsten, Hustedt, Langenhagen, Diepholz, Wimstorf and Celle, the latter two airfields being within the Ninth U.S. Army tactical area. (1)

2nd T.A.F. Daily Log Sheet Nos. 3033(b) - 3165. The most important task of the Group, prior to the assault on Bremen, had been to cut road and rail communications between that city and Hamburg, and from 14 to 20 April 197 rail cuts were made. From 20-29 April sorties were extended to cover the Schleswig-Holstein peninsula and a further 178 cuts were made, completely disorganising traffic within the remaining stronghold of the Wehrmacht. After the completion of their mission pilots were instructed to attack shipping lying in

<sup>(1)</sup> See Map No. 31. logente)



Thid Sheet Nos. 3066, 3079 - 81. the estuaries of the Elbe and Weser. Coasters and small cargo ships were strafed and damaged and a light cruiser lying off Wilhemshaven was attacked on 18 and 19 April. As a result of the second attack the vessel was hit seven times and was left listing to port.

Another task of No. 83 Group was to make reconnaissances over Allied P.O.W. Camps in the area and messages were dropped instructing the prisoners to lay out simple identification strips. All these operations were carried out in poor visibility and violent rainstorms frequently swept inland from the North Sea.

R.A.F. Bomber Command Day Raid Rept.

2nd T.A.F. Daily Log Sheet No. 3103

R.A.F. Bomber Command Night Raid Rept. No. 900 Apr. 1945.

No. 2 Group O.R.B. Apr. 1945.

Both Bomber Command and No. 2 Group carried out pinpoint attacks on Bremen before the assault troops went in. On 22 April aircrews were briefed to attack strongpoints in factories, camps and defended localities. Over Bremen that No. 40 Apr. 1945. day there was 9/10ths cloud and out of 757 aircraft despatched by Bomber Command only 206 accomplished their missions. The remainder flew home with their bombs on instructions from the Master Bomber. Only four out of 30 Mitchells despatched by No. 2 Group dropped their bombs in the right area. aircraft did not attempt to intercept the bombers and it is probable that, by this date, the jet fighter force protecting the sea ports had been withdrawn to the south. During that night, 22/23 April, more effective attacks were carried out by a small force of 40 Mosquitoes of Bomber Command using Oboe technique.

> On the following three days further attacks were undertaken by No. 2 Group and 288 sorties were flown against strongpoints and gun positions. Low cloud and rain squalls limited visibility and aircraft were directed by the Mobile Radar Control Post on most of the sorties. Results were mainly unobserved because of cloud and smoke but on one occasion the Army reported that a particular strong point had been well and truly hit. Relays of No. 2 Group Mosquitoes attacked Bremen on the nights 23/24 and 24/25 April. On the first night three encompments were hit and large fires On the following night Mosquito pilots made for sprang up. two dangerous strong points. One hundred and thirty-four 500 pound bombs were dropped on them with satisfactory results.

After the last of these attacks on 25 April two divisions of XXX Corps entered the city but the enemy put up little resistance. On the east bank of the Weser from where the assault was made No. 83 Group gave immediate support. Fortified villages, mortars and gun positions were attacked with bombs and rockets. On the following day the Army had cleared the city as far as the dock area. Another full day's effort was made by No. 83 Group, attacking headquarters, self-propelled gums and nebelwerfers. The weather had now improved and although there was a good deal of fog in the morning, visibility was excellent later in the day.

A.M. File C. 34473/D.S.T./ 2074.

The capitulation of Bremen took place on 26 April when a Naval Intelligence Officer reached the City Hall and accepted surrender from the Burgemeister. Very little damage was found in the docks and quaysides but the warehouses had been Few ships were found afloat in the totally destroyed. harbour which shows how thoroughly 2nd T.A.F. and R.A.F. Bomber Command had executed their tasks. The main task now was to clear the river of mines and sunken ships. In the meantime, the 51st Highland Division was sent ahead by General Demosey to clear up the Ems-Weser peninsula.

During the operations conducted by XXX Corps to invest Bremen and the deployment of the rest of the Second Army along the west bank of the Elbe fighter cover was given from Hamburg to Lauenburg, the proposed crossing place on the Elbe, by No. 83 Group. The Luftwaffe was sheltering on the congested airfields in Schleswig-Holstein, Denmark, and other airfields east of the Elbe, and did little to dispute the supremacy in the air maintained by 2nd T.A.F. During the assault on Bremen continual sweeps were made over German airfields and 30 enemy aircraft were destroyed by No. 83 These were mainly at Neustadt, Rechlin, Hagenow and Group. No. 84 Group claimed to have destroyed Ludwigslust. 9 aircraft on airfields in the Danish peninsula and No. 85 Group operating at night claimed 6 aircraft destroyed, thus making a total of 45 aircraft destroyed by 2nd T.A.F. losses amounted to 21 aircraft.

2nd T.A.F. Log of Casualty Claims etc. Sheet Nos. 209-213.

2nd T.A.F. Daily Log Sheet Nos. 3026-3157. Armed reconnaissance tasks remained as important as ever, and from 12 to 27 April 7,252 sorties were flown by 2nd T.A.F. and claims were made for 1946 motor and horse drawn transport destroyed; locomotives and trains were also attacked. The bomb-line in the British sector now ran straight across Mecklenburg from Warnemunde on the Baltic to Rostock, Karow and Sandau on the Elbe, the last named town which is south of Wittenberge. From about 21 April Russian troops were fighting in the suburbs of Berlin and a great exodus to the north and south began. The staffs of O.K.H. and O.K.W. were evacuated to Flensburg and Hitler, Goebbels and other intimates of the Fuehrer stayed on in Berlin to face the end.

Ibid Sheet No. 3113(c)

2nd T.A.F. aircraft had to wait for the northward bound convoys until they had crossed the bomb-line, but squadrons on cover duty frequently flew east of the bomb-line and on the evening of 23 April No. 350 Squadron reported 'the longest convoy of enemy vehicles ever seen' travelling north on the Kyritz - Nauen road, but no action could be taken against them. It must be mentioned here that no clash of British aircraft with the Russian forces either on the ground or in the air took place while the Second Army was on the Elbe.

In addition to its operations against Bremen, No. 2 Group found it possible to make a start on preparatory bombing operations for the assault across the Elbe. On 26 April two concentration areas at Potrau-Buchen near Lauenburg and Elmshorn north of Hamburg, were bombed by 72 Mitchells.(1) In both cases bombs straddled the targets and large explosions were observed.

Night Operations by No. 2 Group and R.A.F. Bomber Command

See Map No. 31.

At night No. 2 Group had continued its harassing tactics. Until the bomb-line was drawn from the Baltic to the Elbe, road and rail transport was attacked east of the Elbe and north of Berlin. Rail junctions at Neuruppin, Perleburg, Wittenberge, Pritzwalk, Wittstock and Wismar were bombed and traffic dislocated. In the northern pocket Mosquitoes ranged along the coast from Emden to Schleswig-Holstein flying as far north as Westerland on the borders of Denmark. From 23 April until the end of the campaign, operations were restricted entirely to the coastal belt

2nd T.A.F. Daily Log Sheet Nos. 2990-3127.

<sup>(1)</sup> The Boston Squadron of No. 2 Group had been disbanded. There were now 5 Mitchell II/III Squadrons and 8 Mosquito VI Sqdns. (2nd T.A.F. Orders of Battle).

# 237

Communication centres, airfields, and Schleswig-Holstein. towns and villages were all subject to attack. The main enemy concentration areas were believed to be at Bad Oldesloe, Flensburg, Rendsburg and Itzehoe. During the last week of the month flying by night became impossible because of sleet and snow-storms and operations were abandoned until 2/3 May.

R.A.F. Bomber Command Night Raid Repts. Apr. 1945.

See Map No. 29.

No. 85 Group 0.R.B. Apr. 1945.

Mosquitoes of Bomber Command continued No. 2 Group's work in this area at night and attacked airfields and marshalling yards in Schleswig-Holstein. On 20/21 April the last Mosquito attack was made on Berlin, as the Russians had entered the town, and in the following week Kiel port was raided nightly and 153 sorties were flown against U- boat yards and port Other Mosquitoes attacked airfields at Wittstock, facilities. Schleswig, Eggebek, Grossenbrode, Husum and Neumunster. Rendsburg marshalling yards near Kiel and the port at High and low Travemunde on the Baltic were also attacked. level Intruder patrols were flown and Window and Mandrel Screen operations were carried out by No. 100 Group provoking only a very slight reaction by enemy night fighters. large daylight operation was made by Bomber Command on 24 April when 110 Mosquitoes bombed the important marshalling yard of Bad-Oldesloe.

#### Defensive Operations

On 26 April Air Commodore D.A. Boyle the Senior Air Staff Officer of No. 83 Group took over command from Air Vice Marshal Steele as Air Officer Commanding No. 85 The latter was shortly to become the Senior Air Staff Officer of 2nd T.A.F.

The Group's operations at the end of the campaign were unspectacular when compared with the achievements of the day fighters. But since a Wing was operating east of the Rhine an offensive could be carried out over the enemy's airfields. Pilots flew as far east as Berlin and succeeded in inducing the enemy's night fighters to go into action. In the last two weeks of April they claimed to have destroyed about 15 enemy aircraft in the air, a satisfactory score, considering that no flying took place for three nights in this period because of storms and poor visibility. Various types of aircraft were among those destroyed including Ju's 52, 87, 88, 188, 190, 290, He's 111 and F.W's 189 and 190. Many of them were obviously escaping from the Russian front.

On only one occasion did enemy night fighters elude the vigilance of No. 85 Group and that was when an F.W. 190 strafed No. 83 Group Headquarters at Bispingen on 1/2 May Losses to the Group during but little damage was caused. April amounted to four Mosquitoes and one Spitfire.

#### Summary of air operations from the Rhine to the Elbe

The advance of over 200 miles from the Rhine to the Flbe was made by Twenty First Army Group with great dash. Fanatical resistance was met at many points; at every stage river obstacles had to be overcome and over 500 bridges were constructed. But the enemy was broken and did not attempt to form a line of defence. It was further south at Magdeburg that a strenuous effort was made to halt the Allies. In western Holland and around the ports of Bremen and Hamburg the trapped divisions that remained were determined to hold In the third week of April the German High Command

left Hitler to his fate in Berlin and proceeded to Flensburg. The Luftwaffe in the north also assembled in the Danish Peninsula. Thus it was in the north, rather than in the south, as had been predicted, that any attempt at a last stand was made.

There were few opportunities, (with the exception of Bremen) during this phase of fast-moving armoured columns, for the heavy bombers to assist the Army. But important strategic operations were carried out against the German Navy concentrated at Kiel and Hamburg and a powerful blow was delivered at coastal batteries on Heligoland and Wangerooge. The VIIIth Air Force caused great havoc among the Luftwaffe with attacks by Fortresses and Liberators on airfields and by fighters on grounded aircraft. Immunity was thereby given to the Army and unarmed transport aircraft.

The operations of 2nd T.A.F. were notable, in that once airfields in the Enschede area had been secured, squadrons were always placed well forward so as to support the Army. This was a great achievement of the administrative services in clearing enemy airfields for use and maintaining the supply of fuel and ammunition. Spitfires, Tempests and Typhoons flew 5,748 sorties during cover operations for the British and Canadian Armies and they answered 5,182 support calls. Aircraft on tactical reconnaissance flew 1,519 sorties. Although a few tip and run raids on the Weser, Aller and Leine bridgeheads were made by the enemy they could not stop the momentum of the advance.

2nd T.A.F. found many opportunities to hurt the enemy in armed reconnaissances. Convoys on the roads and rail traffic were continually attacked during the hours of daylight by Nos. 83 and 84 Groups and at night by No. 2 Group; Nos. 83 and 84 Groups made a total of 10,837 armed reconnaissances and Mosquitoes of No. 2 Group flew 2,095 sorties by night. Altogether 5,441 motor vehicles, 1,019 locomotives and 2,944 railway trucks were claimed to have been either damaged or destroyed and over 500 rail cuts were made in the area round Bremen and Hamburg.

The main effort of the Luftwaffe was directed against the Russian advance from the Oder and therefore 2nd T.A.F. took the offensive into the enemy's camp. Nos. 83 and 84 Groups claimed to have shot down 181 aircraft (many of them over the enemy's airfields) and to have destroyed just under 100 aircraft on the ground. The night fighter organization was never fully put to the test but the threat of enemy intruders was always present. No. 85 Group flew 671 sorties and claimed to have shot down 18 enemy aircraft during the month.

# CHAPTER 8

#### FINAL OPERATIONS IN NORTHWEST EUROPE

# The Crossing of the Elbe - Operation Enterprise

By 26 April U.S. troops on the central sector had joined up with the Russians at Torgau on the Elbe and a further advance to the east was no longer possible. In the south General Patton advanced to meet the Russians, approaching from Vienna, at Linz and the Seventh U.S. Army thrust towards Augsberg and Berchtesgaden to clear up the National Redoubt.

Log D.S.C. S.C.A.F. 280 14 Apr. 1945

Eyes only Eisenhower to Montgomery S.H.A.E.F. FWD-20042 27 Apr. 1945

2nd T.A.F. File 30317/87/Ops.

See Map. No.32

Montgomery to strike towards Lubeck with all speed so that the Danish peninsula, which was the remaining stronghold of the Reich in the north, might be cut off. The urgency of this operation was expressed in a personal message sent by General Eisenhower to the Field Marshal asking him to inform him instantly 'if any slowness on the part of the U.S. Corps' (The XVIII U.S. Airborne Corps had been attached to Twenty First Army Group for the crossing of the Elbe) 'might hold up your plans for a day or even for an hour'. The Supreme Commander promised him extra support if this was necessary.

The River Elbe was a stiff obstacle and next to the Rhine was the widest river in Germany. An airborne operation had been planned to assist the assault. One battalion of the 6th Airborne Division carried by aircraft of Nos. 38 and 46 Groups was to seize a bridgehead opposite Lauenburg about 30 miles south of Hamburg where the river was about 300 to 400 feet wide. No.2 Group medium bombers were to prepare the way by bombing flak positions and enemy concentration areas - the same technique which had been employed in Operation Varsity.

The ground assault was to be launched six hours later by VIII Corps and a rapid link up on the east bank was to be made with the airborne parties. On D plus one day the U.S. Corps was to make an assault at Bleckede, a few miles higher up the river. The British troops were then to push on to Lubeck and the Americans were to contact the Russians advancing from Stettin. On the left flank XIIth Corps (Second British Army) was to make an assault on Hamburg.

After the surrender of Bremen on 26 April, enemy resistance weakened suddenly and Field Marshal Montgomery decided to go shead with the Elbe crossing without the airborne part of the operation. This was planned to take place on the first day of the following week.

The VIIIth Corps preceded by Commando troops in amphibians crossed the Elbe at 0200 hours on 29 April. Little opposition was met on the opposite bank and bridging operations were set in motion. In the air No. 83 Group gave its customary pre-arranged and immediate support to the troops and covered them from attacking aircraft. The one thorn in the German defence system was a number of railway guns which ran to and fro on the Ludwigslust - Hamburg line, firing on the bridging operations. Fighter bombers were at once called upon to silence the batteries. No hits on the guns were scored but the Germans must have been harassed by the continual strafing with bombs and

2nd T.A.F. Daily Log Sheet No.3165

240

rocket projectiles. Other aircraft made cuts on the railway line. Concentration areas, especially the village of Schwarzenbek about ten miles from Lauenburg, were severely attacked.

Fighter patrols protected the bridgehead from Wittenburg, opposite the assault area, southwards to Ludwigslust and north eastwards from Ahrensburg, some miles north of Hamburg, to Zarrentin about 20 miles east of the bridgehead. They were thus able to cover all the airfields east of the Elbe. Thick cloud often falling to about 600 feet and rain and sleet interspersed with fitful sunshine gave good opportunities to enemy fighter-bombers to make tip and run raids on the bridgehead area. Their airfields were in close proximity to the fighting and little fuel was required to bring them over the bridgehead. Several waves of F.W.190's and Me.109's were intercepted by No. 83 Group and 14 of them were claimed to have been destroyed on the 29th.

2nd T.A.F. Number Claims. Sheet No. 215 as the Apr. 1945.

On 30 April the 82nd U.S. Airborne Division of XVIIIth U.S. Airborne Corps crossed the Elbe at Bleckede without any difficulty and bridging operations were soon well in hand. The weather had improved and between the showers visibility was often up to five miles. Both Allied and enemy air activity, was on a larger scale than the previous day. Numbers of F.W.190's tried to reach the bridgehead, but No.83 Group fighters on cover and armed reconnaissance missions kept a close watch over enemy airfields and attacked aircraft as they took off. About 37 of them were claimed to have been destroyed. Others were forced to jettison their bombs and escape into the clouds. A final attempt was made by the enemy on 1 May but only one or two actually penetrated the British fighter screen and dropped bombs on the bridgehead area.

2nd T.A.F. File 30317/87/Ops. Encl.22A

Air Vice Marshal Broadhurst, the Air Officer Commanding No. 83 Group expressed the opinion that the heaviest air fighting since the early days of the campaign in Normandy took place during these operations.

See Chap. 7. p. 229 The Meteors (No. 616 Squadron) had been moved up to the Elbe from No. 84 Group area and were now attached to No. 83 Group to gain experience in air combat. Unfortunately no aircraft were encountered in the air but the Meteors carried out a number of ground attacks. One aircraft and a locomotive were destroyed during the short time that they operated with the Group. An unfortunate accident took place on 29 April when two Meteors collided in the low cloud and both pilots were lost. Although Meteor operations were only on a small scale, the morale, both of the pilots of 2nd T.A.F. and the troops on the ground was strengthened by the sight of the latest type of fighter aircraft in action.

2nd T.A.F. O.R.B. Summary of Ops. May 1945.

# The Drive to the Baltic

While British and German squadrons were fighting their last actions of the war over the Elbe, the Second British Army experienced little difficulty in breaking out of the bridgehead. By 2 May two divisions had struck out towards Lubeck across the flat, marshy country drained by numerous streams and canals. On the right flank the U.S. troops advanced on the sxis Dommitz-Ludwigslust-Schwerin mopping up the enemy as they went. The 6th British Airborne Division now attached to the U.S. forces met no opposition and occupied Wismar on the Baltic that day. A few hours later

the Russians entered the town and made contact with the British. On the left flank Second British armoured forces entered Lubeck without any opposition. Another division operated into Schleswig-Holstein on the west side of the Ratzeburger Zee, one of the many large lakes in the area. The garrison of Hamburg was thoroughly shaken by the advances east of the Elbe and its commander surrendered to XIIth Corps on 3 May. Other towns which surrendered on that day in the Schwerin area were Neustadt, Bad Siegeburg and Neumunster.

It was now the intention of Field Marshal Montgomery to advance into Schleswig-Holstein liberate Denmark and capture the many important Germans who had taken refuge in the peninsular. Landings by paratroops (Operation Red Admiral) had been planned to help Second Army across the Kiel Canal - the last water obstacle of the campaign. A bridgehead was to be formed by the 1st British Airborne Division between Rendsburg and the port of Kiel. This force was to be flown from the U.K. by No. 38 Group and was to join up with Second Army within 12 hours. Re-supply missions were to be flown immediately after the drops.

2nd T.A.F. File 30317/90/ Ops.

> But the enemy had no longer any fight left in him. The roads leading into the Danish peninsula were crammed with troops and civilians fleeing from the Russians on the east and from the British on the west. On 30 April Hitler had poisoned himself in his bunker below the Chancellory at Berlin and the city itself surrendered to the Russians on Admiral Doenitz who had escaped to Flensburg with other members of O.K.W. assumed the office of Head of the Reich. He wanted to end the war but at the same time was unwilling to surrender to the Russians. By surrendering to the Anglo-American forces he thought he might divide the Allies. (1) Tentative proposals for a local truce had already been put forward by the Allies to the Germans in western Holland at the end of April when negotiations had taken place for the relief of the Dutch, but Reichs Komissar Seyss-Inquart had refused to come to any terms. In Germany, however, several of the commanders were ready to capitulate. Among these were Field Marshal Von Busch who commanded the troops in the Hamburg area and the German commander in Denmark who sent emissaries to Stockholm. Like Doenitz, their main motive was to prevent their forces being captured. by the Russians. By 2 May the situation was beyond the The German commander at Hamburg had enemy's control. already informed General Dempsey that his immediate superior, General Blumentritt, the Army Group Commander, was prepared to But on 3 Mays in place of Blumentritt, representasurrender. tives from Doenitz himself arrived at Second British Army Headquarters and they were at once sent on to Mield Marshal Montgomery's Headquarters on Luneberg Heath. In the meantime the British troops halted on the line Lubeck-Hamburg and on 3 May Operation Red Admiral was cancelled.

2nd T.A.F. O.R.B. App. 50. Apr. 1945

# Last Air Operations

In the first week in May the only air operations of any significance took place over the Danish peninsula in the north, and in support of the Third Army in the Danube Valley and other U.S. forces in Bavaria in the south. In central Germany the proximity of U.S. and Russian troops put an end to active operations by the IXth Air Force. The Strategic

<sup>(1)</sup> Himmler had already attempted to do this on 24 April.

# 242

Air Forces which had been operating in a tactical role in south Germany and over the Gironde river in the Bay of Biscay were engaged in dropping food supplies to the Dutch and evacuating prisoners of war.

While operations were proceeding to reduce Bremen, Air Marshal Coningham had been able to base 2nd T.A.F. forces from where they could carry the air war into Denmark, Schleswig-Holstein and the Baltic. Frequent moves of squadrons while the Second Army advanced from the Rhine to the Elbe - a distance of over 200 miles which was accomplished in just over four weeks - had raised many administrative problems especially with regard to fuel and ammunition. On one airfield even ammunition captured by the Germans from the British had been used to rearm aircraft.

Air Staff S.H.A.E.F. FWD CATOR O.R.B. App. 2 May 1945 Some assistance was given by Nos. 38 and 46 Groups operating under CATOR and during April they flew 1318.7 tons of petrol to 2nd T.A.F. in addition to their regular commitment of supplying Twenty First Army Group.

The Main Headquarters of 2nd T.A.F. remained at Suchteln and did not move to Bad Eilsen until the end of the month.

On 21 April No. 83 Group Headquarters left Mettingen for Wunstorf just west of Hanover. It remained there for the following week while the assault on Bremen took place and then moved forward to Bispingen, east of Soltau, in company with Main Headquarters, Second Army. It was thus well situated to control operations east of the Elbe. The Group Control Centre remained at Schneverdingen due north of Soltau. Squadrons were located at Fassberg, Celle, Winstorf, Rheinselen, Hustedt and Luneberg.

No. 84 Group remained in the Enschede area as already described. Nordhorn airfield was evacuated in place of Alhorn.

One Wing of No. 2 Group had been moved east of the Rhine during April to Achmer in the Enschede area. The remainder of the Group and its Headquarters stayed west of the Rhine at Volkel, Gilze-Riejen, Epinoy and Melsbroek. No. 34 Wing which was used for strategic reconnaissance was still stationed at Endhoven. (1)

No. 85 Group had moved one Wing forward to Rheine. The other Mosquito Wing remained at Gilze Riejen. Air Sea Rescue Squadrons were stationed at Knocke on the Belgian coast.

On 1 May it was decided at a conference between the Senior Air Staff Officer, 2nd T.A.F. and the Air Officer Commanding No. 16 Group, R.A.F. Coastal Command that Helmond in the Netherlands should be used by Coastal Command aircraft to refuel after operations east of the Danish peninsular. The airfield was first used by Coastal Command on 3 May.

During this week wintry weather seriously interfered with air operations. Showers of sleet and rain blowing from the North Sea kept No. 84 Group grounded for two days. No. 83 Group, with its bases further inland, was more fortunate but operations were often restricted by poor visibility. Night operations were on a very small scale.

2nd T.A.F. File Orders of Battle May 1944 -June 1945

2nd T.A.F. O.R.B. p.131 May 1945.

On the ground the roads were packed with transport of all kinds and with thousands of pedestrians. The scene often resembled the Falaise Gap of August 1944, but with an Among the fugitive troops and civilimportant difference. ians were many Allied prisoners of war and displaced persons who had broken out of the labour camps; all were hastening to reach the British lines. On 1 May S.H.A.E.F. sent a signal to the Tactical Air Forces suggesting that they should restrict fighter aircraft from attacks on vehicles and pedestrians. This was in response to an allegation made by the Swedish Red Cross that 16 motor trucks carrying Allied P.O.W's had been destroyed near Wismar and Schwerin in north Germany during the last week of April. H.Q. 2nd T.A.F. replied that a restriction of this nature would only enable the enemy to concentrate his forces against the Elbe bridgeheads, while at night it believed that only foot movement took place. It was suggested that Red Cross activities should take place outside the battle area or in ports. H.Q. 2nd T.A.F. issued orders to squadrons to attack only motor transport guns and loaded goods trains by day.

It is difficult to discover whether in fact any P.O.W's were killed or injured by Allied air attacks but with the fighting taking place in a narrow area, most prisoners of war took good care to identify themselves. On 1 May the 2nd T.A.F. Operations Record Book reported that the 'westward movement of prisoners of war was observed for the most part clearly marked'.

Apart from sweeps over airfields on 1 May, No. 83 Group made a big attack on transport escaping from the Russian front, and 343 vehicles were claimed to have been destroyed and 594 damaged. Cuts were made on the railways connecting Kiel with Schwerin but even so there was still a good deal of rail traffic. Pilots exercised great care in selecting their targets to avoid hitting Allied prisoners of war or displaced persons and it is remarkable that such a high score was obtained.

On the morning 2 May No. 85 Group reconnaissance aircraft spotted Russian tanks moving into Goldberg about 20 miles east of Schwerin. Panic had gripped the enemy and the writer of 2nd T.A.F. Operations Record Book observed that this 'was one of the few occasions when the enemy was forced to disregard the factor of air power'. Several convoys, about 200 vehicles strong, converged on Kluetz, a small town near Lubeck, and attempted to pass along the narrow corridor between Second Army and the sea. Once through the gap the fugitives made for Eutin 20 miles north of Lubeck. On the western side of the peninsula No. 2 Group, adding to the confusion, bombed the railway junction at Itzehoe 30 miles north of Hamburg. At the end of the day about 587 motor vehicles and 41 railway trucks were claimed to have been destroyed and 873 vehicles damaged by 2nd T.A.F.

Ships of all kinds were pressed into service by the enemy and large convoys began to assemble in the expansive bays of Lubeck and Kiel. It appeared that they were preparing to make a dash to Norway from where perhaps they might continue the struggle. Violent storms prevented No. 84 Group from operating over the Baltic; No. 83 Group had not sufficient resources to make a powerful strike and R.A.F. Coastal Command had not yet taken over Helmond airfield from where it could operate extensively over Norwegian waters. No. 83 Group, nevertheless, damaged three motor vessels and hit two U-boats and an E-boat. Further out to see

O.R.B. Air Staff 2nd T.A.F. App.71 May 1945

2nd T.A.F. Daily Log Sheet No. 3177

2nd T.A.F. Daily Log Sheets No. 3181-3186

244

R.A.F. Bomber Command had laid mines in the Kattegat and Oslo Fjord a week before and Coastal Command aircraft daily patrolled the Norwegian coast.

R.A.F. Bomber Cmd. Night Raid Rept. No. 910 May, 1945 That night the last air operations were conducted by British aircraft over north Germany. A force of Mosquitoes from Bomber Command attacked Kiel and the neighbouring airfields of Husum and Eggebek and other Mosquitoes carried out Intruder patrols and various Radar Counter Measure operations. The enemy did not attempt to reply with flak and only a couple of night fighters took off to intercept the bombers.

2nd T.A.F. Daily Log Sheet No. 3191 The weather was good enough on the continent for No. 2 Group to carry out its final night operation of the campaign. Relays of Mosquitoes attacked Itzehoe railway station (already bombed by the Mitchells that day) and seven towns and villages on the peninsula. Even at night the broken Wehrmacht was allowed no rest.(1)

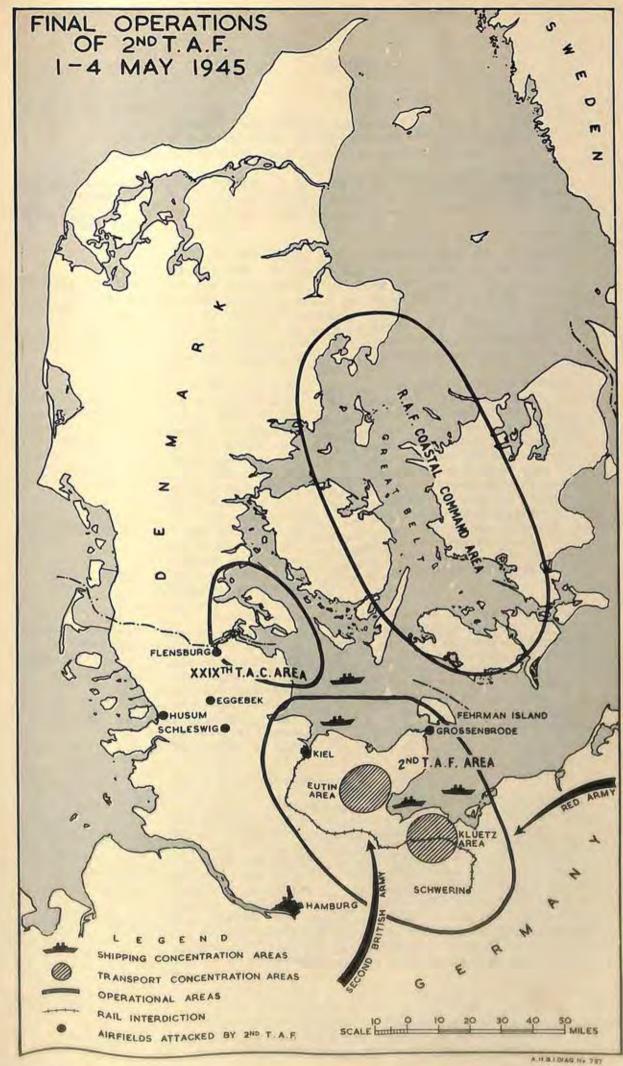
2nd T.A.F. Daily Log Sheets No. 3192, 3202 and 2nd T.A.F. O.R.B. May 1945 On 5 May, while German plenipotentiaries proceeded to Luneberg for negotiations, the war in the air continued at full strength. Visibility had improved, often extending to six miles. No. 83 Group continued to harry transport around Eutin but by mid-day the mass of vehicles had dispersed into the thick pinewoods.

Nos. 83 and 84 Groups now operated against the large convoys putting out into the Baltic for Norway. The ships were concentrated in an area about 40 miles north of Kiel to Fehrman Island, situated off the northern tip of Lubeck Bay. Other ships were still waiting to leave Lubeck, Schwerin Bay and Kiel. In all there were about 500 craft of all descriptions. At S.H.A.E.F. it was believed that important Nazis who had escaped from Berlin to Flensburg were on board and were fleeing to Norway or neutral countries.

As the Navy was unable to reach the area because of the minefields in the Kattegat an all out air effort was planned to block this last escape hole. R.A.F. Coastal and Fighter Commands and the Ninth Air Force were called upon to assist 2nd T.A.F.

No. 83 Group spent the first part of the day around the ports of Lubeck, Kiel and Schleswig. The two Typhoon Wings of No. 84 Group were moved to a forward airfield on the Elbe so that they could operate over Lubeck Bay. As the ships steamed out to sea they were followed by Typhoons and Tempests. Tempests of No. 83 Group attacked and hit the liners Deutschland (21,046 tons) and the Cap Arcona (27,561 tons). Altogether the Typhoons of 2nd T.A.F. made 280 pre-arranged sorties while Spitsfires and Tempests carried out many armed reconnaissances. Claims are hard to assess as the same vessels were attacked by numbers of aircraft but most damage was caused by the Typhoons. By the end of the day 2nd T.A.F. had made over 840 sorties against land and sea transport. No. 83 Group claimed 13 vessels sunk and 101 damaged; No. 84 Group claimed four

<sup>(1)</sup> No. 2 Group aircraft flew over Wilhemshaven and Ouxhaven where their predecessors had attacked the German Fleet on 3 Sept. 1939.



# 245

vessels sunk and six damaged.(1) Losses to 2nd T.A.F. amounted to 13 aircraft shot down by flak or damaged by explosions from enemy shipping.

Air Staff S.H.A.E.F. Int/Ops. Summary p.4 3 May 1945 Further up the coast at Flensburg the XXIXth Tactical Air Command made 123 sorties and claims were made for 13 cargo vessels destroyed and eight tankers damaged.

R.A.F. Coastal Cmd. Narrative 123 May 1945 In the R.A.F. Coastal Command area No. 18 Group operated to the north and No. 16 Group to the south of the Great Belt. Braving the squally weather 45 Beaufighters escorted by two Mustang squadrons carried out a successful strike. A U-Boat and a motor vessel and 22 vessels of various types were damaged. A second strike force of 48 Mosquitoes ran into rain storms and, unable to see anything, returned to base.

2nd T.A.F. Daily Log Sheets No. 3206-3211 Friday, 4 May was the last day of air operations in north Germany. Flensburg and Kiel were declared 'open cities' and the Second Army halted while peace negotiations were in progress. Consequently movement on the roads was greatly reduced and only 48 vehicles were destroyed by 2nd T.A.F. At sea the large concentration of ships had dispersed and many of them seemed undecided whether to go to Norway or seek haven in a neutral port. No. 83 Group carried out further anti-shipping strikes and claimed to have destroyed four small craft and six ships and to have damaged 66 vessels of varied description. No. 84 Group turned its attention to the Dutch coast. One ship blew up after a strike near Wangerooge and eight others were damaged.

R.A.F. Coastal Cmd. Narrative 124, May 1945 R.A.F. Coastal Command carried out another day's operations with 62 Mosquitoes and Beaufighters escorted by 61 Mustangs of Fighter Command. Despite the poor visibility they damaged two U-boats and a destroyer and seven other craft were left smoking. Sixteen attacks were made on small vessels. Another Beaufighter force turned home because of the poor visibility. By that evening the cloud which had done so much to obscure air operations in the last few days had begun to lift.

# The debacle of the G.A.F.

After 1 May the G.A.F. rarely attempted to launch any offensive operations. Heavy claims were made by No. 83 Group against a miscellaneous collection of aircraft - both ancient and modern - which were escaping from the Russian front. Among them were B.V's138, He's110,111, Fi's 156, F.W's 44 and many other types. They had assembled at Flensburg, Eggebek, Schleswig and Husum. Aircraft either stood helplessly on runways or were parked wing tip to wing tip in fields. On 3 May, for example, over 100 aircraft were seen at Grossenbrode on the east side of the peninsula. See planes and flying boats were destroyed as they lay moored at their bases.

<sup>(1)</sup> A photograph of a liner attacked by Typhoons of No. 121 Wing may be found at Appendix No. 6.

246

O.R.B. Air Staff 2nd T.A.F. App.66 May 1945 broken down and its commander General Lieutenant Stumpf when asked to produce an order of battle immediately after the surrender was unable to discover the strength of aircraft in all his units. In the Schleswig Holstein area he accounted for just over 300 aircraft (mainly F.W.190's and Me.109's) and 134 transport aircraft. During May the Air Technical Intelligence Branch of 2nd T.A.F. counted 2,950 aircraft mainly north of the Kiel canal, of which about 2000 were airworthy.

The chain of command in Luttflotte Reich had completely

2nd T.A.F. Log Casualty Claims Sheet No. 227 May 1945 From 1 to 5 May 131 aircraft were claimed to have been destroyed by No. 83 Group and 17 by No. 84 Group. A final assessment of the claims of 2nd T.A.F. were reckoned to be 111 aircraft destroyed during this week. British losses during this period came to 29 aircraft. Many were shot down by flak as they flew low over shipping in the Baltic and some were destroyed by explosions from the ships.

# The Relief of the Dutch in Western Holland

The First Canadian Army had been engaged in heavy fighting during the last week of April in the coastal belt. The Polish Armoured Division under its command advanced along the east bank of the river Ems to Emden and, on the west bank of the Ems, Canadian troops cleared the area around Delfzijl, capturing that port on 1 May. On the next day, Oldenburg fell after a long struggle. No. 84 Group gave support to the Army whenever possible by attacking guns and strong points.

2nd T.A.F. Daily Log Sheets No. 3149 - 3161

> In western Holland, air operations of a very different character were now in progress, but it is first of all necessary to go back for some months and review the situation.

Relief for western Holland which contained over three million people had been an increasing source of anxiety to the Allies since October, 1944, when the enemy garrison became responsible for feeding the people. In north east Holland, the majority of the population were farmers and were, therefore, self-supporting, but in the west there were highly developed urban centres such as Amsterdam, Rotterdam, and the Hague, while in the event of military operations taking place the countryside could easily be flooded by the Germans.

File A.C.A.S. (Ops). 1D/12/88 At the end of 1944, famine conditions arose. Negotiations took place between the Allies and the Germans through the Swedish government, with the result that in January, 1945, two Swedish vessels loaded with food stuffs were allowed to pass through the Kiel Canal to a port in Holland where the supplies were introduced into the stricken areas by devicus means. But it was clear that before long more elaborate methods must be employed.

log D.S.C. S.C.A.F. 250 28 Mar. 1945 Prior to the crossing of the Rhine, General Eisenhower recommended to the Combined Chiefs of Staff that the best method of introducing food supplies in the early stages was undoubtedly by air. In order to open up a sea route, minefields would have to be cleared and U-boats and E-boat bases put out of action, while supply by land route would involve many vehicles which were in great demand east of the Rhine. General Eisenhower requested that preparations for air supply should begin at once in the U.K. and advised the Combined Chiefs of Staff that three million of the packed rations which had been reserved for Allied P.O.W's should immediately be made available to the Dutch.

# 247

Meanwhile, another relief ship the S.S. Hallaren had sailed from Sweden after much delay, clearing the Kiel Canal on 8 April. This interrupted the series of attacks on Naval targets at Kiel planned by the Strategic Air Forces.(1) In order that the relief ship should have a port of entry, the Navy asked that an air attack should be made on a 'Sperrbrecher' or flak ship, lying at the entrance to Ijmuiden Harbour on the west coast of Holland. The 'Sperrbrecher' was sunk by a force of seventeen Lancasters from No. 5 Group, Bomber Command on 7 April. This was the first air operation in connection with the relief of the Dutch.

R.A.F. Bomber Cmd. Day Raid Rept. No. 29 Apr.1945

File 2nd T.A.F. 30317/85/0ps. A plan for dropping food to the Dutch (known by the code name Placket C)(2) was made out by the Air Staff, 2nd T.A.F. in collaboration with the Netherlands District Command which had been set up by Field Marshal Montgomery to deal with the administration of western Holland after the occupation. Briefly the procedure was that the Army should inform 2nd T.A.F. of its requirements which, after approval by the latter, would be passed on to Air Staff S.H.A.E.F. and C.A.T.O.R. for action. The supply missions would be flown by No. 38 Group from England. But 2nd T.A.F. insisted on being responsible for the whole operation and this was approved by S.H.A.E.F. on 15 April.

A list of dropping zones had been prepared by the Army, but No. 38 Group considered that many of them were unsuitable and on 20 April, a new list of 30 dropping zones, chosen by an officer of No. 38 Group in conjunction with the Army, was issued.

Meanwhile, Air Staff, S.H.A.E.F. had decided that as transport aircraft were so much in demand, drops would be carried out by R.A.F. Bomber Command and the VIIIth U.S. Air Force. The same procedure for carrying out a strategic bombing raid would be adopted. (5)

No advance into western Holland had been made by the Allies and the Germans were still determined to hold out. But the food situation forced the Germans to act. On 22 April, they got into touch by radio with Canadian troops on the

Instructions were issued that the canal must not be blocked until the relief ship had passed through.

<sup>(2)</sup> Another plan, Placket B was the introduction of supplies by sea with airborne parties clearing the harbour entrances.

<sup>(3)</sup> In the plan for Operation Eclipse, (the phase covering Allied operations from the end of Overlord until the setting-up of Military Government in Germany) the principal task allotted to the Strategic Air Forces was to carry out transport operations beyond the capacity of C.A.T.O.R. and in particular the feeding and evacuation of P.O.W's. Early in 1945 experiments had been carried out by Bomber Command in dropping supplies and fitting out heavy bombers to carry freight or passengers. In view of the fact that there was a great shortage of parachutes, rations were packed in double sacks and dropped from a height of between 300 and 500 fact. It was found that although the inner sack burst, the outer one remained intact. The whole operation of supply dropping called for great skill on the part of the air-crews. (Bomber Cmd. File B.C./S.32085/2).

Grebbe Line, asking that they should send in food supplies to the civilian population. General Eisenhower signalled immediately to the Combined Chiefs of Staff advising them that something should be done for the Dutch at once, and asked permission to send a message to the Commander of the German Twenty Fifth Army, General Blaskovitz, pointing out the futility of occupying an area which would soon be indefensible and informing him that he and his subordinates would be held entirely responsible for the tragic situation.

The Combined Chiefs of Staff allowed General Eisenhower to proceed with supply drops and they authorised him to arrange a truce with the Germans, provided that he did not depart from the unconditional surrender policy agreed upon by the Allies. In the event of a truce the Germans must cease all military and political activities, and the Allies in their turn, were to end active operations against the Germans in western Holland. All negotiations were to be carried out in collaboration with the Russians.

At the same time as the message was sent by S.H.A.E.F. to the Germans, broadcasts were made to the Dutch Government, informing them when and where food drops would take place.

On 25 April a message from General Blaskowitz and Seyss-Inquart, the Reichs Komissar of western Holland was received by S.H.A.E.F. stating that they agreed in principle with the plan for feeding the Dutch, but they rejected the method of supply by air, alleging that the Dutch themselves, believed that fair distribution would be impossible, and that only the Black Market would benefit, especially if drops were made at night. The Dutch Government in London agreed with this point of view, and it was decided to cancel a trial run at night, which was to be made by R.A.F. Bomber Command.

On Saturday, 28 April, a meeting was arranged between the Allies and representatives of Seyss-Inquart and the German Commander-in-Chief, Netherlands. It took place in the small village school of Achterveld, just outside the lines of the First Canadian Army. General de Guingand Chief of Staff to Field Marshal Montgomery and Air Commodore Geddes representing Air Marshal Coningham, and a number of Naval, Army and Air Administrative Officers, formed the Allied party. General de Guingand gave an outline of the scheme and called upon the experts to expound their detailed plans for relief. A further meeting was arranged for the following Monday, 30 April, in order to settle the method of supply.

On this occasion Lieutenant General Bedell-Smith, Chief of Staff to the Supreme Commander led the delegation to Achterveld. Other important members were General Suslaparov, the Russian representative, Prince Bernhardt of the Netherlands and Monsieur Louwes, the Dutch Director General of Food. Seyss-Inquart himself headed the German team of experts. General Bedell-Smith emphasised the hopeless position of the Germans on every front and warned Seyss-Inquart that he was on the Allied list of War Criminals, Seyss-Inquart then agreed to allow the Allies to proceed with the supply of food to the Dutch, but he refused to consider a truce so long as the German High Command was in being.

The two delegations then broke up into syndicates to discuss the various methods of supply. The Germans refused to allow the Allies to fly over three areas at Voorne,

D.S.C. 'In' log 21 Army Group to S.H.A.E.F. FWD 26 Apr. 1945

O.R.B. Air Staff 2nd T.A.F. App. 46 Apr. 1945

Ibid. App. 50

# 249

Ijmuiden and Den Helder for security reasons, and the R.A.F. officers accepted them as danger areas which would be prohibited to Allied aircraft during the dropping operations. They also agreed to stop offensive air operations over western Holland during the period of the drops. While these consultations went on in the school room, the Dutch outside demonstrated their loyalty by singing their National Anthem.

The final act in this strange drama took place on 1 May when a written agreement in English and German, together with a map marking the three danger zones was taken by Air Commodore Geddes and Group Captain Hill from Air Staff S.H.A.E.F. to a ruined cottage between the Canadian and German lines near Wangeningen. They were met by officers of the Luftwaffe who took away the papers for signature by the Superiors. They returned that evening with the signatures and Air Commodore Geddes telephoned at once to 2nd T.A.F. informing them that relief operations could go ahead.(1)

The trial drop was made in daylight by Bomber Command on 29 April (the day after the first meeting with the Germans). All aircraft were instructed to fly west of a Drops were made at line drawn north and south of Utrecht. Rotterdam and the Hague. Mosquitoes acted as markers, dropping target indicators over the zones which were already This proved to be unnecessary marked with white crosses. because of the clear visibility, and 253 out of 258 aircraft dropped their bags of rations accurately. Enthusiastic crowds of Dutch people watched the operations, waving Union The Special Force Headquarters, in contact with the Jacks. Dutch Resistances later sent a signal to Twenty-first Army Group stating that not more than one eighth of the total amount had been lost and that the Dutch wished to convey their 'eternal thanks' to the Allies. In spite of warnings issued by the Allies, German troops fired at several of the aircraft, but fortunately they did no damage.

On 1 May the VIIIth Air Force began supply drops with 396 Fortresses and Liberators. Again the Germans fired on the Allied aircraft, but after this no further incidents were reported. From now until 8 May regular supply drops were carried out over western Holland. Only 10 dropping zones had been chosen, as the Dutch were unable to cope with distribution from a greater number. Dropping zones for R.A.F. Bomber Command were located at Kralingsche Plas and Waalburg Airfield at Rotterdam, Valkenburg Airfield at Leiden and Gouda Airfield and the Race Course at the Hague. The VIIIth Air Force dropped supplies on the east side of the peninsula at Amsterdam, Vogelensang, Alkmaar, Hilversum and Utrecht. These were also either airfields or large open spaces.(2)

In this manner the Strategic Air Forces, which had carried so much destruction to the enemy, laid low the spectre of starvation. A supply route by sea was opened on 4 May when the S.S. Hallaren at last reached Den Helder and on the next day the Germans in northern Europe surrendered and road and rail routes were quickly opened. Lencasters and Mosquitoes of Bomber Command flew

R.A.F. Bomber Cmd. Day Raid Rept. No. 47 Apr. 1945

See Map. No.8

File 2nd T.A.F./ 30317/85/Ops. Encl.29A

R.A.F. Bomber Cmd. Day Raid Repts. Nos. 47-56

VIIIth Air Force Summery of Ops. 1 May - 7 June, 1945

<sup>(1)</sup> An interesting account of the meetings with the Germans and the signed map, may be found in Appendices 46 - 50 Air Staff, 2nd T.A.F. Apr. 1945.

<sup>(2)</sup> This was known as Operation Chowhound.

3,500 sorties in ten days and they dropped 7344 short tons of rations. The VIIIth Air Force flew 2,191 effective sorties from 1 to 7 May dropping over 4,180 short tons of rations. The Americans lost one heavy bomber during the course of operations. The object of the air relief operations had been, all along, to fill the gap until land and sea routes were opened and this the Strategic Air Forces achieved with great efficiency. (1)

# Evacuation of Allied Prisoners of War by the Strategic Air Forces

Another important activity of the heavy bombers during the last days of operations in north west Europe, was the evacuation of Allied P.O.W's. Great care had been taken in working out plans for loading the aircraft and providing for the comfort of the P.O.W's, many of whom were expected to be sick men. Special orders were issued by the Commander-in-Chief, Bomber Command to the aircrews concerned, emphasising the need for safety rather than speed during the operations.

R.A.F. Bomber Cmd. Night Raid Rept. No. 902 Apr. 1945 As the Allies advanced into the heart of the Reich, the German administrative system did not collapse suddenly as had been expected, and only one supply drop was carried out over a P.O.W. camp at Neu Brandenburg in north east Germany where there was a grave shortage of medical equipment. A number of leaflet dropping operations were carried out that week over camps in eastern and northern Germany warning the Commandants and Staffs that they would be held responsible for any reprisals carried out against the prisoners.(2)

R.A.F. Bomber Cmd. Day Raid Rept. No. 44 Apr. 1945

By 25 April hundreds of prisoners of war freed by the Allied advances had arrived at Brussels and S.H.A.E.F. requested R.A.F. Bomber Command to provide 50 aircraft to evacuate 1000 men per day to the U.K. The first batch of P.O.W's was flown across the Channel on 26 April by 44. Lancasters and this became a regular commitment until 1 June. Only small parties were carried after that date and the last operation ended four days later.

R.A.F. Bomber Cmd. O.R.B. Apr. to June 1945 The principal airfields used by Bomber Command were at Melsbrock near Brussels and Juvincourt, also in Belgium. Bomber Command alone carried some 75,000 prisoners of war during April and May and they flew 1,876 Belgian refugees from England to Belgium at the request of the Belgian Government.

The VIIIth Air Force also undertook the transport of prisoners of war and displaced persons, when they had completed the task of feeding the Dutch. From 7 May to 3 June they flew to German airfields carrying food supplies. On the return journeys to airfields in France they brought back 44,429 prisoners of war (of whom 2,836 were British) and 6,768 displaced persons.(3)

VIIIth Air Force Summary of Ops. 1 May - 7 June

- (1) There were no drops on 6 May by Bomber Command and on 4 May by the VIIIth Air Force because of bad weather.
- (2) At the end of March the Supreme Commander had instructed the First Allied Airborne Army to prepare a plan for the protection of P.O.W's (S.H.A.E.F. FWD.18417 dated 31 March, 1945). This became known as Operation Jubilant and special parachute detachments were to be dropped on camps or hospitals where-ever necessary. This operation was cancelled on 7 May.
- (5) Known by the code name 'Revival'.

R.A.F. Bomber Cmd. File BC/S.32085 Encl. 22B The Supreme Commander congratulated the Commander-in-Chief Bomber Command on the conclusion of these ferrying operations and stated that the splendid effort made by the aircrews was comparable to what they had achieved in their bombing offensive against Germany.

Operations by Nos. 46 and 38 Groups in support of Twenty First Army Group

It has already been mentioned that R.A.F. transport aircraft carried fuel to 2nd T.A.F. during the advance to the Elbe. Supplies such as ammunition, ordnance stores, rations, petrol and diesel oil were also flown to the Twenty First Army Group, although not in the large quantities that were received by the U.S. Armies. There were a number of reasons for this. Airfields in the British sector were few and several in the Hanover area came into the U.S. zone after the Ninth Army returned to General Bradley's command on 4 April. Thus all forward airfields were urgently required by 2nd T.A.F. for fighter and fighter bomber squadrons. In the second place 2nd T.A.F. disapproved of the centralised control of transport aircraft by S.H.A.E.F. and wanted to direct these operations itself. This attitude was not unnaturally a source of irritation to C.A.T.O.R. Lastly the British lines of communication were not put to such a strain as those of the U.S. Armies.

S.H.A.E.F.(FWD) Air Ops.3 App.II Apr. 1945

No. 46 Group under command of Air Commodore Darval carried the major part of the supplies. No. 38 Group commanded by Air Vice Marshal Scarlett-Streatfeild also took part but its main task was to drop supplies to British agents and members of the Resistance in Holland, Denmark and Norway. No. 46 Group had 130 aircraft and No. 38 Group 280 aircraft available each day for supply operations. (1)

All aircraft flew from their stations in east Anglia to airfields on the Continent. Thirteen of them were west of the Rhine at:-

No. 46 Group O.R.B. Apr. 1945. Brussels/Evere St. Denis - Westram
Eindhoven Maldegem
Gilze-Riejen Epinoy
Coxyde Deurne
Vitry Kluis
Rosieres Achiet
Goch

Six airfields east of the Rhine were used at:-

Achmer Rheine Rhosten Diepholz Gelle Rustedt

The peak period was reached during the last two weeks of April when Second Army was forming up on the Elbe. On 23 April, for example 200 sorties were flown by British transport aircraft which was their highest total for the month. During April, No. 46 Group flew 5,499 sorties and handled 6,929.6 tons of supplies. No. 38 Group flew 220 sorties and carried 514.4 tons. On the return journey to

<sup>(1)</sup> No. 46 Group was made up of 6 Squadrons of Dakotas and 1 Squadron of Ansons (ADIS). No. 38 Group contained 7 Stirling IV Squadrons and 4 Halifax III/VII Squadrons.

252

S.H.A.E.F. (FWD) Ops.3 App.3 Apr. 1945 England 27,277 British and American P.O.W's and 5,986 battle casualties were carried by No. 46 Group. No. 38 Group carried 6,057 sick P.O.W's.

Air operations on the U.S. front during the advance across Germany

General Bradley's Army Group made very rapid advances after the break-out from the Rhine bridgeheads and the encirclement of the Ruhr. On 4 April Kassel was cleared and within a few days General Patton began his dash into Thuringia. General Dever's Army Group joined up with the Third Army at Darmstadt on 27 March and on 1 April a crossing of the Rhine was made by First French Army south of Mannheim. The Seventh Army then launched a thrust on the axis Bayreuth-Nuremburg.

There were better opportunities for the strategic bomber forces in central and southern Germany than in the more sparsely populated north. Around Leipzig were a number of important railway centres such as Halle, Gera and Chemnitz. Further south lay the important towns of Bayreuth, Hof and Nuremburg and in Bavaria there were about 14 railway centres around Munich, Ten bridges crossed the Danube between Linz and Ingoldstadt which, it was expected, the enemy would use in his retreat from Austria.

File D.S.C./T.S. 100 Pt.9 Encl.93B

S.H.A.E.F.(Air) Hist. Rec. and Diary App. Enemy Operation Olga Mar. 1945 One of the tasks of the heavy bombers at the beginning of April was to stop movement from the Berlin area into central Germany and the National Redoubt (roughly Bohemia and lower Bavaria). Air Staff S.H.A.E.F. believed that an extensive evacuation from Berlin to Thuringia in central Germany had begun in the last week of March and that government departments were moving to such towns as Nordhausen, Halle and Erfurt. This was borne out by the heavy rail traffic moving in a southerly direction from Berlin. According to interrogations of enemy prisoners of war, after the war, it appears that the whole of O.K.W. was to have been evacuated to Thuringia when the Russians threatened Berlin. A few administrative sections did in fact leave the city at the end of March but the swift advance of General Patton forestalled further moves and those already evacuated moved south as fast as possible.(1)

#### The G.A.F. in the Central and Southern fronts

After Germany had been divided into two by U.S. forces closing to the Elbe, Luftflotte 6 (transferred from the eastern front) commanded by General Lieutenant Ritter Von Greim(2) was responsible for the defence of the Reich in that area. Among his forces was the remains of Luftwaffe Command West and a number of jet fighters of the strategic force evacuated from the north. Only a meagre effort was made by the G.A.F. in the south during this last phase although there were potentially large numbers of aircraft. During the third week of April for example only 522 ground attack sorties were flown by day and 251 by night.

<sup>(1)</sup> Notes on interrogation of General Christian Chief of O.K.L. North 17 May 1945. D.S.C./T.S.108/22.

<sup>(2)</sup> Von Greim later replaced Goering as C. in C. Luftwaffe.

# Air Operations by Strategic and Tactical Air Forces

R.A.F. Bomber Cmd. Day Raid Repts. Nos. 26 - 27 Apr. 1945 During the first fortnight of April, R.A.F. Bomber Command undertook a number of important operations in central and southern Germany in connection with the land battle.(1) In the first week two attacks were made on Nordhausen in Thuringia where, it was believed, government departments had been evacuated. Great devastation was caused to the town but the Commander-in-Chief Bomber Command gave his opinion that the barracks which were the main target were empty at the time of the attack. This is partly borne out by the fact that the Germans in their reports on the raid make no mention of any Government occupied buildings being hit.

See Chap. 7, pp. 216-217 The reader will recall from Chapter 7 how concerned the Air Staff at S.H.A.E.F. were with the necessity for concentrating heavy bomber attacks on the railway system in central and southern Germany. By 9 April air reconnaissance revealed that there was a constant movement of troop trains and oil tankers on the line Dresden-Leipzig-Halle. This activity was the greatest that had been seen in that area for some weeks. S.H.A.E.F. (Air) also emphasised the importance of the Halle-Nuremburg line. In response R.A.F. Bomber Command attacked two important marshalling yards in Leipzig on 10 April which was followed up by a second attack on the city that night by Lancasters and Mosquitoes. Other aircraft attacked the marshalling yards at Plauen. On the 11th R.A.F. Bomber Command attacked the marshalling yards at Nuremburg and Bayreuth.

R.A.F. Bomber Cmd. Day Raid Reports Nos. 682-687 Apr. 1945

The next important operation in which R.A.F. Bomber Command took part was on the night of 14/15 April when the barracks and marshalling yards of Potsdam were bombed. Air Chief Marshal Harris had suggested that this target together with Brechtesgaden should be obliterated, when he attended the Air Commanders Conference on 12 April. But the Deputy Supreme Commander doubted whether it was an important target and reminded Air Chief Marshal Harris that there was a possibility of repercussions with the Red Army. For this reason the permission of the Chief of Air Staff had to be obtained before the attack could be mounted. Heavy destruction was caused as a result of the raid but the operation was also notable because it was the first time since March 1944 that Allied heavy bombers had penetrated into the Berlin defence zone by night.

D.S.C./T.S. 100/9 Pt.5 Encl.33A Para.12

In addition to these operations Mosquitoes of Bomber Command were extremely active. Their main task was to harass Berlin during the night hours but small forces also attacked important railway centres such as Magdeburg and Plauen.

R.A.F. Fighter Command contributed not a little to operations by night over Germany. Often aircraft on completing their missions refuelled at an airfield on the continent before returning to the U.K. Nos. 10, 11 and 12 Groups took part and maintained patrols over enemy airfields both in the north and south; they engaged targets of opportunity, such as road and rail transport and assisted bomber Command by diversionary operations. Sorties per night varied from 8 to 39 aircraft depending on the weather. The enemy was frequently misled by all these operations reporting far larger numbers of aircraft than there were in reality.

R.A.F. Fighter Cmd. O.R.B. App. B Apr. 1945

254

See Chap. 7 P. 215

VIIIth Air Force Monthly Summary of Ops. Apr. 1945

The VIIIth Air Force's main task as already noted in the last chapter was to neutralise the enemy air force and this they did most effectively in the south. A concentrated attack was made on airfields in the second week of April. The heaviest of these was made on the 9th when over 1000 heavy bombers attacked the Munich system of airfields, supported by about 700 Mustangs and Thunderbolts of the VIIIth Fighter Command. Further air to ground operations were carried out by VIIIth Air Force fighters and a week later they made an extensive sweep over 26 airfields in Bavaria and Czecho-Slovakia. The Germans admitted that over 300 aircraft had been destroyed.

pp. 72 - 74 Apr. 1945

The next task of the U.S. heavy bombers in the south was the destruction of communications, ordnance depots and industrial plants. A good deal of success was met in these operations and opposition by the enemy jet fighters was only on a very small scale. Heavy attacks were carried out against Nuremburg, Bayreuth, Plauen and Leipzig in the first week of April in an effort to dislocate traffic proceeding into the Redoubt. Rail traffic on the line from Muremberg to Bamburg was seriously disorganised and at Leipzig seven industrial plants were put out of action.

S.H.A.E.F. Daily Int. Ops. Summaries Nos. 44-53 Apr. 1945

Medium bombers of the IXth Air Force operating from bases in the Luxemburg area carried out operations against marshalling yards, railway bridges, supply dumps, oil storage depots, oil refineries and ordnance depots. The main effort was made in central Germany but towards the middle of April the weight of attack shifted to the south.

S.H.A.E.F. App. IX/15 Ops. Records O.R.B. Apr. 1945

On 5 April the Tactical Air Commands of the IXth Air Force were still operating from airfields east of the Rhine. Order of Battle The IXth Tactical Air Command was at Aachen and Kelz, the XIXth Tactical Air Command was in the Metz-Verdun area and the XXIXth T.A.C. was at Venlo, Asch and Ophoven near Munchen-Gladbach. The XIIth T.A.C. which formed part of the Ist Tactical Air Force operated from airfields in the Nancy

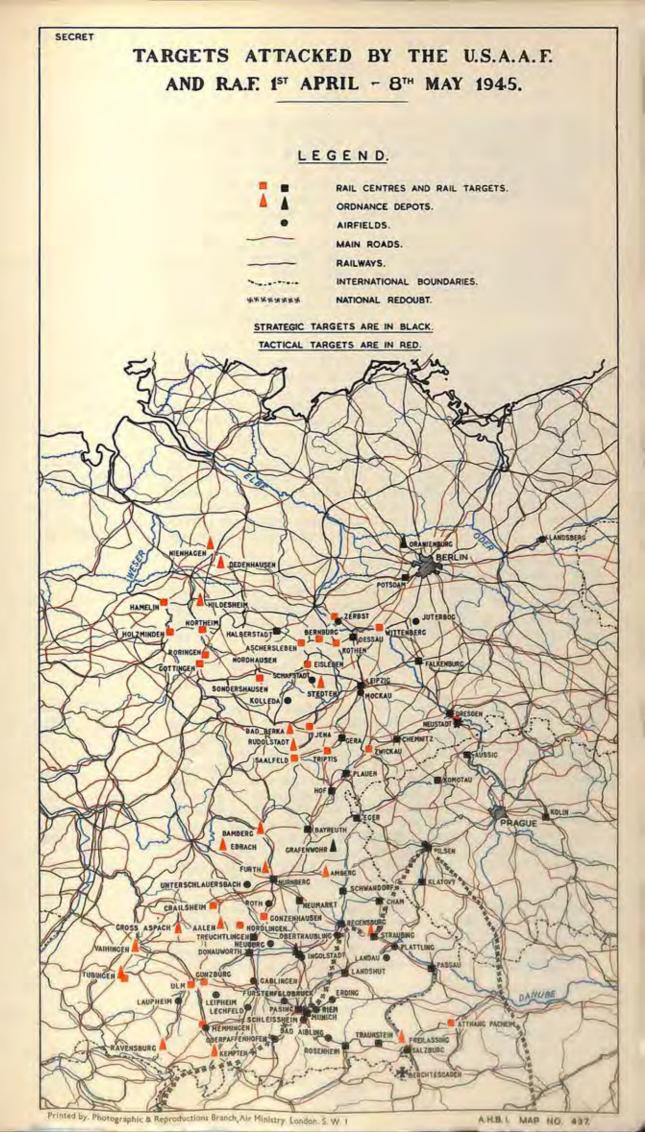
IXth Air Force Monthly Statistical Summaries Apr.-May 1945

Normal army support and attacks on transportation were carried out, but a speciality was made of attacking air fields. These operations reached a climax on 12 April when over 100 aircraft were destroyed on the ground in central Germany and western Czecho-Slovakia. As in the north aerial combats were few and far between, but several air battles did occur over the Erfurt area on 8 and 11 April when American pilots claimed over 70 aircraft destroyed.

By the third week of April the German armies had been divided. The First U.S. Army reached Dessau at the confluence of the Elbe and Mulde on 14 April and Leipzig fell to them on 19 April. The Third U.S. Army was in Chemnitz and to the south the Seventh U.S. Army reached Muremberg on the 16th. Behind the U.S. spearheads the Ruhr pocket had been eliminated and 21 enemy divisions destroyed. The Russians were advancing towards the Elbe from the east. Central Germany was now prohibited to the heavy bomber forces. On 16 April the Strategic Air Force Commanders announced that the 'strategic war' was over and that heavy bombers were henceforward to be The task now was to used entirely for tactical operations. prevent movement into the Redoubt from Ozecho Slovakia, the Danube Valley and Bavaria.

See Chap. 7, P. 218

> During that week R.A.F. Bomber Command made a series of night attacks against communications in western Czecho-Slovakia at Pilsen, Schwandorf, Cham and Komothau. Out of 622 sorties



# 255

578 attacked the primary targets and pilots reported good concentrations of bombs. Extensive operations were carried out by No. 100 Group to deceive the enemy defences. Window and Mandrel screens were operated and other aircraft made feint attacks on airfields in the vicinity of the target areas. As a result of these diversionary operations very few aircraft were lost by Bomber Command.

Mosquito operations against Berlin continued until the arrival of the Russians on the outskirts of the city on 20 April. A few Me.262's had attempted to defend the capital but there were never more than ten aircraft in action at a time and few casualties were suffered by the Mosquito squadrons.

The VIIIth Air Force which had been diverted for two days to bomb strong points on the River Gironde in southwest France returned to attack targets in Germany on the 16th. For the next ten days support was given to the U.S. Armies by attacks on communications. Heavy raids were made on Regensburg, Dresden, (1) Munich and Salzburg. Smaller forces went for railway centres in Czecho-Slovakia and southeast Germany. About 3,946 sorties were made entirely against transportation targets. Through lines were cut, wagons damaged or derailed, buildings adjoining stations were gutted and bridges, locomotive roundhouses and depots were demolished. Four bridges over the Danube at Regensburg, Pirna, Straubing and Zwiesel were either destroyed or the approaches made impassable.

VIIIth Air Force Summary of Ops. App. 23-38 and 81-84 Apr.1945

Further swift advances were made during the last week of April. General Bradley's forces had now joined up with the Russians on the Elbe and on the 22nd General Patton began his sweeping movement to the south. On the same day General Patch's troops crossed the Danube in the Dillingen area. Two days later the Third Army had secured a bridgehead over the Danube at Regensburg. The French Army cleared the Black Forest area and linked up with the U.S. forces at Ulm on 24 April.

Chap. 7 p.219 A big operation was carried out by R.A.F. Bomber Command on 25 April against Berchtesgaden which was believed at the time to be the nerve centre of the Redoubt. Nearly 400 bombers escorted by 13 squadrons of Fighter Command and 78 Mustangs of the VIIIth Air Force were involved. Although they flew over 250 miles of enemy territory the enemy made no attempt to intercept them. About 1250 tons of bombs were dropped on the mountain side on which the Eagles Nest and Hitler's Chalet were perched. But events proved that, only Goering, now in disgrace with Mitler, and the remnants of O.K.L. were in the area. The Fuchrer had determined to remain in the capital of the Reich until the last and without him the Redoubt was an empty husk.(2)

R.A.F. Bomber Cmd. Day Raid Rept. No. 43 Apr. 1945

Another important operation of R.A.F. Bomber Command that week was the destruction of a transformer station mean Munich which served the Bavarian railways (electrified between Munich, Innsbruck and Salzburg). Transformer stations at Rosenheim and Traumstein were attacked by the

<sup>(1)</sup> For earlier raids on Dresden. See Chap.4, p. 122.

<sup>(2)</sup> Oddly enough, General Eisenhower attributed this reid to the VIIIth Air Force - Grusade in Europe, p. 458.

VIIIth Air Force. By 26 April movement in the Munich-Dachau area had come to a standstill as there was no coal to draw on in the emergency.

The medium bombers of the IXth Air Force continued to operate strongly against ordnance depots and marshalling yards until the link up with the Russians after which date there were few targets for them to attack. Their objectives ranged from central Germany to Bavaria and along the Danube - at Ulm, Donauworth and Straubing. From 13-25 April over 3,900 sorties were flown. Seventeen marshalling yards, 13 Ordnance and P.O.L. Depots, (1) defended localities and towns were attacked.

Many fighter and reconnaissance units of the IXth Air Force were now disposed well east of the Rhine. At the end of the month, the IXth Tactical Air Command supporting the First Army, occupied four airfields round Kassel. Further south the advanced headquarters of XIXth Tactical Air Command was at Eisenach and its fighter squadrons were disposed in the Frankfurt area in a position to support both Seventh and Third U.S. Army operations. Reconnaissance units of this Command operated from three air fields near Wiesbaden. To the north the advanced headquarters of the XXIXth Tactical Air Command supporting the Ninth U.S. Army was at Brunswick and occupied six airfields in the Munster-Brunswick area.

The XIIth Tactical Air Command came into prominence at the end of April with its attacks on airfields. An advanced headquarters was established at Kitzingen just east of Wurzburg. Units were disposed in that area and also nearer the Rhine at Mannheim. Ample support was given to U.S. and French troops in the area. Marauders of the 42nd Bomber Wing attached to this Command operated from bases east of the Rhine at Dijon, St. Dizier and Dole Tavaux.

In these last two weeks of extensive operations the main task was the destruction of aircraft on the ground. Large scores were claimed on 16 and 17 April by the IXth Air Force when about 500 aircraft were strafed and set on fire. The XIIth Tactical Air Command was in an advantageous position to deliver a blow against the chain of airfields round Nuremburg, Ingoldstadt and Augsberg and made claims for over 500 aircraft.

At the end of April Third Army troops had again forced a crossing of the Danube at Ingoldstadt and on 2 May bridgeheads were made on the Rivers Isar and Inn. went on to capture Linz which fell on 5 May. In western Czechoslovakia First Army formations under Third Army command seized Pilsen on the following day. On the right flank the Seventh Army captured Augsberg on 28 April and Innsbruck fell on 3 May. Two days later U.S. troops of Field Marshal Alexander's Command linked up with Seventh U.S. Army troops at Vipiteno near the Brenner Pass. That day the commander of German Army Group G surrendered to General Devers. On the German surrender the front held by the U.S. forces extended from Karlsbad to Pilsen and Budejovice in Czecho-Slovakia. Further east Russian forces closed to the line of the Elbe and Vltavia.

0

Operations by the IXth Air Force had dwindled to a very small effort during the first week of May and only a few patrols and armed reconnaissances were flown.(2)

S.H.A.E.F.(Air) Orders of Battle App. IX/13. Ops. Records Apr. 1945

S.H.A.E.F.(Air) Daily Int./Ops. Summs. Apr.-May 1945

Air Staff S.H.A.E.F Daily Int./Ops, Susmary No. 75 May 1915

(1) Petrol, oil and lubricant depots.

The VIIIth Air Force was then dropping food to the Dutch.

SECRET

The single enemy air activity of interest was the arrival of a few Fiesler Storchs behind the U.S. lines containing German commando troops. Their task was to destroy railway bridges and cut railway lines. But the enemy troops were half-hearted and were quickly rounded up by the Americans.

Operations by the IXth U.S. Troop Carrier Command in support of the U.S. Armies

An important part of the air operations on the American front was the supplying of forward troops by air. Supply by air during the campaign in northwest Europe had, of course, become a regular feature of air operations but it was not until the Allies were east of the Rhine that heavy deliveries took place. They were on a far larger scale than on the British front owing to the fact that the British did not have such large numbers of transport aircraft.

The IXth Troop Carrier Command had available for operations 1,072 aircraft daily which operated from airfields in the Amiens and Voisenon - Chartres areas. As with Nos. 46 and 38 Groups the planning and control of all operations and the selection of airfields was performed by C.A.T.O.R. at S.H.A.E.F. (Main).

The type of supplies carried by air were mainly ammunition, petrol (for Army vehicles and aircraft) and rations. But many items of equipment were also flown in. The Third U.S. Army, for example, constantly needed fresh equipment for armoured vehicles, such as engines, bogie wheels, tyres and dry cell batteries while 22 per cent of all the petrol supplies for this Army came by air. In a report on air supply the First Army stated that although only 10 per cent of the total tonnage received by it came by air, this meant the difference between success and failure during the advance to the Elbe. Medical supplies, blood plasma, blankets, mail and personnel such as doctors, nurses and

drivers were also carried.

Airfields on the U.S. front were more numerous than in the British sector and friction did not arise between the IXth Air Force and C.A.T.O.R. During the first week of April the ring of airfields round Kassel and Frankfurt were used to supply the First U.S. Army. In the middle of the month, during the fighting in the Harz Mountains, airfields east and south of Kassel were used. At the end of the month Dakotas were landing as far east as Jena, Gotha, Merseburg and Weimar.

The Third U.S. Army naturally absorbed the largest number of transport aircraft as it had the longest line of communications. During the first week of operations east of the Rhine three airfields in the Frankfurt - Kassel area were employed. When the Army was mopping up the Leipzig -Dresden area four airfields in the vicinity of Gotha were In the last phase IXth Troop Carrier Command flew to airfields in the Nuremburg - Bayreuth area.

From 30 March to 30 April IXth Troop Carrier Command flew 21727 sorties to the U.S. Army Groups and the Dith Air Force. They carried 54,316 tons (long) of gasoline and oil, ammunition, rations and other stores to the Armies and Air Forces. On the return journeys 71,405 repatriates (including 22,604 British) and 52,033 casualties were evacuated to airfields in France.

Air Staff S.H.A.E.F. (FWD) Ops.3 Apps.3-4 May 1945

Air Staff S.H.A.E.F. (FWD) Ops.3 App.3 Apr. 1945

Allied air operations against German fortresses in France, 1945: Operation Independence - Venerable

See Lib. N.W. Europe Vol.IV, Chap. 6 The enemy had continued to hold out in four fortresses after the liberation of France and the reduction of Calais, Le Havre and Boulogne. Dunkirk, one of the Channel ports, was invested by troops of Twenty First Army Group; on the north west coast of Brittany and, further south, down the Atlantic sea-board, the naval bases of St. Nazaire, Lorient and the fortifications at the mouth of the River Gironde were besieged by Free French troops. Only one major operation to reduce these fortresses had been planned during the autumn of 1944, and that had been concerned with the positions on the River Gironde which were preventing Bordeaux from being used as a port. However, more urgent operations in the west was the reason for postponing an assault against them indefinitely.

S.H.A.E.F.(Air) Hist. Rec. and Diary. Apps. 8A to 8R Jan. 1945 Although Operation Independence (as operations in the Bordeaux area were termed) had temporarily been cancelled the local French Military commanders on the Atlantic coast appeared eager that air attacks should be made against the defences guarding Bordeaux. Accordingly, on 10 December, 1944 a conference was held at the Headquarters of General de Larminat (commanding the French Army in the West) at Cognac which was attended by Major General Royce, commanding the 1st T.A.F. who was responsible for air operations against the German garrisons on the west coast of France, and the commander of the investing force, Brigadier General Cornligion - Moliniere.

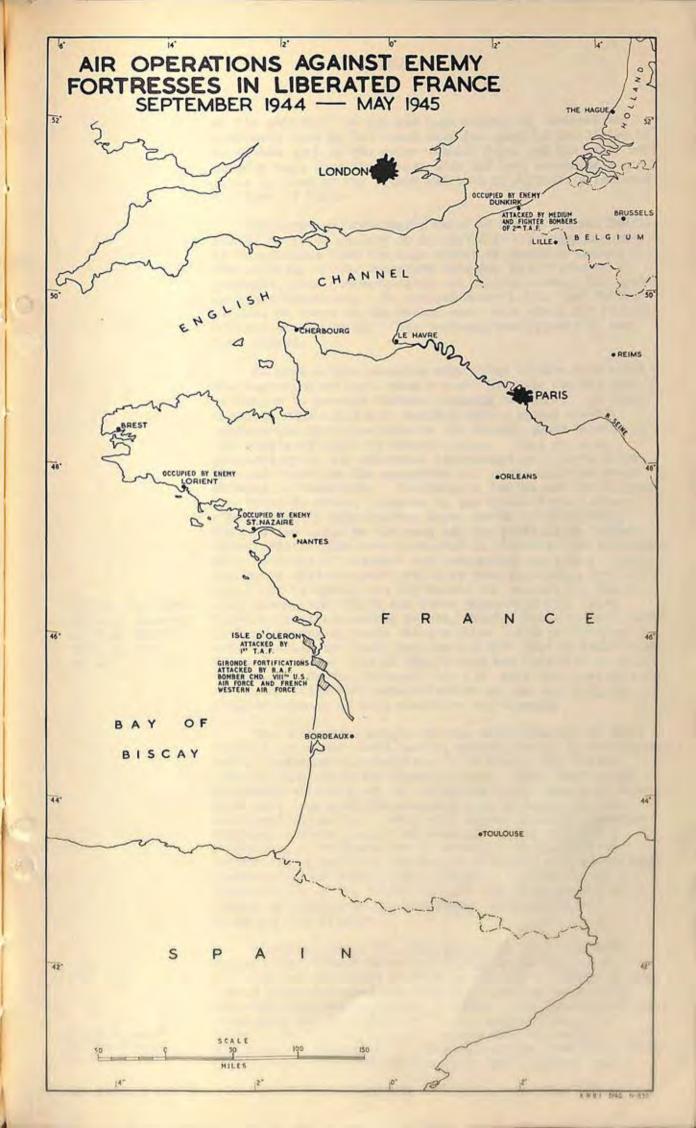
Three targets were discussed as being suitable for attack. They were gun positions at the Point de la Coubre and at the Point de Grave and gun positions and strong points in the area of Royan. General Royce stated that these targets would be suitable for the two night bomber squadrons of the VIIIth Air Force then undergoing training in the U.K. He enquired, more than once, whether the civilian population of Royan would be evacuated before the attack, and he was assured by the French officers that the town would definitely be cleared by 15 December.

S.H.A.E.F.(AIR) Hist. Rec. and Diary. App. 1B Jan. 1945

The Headquarters of 1st T.A.F. then informed S.H.A.E.F. of the targets which were required to be attacked. by the U.S. bombers, however, did not materialize. forecast of weather conditions for the night of 4/5 January over western Germany was unsuitable for heavy bomber operations, and the Commander-in-Chief, R.A.F. Bomber Command directed that Royan would be bombed in strength so as to avoid having to make a repeat attack. S.H.A.E.F. (Air) immediately took action to discover, through the Headquarters of 1st T.A.F., whether Royan was still clear for attack. Attempts by the Headquarters of both 1st T.A.F. and Sixth Army Group to contact the Western French Air Force and the French ground force commander were unsuccessful and, as no reply to the contrary was received at S.H.A.E.F. by that evening, the operation went ahead. A force of 354 Lancasters and Mosquitoes dropped 1576 tons of H.E. on the town. Unhappily the most thickly populated quarter of the town was destroyed and about 800 civilians were killed and 200 injured.

R.A.F. Bomber Cmd. O.R.B. Jan. 1945 and DSC/TS 100/9 Pt.4 Enol. 16A, para. 3.

A protest by General Juin, Chief of Staff, French Army, was addressed to S.H.A.E.F. on 24 January. A thorough investigation had, of course, been instigated by the Supreme Commander as soon as he had heard of the incident. This showed that there were two entirely different points of view



on the matter. On the one hand General de Larminat was convinced that he had asked only for specific localities to be bombed and on the other General Royce and his staff were equally sure that the target area had been marked on a map given to them by the French and that it definitely included the town of Royan.

The Supreme Commander's Chief of Staff, General Bedell Smith, wrote an apology to General Juin informing him that it was obvious that the main causes of misunderstanding in the planning of the operation were due to differences in language, poor communications and liaison between the head-quarters concerned. He assured General Juin that further attacks on towns on the French west coast would not be made without his approval. The incident then appears to have been closed.

No more active measures were taken in this area until the beginning of April when a naval blockade was put into operation to prevent Germans escaping to Spain. At about the same time S.H.A.E.F. decided that a ground assault against the fortifications on the Gironde would be made in This would be the middle of April by French troops. preceded by an air and naval bombardment on a large scale. The code word for the operation had in the meantime been changed to Venerable. The targets for the air forces were the Point de Grave, situated to the south of the estuary; almost exactly opposite was Royan on the northern bank, while a few miles to the west was the Point de la Coubre. Heavy coastal guns were protected by casemates and surrounded by a net-work of trenches and underground shelters. and heavy anti-aircraft artillery gave protection from the On 14 April, the day before the assault was due to take place, the VIIIth Air Force despatched 1162 heavy bombers to attack strong points, coastal batteries and heavy flak positions at these three points. Thirty-two targets were attacked by visual methods and 2780 tons of bombs were A new type of Napalm bomb was tried out on this dropped. On the following day ('D' Day) 1340 sorties were occasion. flown, of which 1285 were effective on the same targets. similar tonnage of high explosive was dropped.

VIIIth Air Force Monthly Summary of Ops. April 1945 pp. 41 to 46

The tremendous weight of this attack against so small an area could not avoid causing serious damage to the defences and it weakened the enemy's will to resist, the latter already poor after the lengthy siege. About half of the batteries were put out of action and a fair number of direct hits were scored on the second day on emplacements and sheltered casemates. Many near misses destroyed communications, trenches and piled sand and rubble over other positions, putting them out of action. Investigations afterwards showed that the Napalm bombs had been ineffective compared to the normal 2,000 pounder. Spitfires and Thunderbolts of the French Western Air Force carried out a series of attacks on gun positions, headquarters and shipping the Estuary.

A ground attack was launched on 15 April and, with support from French aircraft, the Royan sector fell on 18 April and the Point De Grave on the 21st. Ships of the French Navy bombarded gun positions assisted by spotting aircraft from R.A.F. Fighter Command. The Germans held out stubbornly on the Island of Oleron, north of the Point de la Coubre, believed impregnable, unless air support was given. Consequently, Marauders of the 42nd Bomber Wing (1st T.A.F.) flew 288 sorties on 30 April against gun

S.H.A.E.F. Daily Int./Ops. Summary No. 71 April 1945

260

positions and minefields on the island. Shortly afterwards the French assaulted with great vigour and the German garrison was overcome on 1 May.

# Air Operations against Dunkirk

No. 84 Group O.R.B. Jan. to April 1945

No. 2 Group O.R.B. Jan. to April 1945

2nd T.A.F. Daily Log, Sheet No. 2662 and S.H.A.E.F. (Air) Hist. Rec. and Diary. App. 2A March 1945

File D/SAC/H26

DSC/T.S.100/9 Pt.5 Encl. 43A

Ibid Encl. 45A

Ibid Encl. 48A From January to April, 1945 occasional air operations were carried out against the garrison holding Dunkirk. They were the responsibility of No. 84 Group and fighter bombers struck against small targets such as gun positions, strong points and headquarters. These minor operations were supplemented by small forces of medium bombers from No. 2 Group which bombed fuel or ammunition dumps and strong points.

They were marred by an unfortunate mishap which took place on 27 February. A medium bomber attack against Dunkirk was laid on in poor visibility. Some of the Mitchells of No. 137 Squadron detailed to bomb targets in the town mistook Calais for the proper target and as a result a number of French civilians were killed and injured. The usual investigations were made and appropriate disciplinary action taken. Apologies to General Juin, Chief of Staff to the French Army, were tendered by General Bedell Smith and the Deputy Supreme Commander wrote a letter to General de Gaulle, President of the French Provisional Government, expressing his deep regret for the incident.

Towards the end of April Twenty-First Army Group requested S.H.A.E.F. that a heavy bomber attack should be made on enemy positions in Dunkirk. (1) It did not contemplate a ground assault by the investing forces to follow up the air attack, but it hoped that the air bombardment would induce the enemy to surrender. French Army Authorities agreed to the attack provided that the British were sure that all civilians and prisoners of war had been evacuated. Shortly afterwards, however, General Juin requested the Supreme Commander that Dunkirk should not be bombed. spite of this a further request was made by Headquarters, Twenty-First Army Group, although it knew that the bombing of the town had been prohibited. Air Marshal Robb, the Deputy Chief of Staff (Air), refused to permit the bombing, for political and military reasons, at the Air Staff meeting held at S.H.A.E.F. on 30 April.

Operations against Dunkirk by the ground forces were strictly limited, but they included a number of experiments in psychological warfare. Nevertheless, attempts to induce the enemy to surrender proved to be a failure, and the garrisons of Dunkirk, besides those of Lorient and St. Nazaire, continued to resist until the general surrender on 8 May.

<sup>(1)</sup> In addition, General Speatz required the destruction of flak positions in Dunkirk which were firing at the U.S. bomber streams on route to Germany. (See File D.S.C./T.S.100/9 Pt.5 Encls. 33A, 37A).

261

# CHAPTER 9

## THE GERMAN SURRENDER IN THE NORTH

2nd T.A.F. O.R.B. May 1945 On 4 May Air Marshal Coningham informed his Command of the procedure that was to be adopted when the Germans surrendered. All operations against the enemy whether on the ground in the air or on the sea were to cease at once. At the same time, a high state of readiness was to be maintained which varied according to each type of aircraft.

On that evening, Admiral Friedeberg, the representative of Admiral Doenitz surrendered Holland, the Frisian Islands, Heligoland, Schleswig-Holstein and Denmark to the British. The 'cease fire' took place with effect from 0800 hours, 5 May.

Fighter squadrons of No. 83 Group were already in the air before this time and escorted several German aircraft to a British airfield.(1) One aircraft, refusing to obey instructions, was shot down into the sea. Later in the day, escort was provided to an occupation party flying to Copenhagen.

2nd T.A.F. O.R.B. May 1945. Representatives of the German services arrived at Luneberg on 5 May to receive instructions on the surrender of their forces from Field Marshal Montgomery. Air Vice Marshal Groom, the Senior Air Staff Officer at 2nd T.A.F. and Air Commodore Waite, in charge of Disarmament, led the R.A.F. Party, and they gave instructions to the officers representing General Lieutenant Stumpf, the Commander of Luftflotte Reich. All aircraft and anti-aircraft weapons were to be instantly disarmed and immobilized and airfields were to be cleared of obstacles and made ready for use by the R.A.F.

On the next day, Air Commodore Waite and a small party took possession of the Headquarters of Loftflotte Reich at Schleswig. They were the first Allies to arrive in the area and they had to undertake the task of military government until the arrival of the Second Army on 10 May. On 13 May Air Vice Marshal Broadhurst was made responsible for the G.A.F. in north Germany by the Air Officer Commanding in Chief 2nd T.A.F.

#### Procedure for the disarmament of the G.A.F.

A.M. File 11/69/9. Outline Air Plan, Operation Eclipse Plans for the occupation of Germany had been drawn up in 1944 and were revised as the situation changed. A detailed plan could not, of course, be issued, as the conditions which might lead to the end of the war were difficult to predict. Briefly the Tactical Air Forces were to assist the Armies in any air action which might be necessary and they were responsible for the disarmament of the G.A.F. within their respective military zones.

'Dissolution of the Luftwaffe' Vol. I Chap. 1. British Air Disarmament Mobile Detachments had been formed in the autumn of 1944 to collect material in the liberated countries. At the beginning of 1945 they gave place to Disarmament Wings which were to operate within the British Occupation Zones in Germany. Four Group Disarmament Staffs were formed to work with the four Groups of 2nd T.A.F. and under them were 13 Disarmament Wings which were to be located in north Germany and Denmark. In control of all these operations was the Disarmament Staff

<sup>(1)</sup> These were the last offensive sorties of the war flown by the R.A.F. over Germany.

## 262

Headquarters, 2nd T.A.F. (later Air Headquarters, B.A.F.O.), which had originally been the A.E.A.F. Disarmament Staff on detachment at S.H.A.E.F. Main(1) Bushy Park.

Zones of occupation for the British Forces in Germany were decided upon early in May and they were allotted as follows:-

R.A.F.	Army	Area of Occupation
No. 83 Group No. 84 Group No. 2 Group	VIII Corps XXX Corps I Corps	Schleswig-Holstein Hanover Westphalia - Rhine Province.

No. 85 Group was the Base Maintenance group of the R.A.F. in Germany.

## The end of the Task

After the tactical surrender at Luneburg Admiral Friedeburg was sent to S.H.A.E.F. at Rheims. The Supreme Commander soon realized that the Germans were again playing for time, so that they could evacuate troops and civilians from the Russian front into the British lines. He told them that unless they undertook to cease hostilities, he would seal the western front. This thoroughly scared the Germans and, with the approval of Admiral Doenitz, General Jodl Chief of Staff to O.K.W., signed the act of surrender at 02-41 hours on the morning of 7 May.(2) At midnight of 8/9 May, the terms became effective.

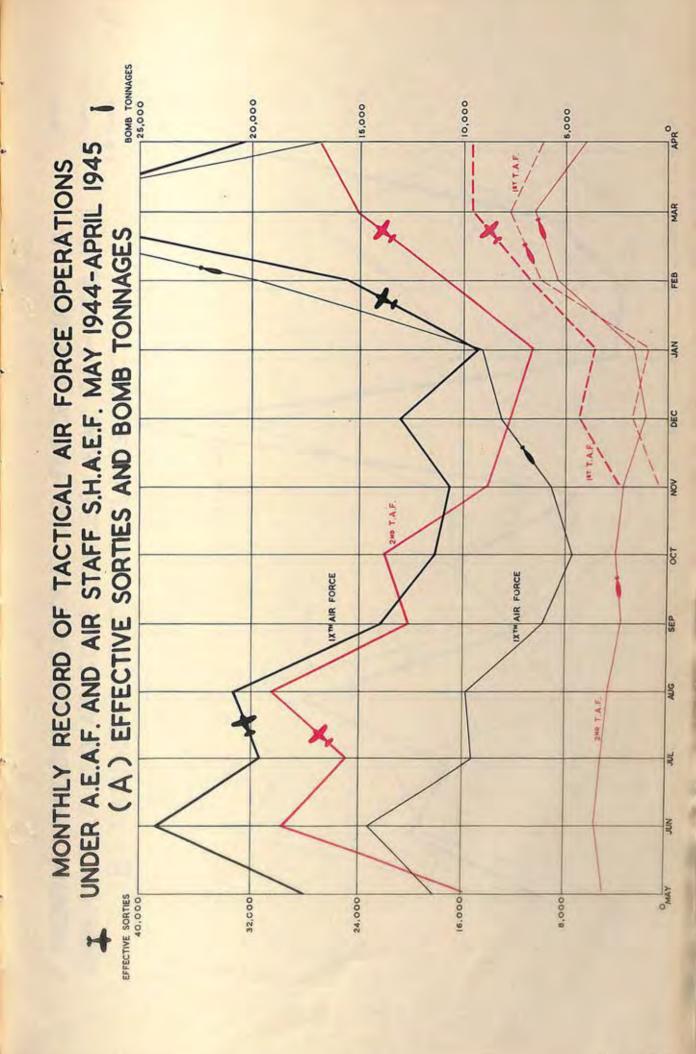
Congratulatory messages began to pour into S.H.A.E.F. and the other Commands of the A.E.F., (3) from His Majesty the King, the Prime Minister, the President of the United States and others. A particularly eloquent message was received by the Air Officer Commanding, 2nd T.A.F. from Mr. Churchill, which summed up the British achievement in the air throughout the campaign. He said

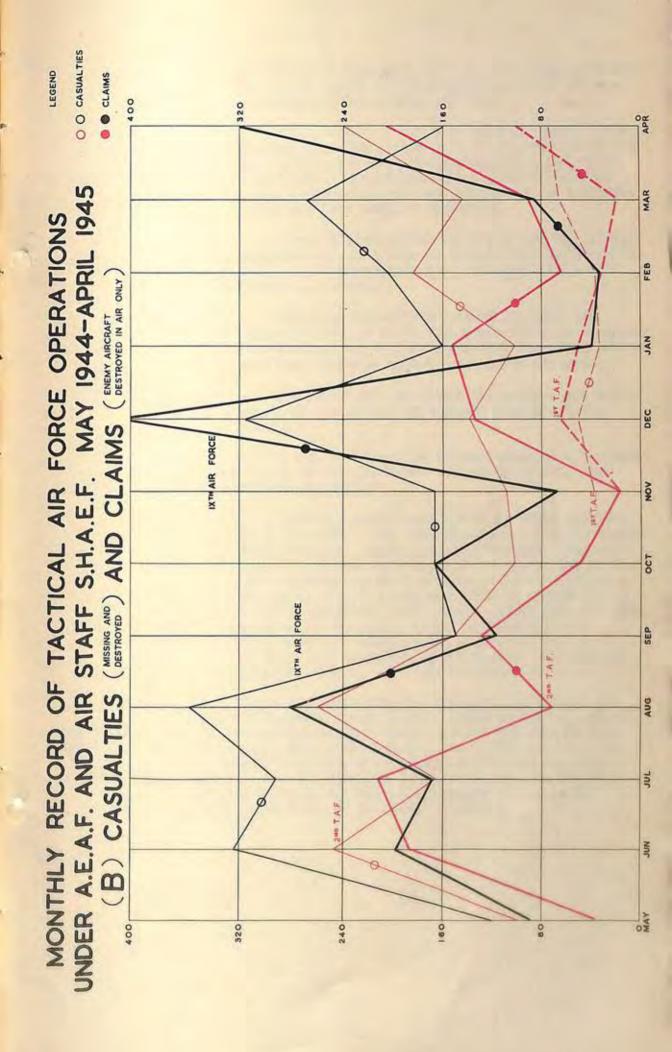
"Now that Germany has been well and truly defeated, I wish to express to you on behalf of

<sup>(1)</sup> For a detailed account of the disarmament operations see 'Dissolution of the Luftwaffe (2 Vols) Feb. 1944 -Dec. 1946' produced by Air H.Q., B.A.F.O.

<sup>(2)</sup> The deed of unconditional surrender was signed by General Jodl, in the presence of General Bedell Smith, representing the Supreme Commander and General Suslaparov, representing the Russian High Command. General Savez of the French Army, Deputy Chief of Staff for National Defence signed as witness. A further ratification of the act of military surrender was held in Berlin at the request of This took place on 8 May and the Soviet High Command. was signed by Generals Friedeburg, Keitel and Stumpff, on behalf of the German High Command, in the presence of Air Chief Marshal Tedder, representing the Supreme Commander and Marshal Zhukov of the Red Army. General Spaatz and Ceneral de Lattre Tassigny were present as witnesses. (For photostat copies of the documents connected with the signing of the deed of unconditional surrender see S.H.A.E.F. (Air) Hist. Record and Diary App. 2A May 1945).

<sup>(3)</sup> Allied Expeditionary Force.





263

His Majesty's Government the deep sense of gratitude felt by all our people for the glorious part which has been played by the 2nd Tactical Air Force.

Their mastery of the skies above our Armies, their ever-vigilant reconnaissance, their interventions in the land battles and their devastating attacks against the enemy's vital communications, concentration areas and supply organisation, has made the task of our Armies far easier and less costly in casualties.

I know that our Armies are deeply conscious of these achievements, and I know too how much they appreciate the care and skill with which your operations have been planned and executed.

The great deeds of the Tactical Air Force bear eloquent testimony to the high morale which has sustained your aircrews and to the devotion with which their efforts have been supported by their comrades on the ground.

The nation will not forget the decisive part which your Officers, Airmen and Airwomen have made to the Victory."

Air Marshal Coningham also received messages of congratulations from General Eisenhower and the Air Council, the latter's message ending:-

"British, Dominion and Allied Air Units share the battle honours. They have played havor with the enemy's communications. Again and again they have intervened directly and with devastating effect in the land battles. Their splendid record of mounting achievement reflects the valour of your flying men backed by an efficient planning and ground organisation in which Staff Officers, technicians, mechanics, airmen and airwomen of all categories have striven ceaselessly regardless of the difficulties, regardless of the hazards, to attain the goal now reached. Our heartfelt thanks to you all."

During the rest of May and June, 2nd T.A.F. began the task of disarming the Luftwaffe. Other activities consisted in reconnaissances over German airfields and 'showing the flag' over Germany and Denmark. On 14 July S.H.A.E.F. was dissolved and the combined command of Anglo-American forces came to an end. Two days later, on 17 July, the Second British Tactical Air Force was disbanded and became the

British Air Force of Occupation in Germany.

Log D.S.C. S.C.A.F. 478 12 Jul. 1945.

# 1

# SUPREME HEADQUARTERS ALLIED EXPEDITIONARY FORCE AIR FORCE

# ORDER OF BATTLE - OPERATIONAL UNITS AS AT

# 2200 HOURS 20 OCTOBER 1944

SECOND TACTICAL AIR FORCE - MAIN H.Q Restdence Palace Brussels.   No. 83 GROUP - Main H.Q. Einchoven.   Rear H.Q. Centrs. (N.E. Einchoven)	WING	SQUADRON	LOCATION	TYPE OF A/C	REMARKS
Ho. 83 GROUP - Main H.Q. Einchoven   Rear H.Q. Cenert. (R.E. Einchoven)		7. do 1960 19			
121   174		SECOND	TACTICAL AIR FORCE - MA		
121		No.	83 GROUP - Main H.Q. Ei Rear H.Q. Ge	nchoven. mert. (N.E. Einchoven)	
121 174   175   Volkel (B.80) Typhon   175   184   175   184   175   184   175   184   175   184   175   185	39 (R) (RCAF)	400 (RCAF) (P	R) Eindhoven (B.78)	Spitfire XI (PR)	
175   184   184   18   18   18   18   18		430 "	n	Mustang I	
184	121	174	Volkel (B.80)		1 a m
124		184			
124	122	3			
124 137   Eindhoven (B.78)   Typhoon   182   182   182   182   183   183   184		80			
185		486			
182	124	137			
125   130   Grave (B.82)   Spitfire XIV   Under operational and edmin. control R.A.F. Fighter Command     1350   (Bel.)		182			
126 (RCAF)	105				
126 (RCAF)	12	402		opicine arv	Under operational
126 (RCAF)					R.A.F. Fighter Command
126 (RCAF)    401 (RCAF)   401 (RCAF)   401 (B.80)   Spitfire IX (LF)     411					
127 (RCAF)   142		610		*	
127 (RCAF)   146 (RCAF)   Grave (B.82)   Spitfire IX (LF)   (det. at AaPaCa). To recequip Spitfire XVIs.	126 (RCAF)	401 (RCAF)	Volkel (B.80)	Spitfire IX (LF)	
127 (RCAF) 465 (RCAF) Crave (B.82) Spitfire IX (LF)  (det. at A.P.C.). To re-equip Spitfire XVIs.  146 " " " " " " 1421 " " " " " 143 (RCAF) 168 (RCAF) 139 " " " " 140 " " " 140 " " " 141 " " " " 142 " " " " 143 (RCAF) 144 " " " " 144 " " " " 145 " " " 146 " " " " " 147 " " " " 148 (RCAF) 149 " " " " 149 " " " " 140 " " " " 140 " " " " 141 " " " " " 142 " " " " " " " " " " " " " " " " " " "		412 "		(•5)	
To re-equip Spitfire XVIs.    146	127 (RCAF)		Grave (B.82)		(det. at AsPoCo).
143 (RCAF)  168 (RCAF)  169	101 (1111)				To re-equip Spitfire
143 (RCAF)  168 (RCAF)  139 " " " " " " " " " " " " " " " " " " "		4.0			
138 (RCAF)		Marie I			
A.O.P. SQNS. 653 658 659 No. 84 GROUP - Main - Nachtelgaelshoek. Antwerp (J.6792) Rear - Hingene (J.5784)  35 (R)  2 Deurne (B.70) Mustang II Re-equipping with Spitfire XIV (F.R.)  4 (PR) 8 Spitfire XI (PR) 18 Mustang 1A To re-equip with Typhoon (F.R.)  123 164 Merville (B.53) Typhoon 183 198	143 (RCAF)	168	Eindhoven (B.78)	Typhoon	
A.O.P. SQNS. 653 658 669 662  No. 84 GROUP - Main - Nachtelgaelshock. Antwerp (J.6792) Rear - Hingene (J.5784)  35 (R)  2 Deurne (B.70) Mustang II Remequipping with Spitfire XIV (F.R.e)  4 (PR) 8 Spitfire XI (PR) 10 Mustang 1A To remequip with Typhoon (F.R.e)  123  164 Merville (B.53) Typhoon 183 198  18		438 (RCAF) 439 "		n	
No. 84 GROUP - Main - Nachtelgaelshock. Antwerp (J.6792)  Rear - Hingene (J.5784)  35 (R)  2 Deurne (B.70) Hustang II Re-equipping with Spitfire XIV (FaRe)  4 (PR)  8 Spitfire XI (PR)  Hustang 1A To re-equip with Typhoon (FaRe)  123 164 Merville (B.53) Typhoon  183 8 8	1.0.0				ATTACANA NO MET COM
No. 84 GROUP - Main - Nachtelgaelshock. Antwerp (J.6792)   Rear - Hingene (J.5784)   Re-equipping with Spitfire XIV (FaRe)	AsosPe SQNSe	658			u a AIII a
Rear = Hingene (J.5784)   35 (R)   2   Deurne (B.70)   Hustang II   Re-equipping with Spitfire XIV (F.R.e.)		662			
Rear = Hingene (J.5784)   35 (R)   2   Deurne (B.70)   Hustang II   Re-equipping with Spitfire XIV (F.R.e.)					
# Spitfire XIV (FaRe)  4 (PR)  8		No. 84	GROUP - Mein - Nachtels Rear - Hingene	aelshoek, Antwerp (J.6792) (J.5784)	
268 " Husteng 1A To re-equip with Typhoon (FaRs)  123 164 Merville (Ba53) Typhoon 183 " " "	35 (R)	2	Deurne (B.70)	Mustang II	Re-equipping with Spitfire XIV (FaRe)
123 164 Merville (B.53) Typhoon 183 " " "		4 (PR) 268			To re-equip with
183 n n n	123	164	Mery171a (B.52)	Typhoon	*2 Smooti / Carrel
609 n n	- 100	183	0		
		609	n		

WING	SQUADRON	LOCATION	TYPE OF	REMARKS
	No. 84	GROUP - Main - Nachtelgae Rear - Hingene (J	lshoek, Antwerp (J.6792) ( .5784) (Contd.)	Contd.)
131 (Pol)	302 (Pol)	St. Denis/Westram (B.61)	Spitfire IX (LF)	
	308 " 317 "	n n		
132 (Nor)	66 127 331 (Nor) 332 " 322 (Dutch)	Grimberghen (B.60)	Spitfire IX (LF) (-5) (-5) (-5)	To re-equip Spitfire XVI
135	33 222 349 (Belge) 485 (RNZAF)	Merville (B.53)	Spitfire IX (LF) (*5) (*5) (*5) (*5)	
145 (Fr)	74 329 (Fr) 340 " 341 " 345 "	Courtral (B.55)	" (.5) " (.5) " (.5) " (.5) " (.5)	dete at A.P.C.
146	193 197 257 263 266	Antwerp/Deurne (B.70)	Typhoon  " " " " "	
A.O.P. Sqns.	652 660 661		Aust. IV	Allocated to I Corps. " II Can. Corps. Allocated to First Can.
	-		. Ameri	Army.
142	476 (400)	No. 85 GROUP - H.		
142	176 (ASR)	St. Denis/Westrem (B.61)	Warwick Walrus Spitfire V	A Flight Portreath
148	409 (RCAF)	Lille-Vendeville (B.51)	Mosquito XIII	
149	219 410(RCAF)	Amiens/Glisy (B.48)	Mosquito XXX	
147	488 (RNZAF)	Hunsdon		Under R.A.F. Fighter Command for Ops.
		No. 2 GROUP - Adv. H. Main H.	.Q. Brussels .Q. Mongewell Park	
137	88 226 342 (Fr)	Vitry en Artois (B.50)	Bost, IIIA/IV Mitchell II Bost, IIIA/IV	
138	107 305 (Pol) 613	Lasham n	Mosquito VI	
139	98 180 320 (Dutch)	Brussels/Melsbroek (B,58)	Mitchell II	
1110	21 464 (RAAF) 487 (RNZAF)	Thorney Island	Mosquito VI	
34 (PR)	16 (PR) 69 (NR) 140 (PR)	Brussels/Melsbrock (B.58)	Spitfire IX (PR)/XI (PR) Well. XIII Mosquito IX/XVI (PR)	

WING	SQUADRON	LOCATION	TYPE OF A/C	REMARK
		No. 38 GROUP - (a) H.Q	. Netherayon	
Rivenhall	296 570	Rivenhall	Stire IV	
Earls Colne	296	Earls Colne	Albemarle	To re-equip Halifax V.
	297			Hailiar v.
Weathersfield	196 299	Weathersfield	Stir. IV	
Tarrant Rushton	6144	Tarrant Rushton	Halifax V	To re-equip
	644			natitax iii.
Fairford	190 620	Fairford	Stire IV	
	No		.Q. Harrow Weeld	
Broadwell.	1,8	Down Ampney	Dakotas	
	271		0.00	
	512 575	Brussels (B.56)	0	
Blakehill Farm	233	Blakehill Farm	1.0	
	437 (RCAF)	11 11		

(a) Under Operational control of S.H.A.E.F. except for Airborne Operations; under Admin. Control of R.A.F. Fighter Command.

NINTH U.S. ARMY AIR FORCE
Adv. H.Q. Luxembourg
Main H.Q. Chantilly
IXth. Tactical Air Command H.Q. - Verviers

70th Fighter Wi	Ing	H.Q. Liege/Bieset	(A.93)
368th Grp. 370th " 404th " 365th " 48th " 367th " 474th "	395-396-397 401-402-485 506-507-508 386-387-388 492-493-494 392-393-394 428-429-430	Chievres (A84) Florennes (A78) St. Trond (A92) Chievres (A84) St. Trond (A92) Clastres (A71) Florennes (A78)	P 47 P 38 P 47 P 47 P 47 P 38 P 38
422 (Night Figh	ster) Squadron	Florennes (A78)	P 61
67th (Recce) 0	rp. 33 - 107 - 109	Charleroe (A87)	F 6

XIXth Tactical Air Command Adv. H.Q. Nancy Rear H.Q. Juvigny

100th Fighter W	ling	H.Q. Ber 1e Duc (VU C	837)
354th Grp. 358th " 362nd " 405th " 406th "	353-355-356 365-366-367 377-378-379 509-510-511 512-513-514	Orcante (A 66) P Mourmelon (A 80) P Prosnes (A 79) P St. Dizier (A 64) P Mourmelon (A 80) P	5144444
425th (Night Fi	ighter) Squadron	Prosnes (A 79) P	61
10th (Recce) Gr	P• 12 (TR) ~15 (TR) 31 (PR) 155 (PR-N)		6 5 3

WING SQUADRON LOCATION	TYPE OF REMARKS
XXIXth Ta	actical Air Command H.Q. Arlon
84th Fighter Wing 303rd " "	H.Q. Arlon H.Q. Arlon
373rd 0rp. 410-411-412 36th " 22- 23- 53 366th " 389-390-391	Reims/Champagne (A 62) P 47 Juvincourt (A 68) P 47 Laon/Couvron (A 70) P 47
363rd (Recce) Grp. 160 (RE) 161 (TR)	Sandweiler (A 97) F 6
XII th Ta	Adv. H.Q. Epinal Rear H.Q. Dole.
64th Fighter Wing	H.Q Dole/Tavaux
50th Grp. 10—81-313 371st " 401-405-406 324th " 314-315-316 4th " (F-A-F-) 1/4, 11/3, 11/5 339 Wing (F-A-F-) 326, 327, 328	Lyon/Bron (Y 6) P 47 Dole/Tayaux (Y 7) P 47 " (Y 7) P 47 Amberieu (Y 5) P 47 Luxeuil (Y 8) Spitfire V, VII, IX.
415th (Night Fighter) Squadron	Dijon (Y 9) Beaufighter
31st Bomb Grp. (F.A.F.) 1/19, 1/22, 11/20 34th " (F.A.F.) 1/32, 11/52, 11/63	Istres (T 0 939)
9th (Recce) Grp. (Provisional) III (TR) 162 (TR) 34 (PR)	Dijon (Y 9) " F 6 " F 5
IXth Bomb	ardment Division
	H.Q. Chartres (A 40)
1st Pathfinder Squadron	Andrews Field B.26
98th Bomb Wing 323rd Grp. 153-454-455-456 397th 596-597-598-599 387th 556-557-558-599 394th 584-585-586-587	H.Q. Laon/Althies (A 69)  B.26  Peronne (A 72)  Chateaudun (A.39)  Cambrai (A.74)  B.26
99th Bomb Wing 322nd Grp.	H.Q. Beaumont sur Oise (A.60)  Beauvais/Tille (A.61) B.26  Cormeilles-en-Vexin (A.59) B.26  Beaumont sur Oise (A.60) B.26  Roye/Amy (A.73) B.26
97th Bomb (Light) Wing	H.Q. MELUN
416th Grp. 668-669-670-671 409th " 640-641-642-643 410th " 644-645-646-647	Melun (A.55) (A.203) Bretigny (A.48) (A.203) Coulommiers (A.58) (A.203)

# SUPREME HEADQUARTERS ALLIED EXPEDITIONARY FORCE

#### AIR FORCE

# ORDER OF BATTLE

# OPERATIONAL UNITS AS AT 2200 HOURS 2 FEBRUARY 1945

WING	SQUADRON	LOCATION	TYPE OF A/C	REMARKS
	SECOND TACTICAL Air Officer Com	AIR FORCE - H.Q Res	idence Palace, Brussels Sir A. Coningham.	
		No. 83 Group - Main H.Q	• Eindhoven • Valkenswaard (E 4208)	
		A.O.C A/V/M H	Broadhurst	
39 (R)(RCAF)	400 (RCAF) (PR 414 " 430 "	Eindhoven (B78)	Spitfire XI PR " IX FR " XIV FR	
121	174 175 184	Volkel (B80)	Typhoon	
	245	4	i i	
122	3 56 80	Volkel (B80)	Tempest V	
	274 486 (RNZAF)			
	456 (RNZAF)		Spitfire XIV	det from No. 125 Wing
124	137	Helmond (B86)	Typhoon	At APC
	182 247			AC AFC
no video			The second second	
125	130 402 (RCAF)	Eindhoven (B78)	Spitfire XIV	At APC
	350 (Belge) 610	0	1	
126 (RCAF)	401 (RCAF)	Heesch (B88)	Spitfire IX LF.5	
	411 "		# •5 • •5	
	442 "		" <sub>6</sub> 5	
127 (RCAF)	403 (RCAF)	Evere (856)	Spitfire XVI LF	
	421 "	n n		
143 (RCAF)	168	Eindhoven (B78)	Typhoon	
IID (IIOM )	438	a strong Aett (P.10)	a principal and a second	
	439 440			
A O P Sqdnse	653 658		Aust. IV	Allocated to XII Corr
	659 662			a a AIII a
	902		•	в в ХХХ п
		No. 84 Group - Main H Rear H A.O.C A/V/M.	.Q. Goirle (E 1530) .Q. Breda E.C. Hudlestone	
35 R	2 PR	Gilze Rijen (B77)	Spitfire XIV FR	
	4 PR 268	n n	" XI PR Typhoon FR	t fits AsPaCe
123	164 183 198	Gilze Rijen (B77)	Typhoon	Temporarily under control of No.83 Group
000000000	609	В. В		
131 (Pol)	302 (Pol) 308 "	Grimberghen (B60)	Spitfire XVI LF	To remequip Spitfire
	317 "	.0		XVI LF.

WING	SQUADRON	LOCATION	TYPE OF	REMARKS
¥.		No. 84 - Main H.Q. Goirle ( Rear H.Q. Breda ( A.O.C A/V/M.E.C. Hudles	Contd.)	
132 (Nor)	66 127 331 (Nor) 332 " 322 (Dutch)	Woensdrecht (B79)	Spitfire XVI LF	
135	349 (Belge) 485 (RNZAF) 33	Gilze Rijen (B77) Predannack	Spitfire IX LF .5 Tempest V	To re-equip Temp. V
145 (Fr)	74 329 (Fr) 341 "	Deurne (B70)	Spitfire IX LF .5	
	340	Drem	" HF E.	Under operational control of R.A.F. Fighter Command.
146	193 197 257 263 266	Deurne (B70)	Typhoon  n  n	At A.P.C.
A.O.P. Sqdns.	652 660 661	- Mariana	Aust, IV	Allocated to I Corps.  " II Can. Corps.  " First Can. Army
	<del></del>	No. Of Carrier at It O. Ch		
		No. 85 Group - H.Q. Gh. A.O.C A/V/M.C.	R. Steele	
142 147 148 149	276 (ASR) 264 409 (RCAF) 604 219 410 (RCAF) 488 (RNZAF)	Knocke Le Zoute (B83) Odiham Lille Vendeville (B51)	Mosquito XII/XIII  " XIII " XII/XIII " XXX " XXX " XXX	
	No.	2 Group - H.Q. Caserne de C.	avallerie Brussels	
136	418 (RCAF) 605	Blackbushe	Mosquito VI	
137	88 226 342 (Fr)	Vicry (B50)	Boston III/IV Mitchell II/III Boston III/IV	
138	107 305 (Pol) 613	Epinoy (A75)	Mosquito VI	
139	98 180 320 (Dutch)	Melsbrock (B58)	Mitchell II/III	
140	21 164 (RAAF) 467 (RMZAF)	Rosteres (B67)	Mosquito VI	14/1
34 PR	16 PR 69 NR 140 PR	Melsbroek (B58)	Spitfire XI PR Wellington XIII Mosquito IX/XVI PR	

	SQUADRON	LOCATION	TYPE OF	REMARKS
	No. 38 Group (a)	H.Q. Earls Colne		
	AOC	A/V/M J R Scarlett-S	treatfeild	
Rivenhall	295	Rivenhall	Stirling IV	
Earls Colne	570 296	Earls Colne	Halifax V)	
Weathersfield	297 196	II Charles de Carres	" )	to re-equip Halifax III
Weatherstread	299	Shepherd's Grove	Stirling IV	
Tarrant Rushton	298 614	Tarrant Rushton	Halifax III	
Great Dunmow	620 190	Great Durmow	Stirling IV	
	No. 46 Group (b)	Main H.Q Harrow Weal Adv. H.Q. Netheravon		aln was a set
	AOC	A/Cdr. L. Darvall		
Broadwell	48	Down Ampney	Dakotas	
	271		0	
Blakehill Farm	512 233	Broadwell Blakehill Farm		
DEGRESIAL POLIS	457 (RCAF)	Dackenial Ferm		
	575			
		rol of S.H. A.E.F. except		ions:
	mder Admine Control	of R.A.F. Fighter Comman	10.	
(b) Unde	on Constional Contr		The second second	
		of B. A. E. Transport Com		ions:
		of R.A.F. Transport Com		ons:
			nand.	ons:
	under Admin. Control	of R.A.F. Transport Com	DE Cyt S. Vandenberg	cons:
	Commanding Adv. H.Q. Main H.Q.	NINTH U.S. ARMY AIR FORG	CE Hoyt S. Vandenberg	cons:
	Commanding Adv. H.Q. Main H.Q.	NINTH U.S. ARMY AIR FORG General - Major General I Namur (VJ 3612) Chantilly	DE Coyt S. Vandenberg	cons:
	Commanding Adv. H.Q. Main H.Q. IXth	Of R.A.F. Transport Com  NINTH U.S. ARMY AIR FORG  General - Major General I  Namur (VJ 3612) Chantilly  TACTICAL AIR COMAND - H.  General - Major General I	CE  Cyt S. Vandenberg  Co. Verviers  Siwood R. Quesada	cons:
	Commanding Adv. H.Q. Main H.Q. IXth Commanding	NINTH U.S. ARMY AIR FORM  NINTH U.S. ARMY AIR FORM  General - Major General H  Namur (VJ 3612  Chantilly  TACTICAL AIR COMMAND - H  General - Major General H  H.Q. Liege/Bierset (A9)	CE  Hoyt S. Vandenberg  O. Verviers  Elwood R. Quesada	cons:
	Commanding Adv. H.Q. Main H.Q. IXth Commanding	Of R.A.F. Transport Com  NINTH U.S. ARMY AIR FORG  General - Major General I  Namur (VJ 3612) Chantilly  TACTICAL AIR COMAND - H.  General - Major General I	CE  Hoyt S. Vandenberg  O. Verviers  Elwood R. Quesada	cons:
70TH FIGHTER WIN	Commanding Adv. H.Q. Main H.Q. IXth Commanding Commanding Commanding Commanding	Of R.A.F. Transport Common of R.A.F. Transport C	CE toyt S. Vandenberg O. Verviers Elwood R. Quesada S) H. L. Hecaulay P 17	cons:
70TH FIGHTER WIN 36th Grp. 365th "	Commanding Adv. H.Q. Main H.Q. IXth  Commanding  Commanding  Commanding  22-23-53 386-307-388	NINTH U.S. ARMY AIR FORM  NINTH U.S. ARMY AIR FORM  General = Major General   Namur (VJ 3612 Chantilly  TACTICAL AIR COMMAND = H.  General = Major General   H.Q. Liege/Bierset (A92 Officer = Brig. General   Le Culot (A89)   Florennes (A78)	CE Hoyt S. Vandenberg  O. Verviers Elwood R. Quesada  O) H. L. McCaulay P 17 P 17	cons:
70TH FIGHTER WIN 36th Grp. 365th "	Commanding Adv. H.Q. Main H.Q. IXth Commanding Commanding Commanding Commanding 22-23-53 386-387-388 410-411-412	Of R.A.F. Transport Com  NINTH U.S. ARMY AIR FORE  General - Major General I Namur (VJ 3612) Chantilly  TACTICAL AIR COMMAND - H.  General - Major General I  H.Q. Liege/Bierset (A9)  Officer - Brig. General I  Le Culot (A89) Florennes (A78) Le Culot (A89)	DE Hoyt S. Vandenberg  O. Verviers Elwood R. Quesada  D. H. L. HoCaulay  P 17  P 17  P 17	cons:
70TH FIGHTER WIN	Commanding Adv. H.Q. Main H.Q. IXth  Commanding  Commanding  Commanding  22-23-53 386-307-388	NINTH U.S. ARMY AIR FORM  NINTH U.S. ARMY AIR FORM  General = Major General :  Namur (VJ 3612 Chantilly  TACTICAL AIR COMMAND = H.  General = Major General :  H.Q. Liege/Bierset (A92  Officer = Brig. General :  Le Culot (A89) Florennes (A78)	CE Hoyt S. Vandenberg  O. Verviers Elwood R. Quesada  D) H. L. McCaulay P 17 P 17	Attached from VIIIth
70TH FIGHTER WIN 36th Grp. 365th # 373rd # U74th # 352nd #	Commanding Adv. H.Q. Main H.Q. IXth Commanding Commanding Commanding Commanding 22-23-53 386-367-388 410-441-442 428-429-430	Of R.A.F. Transport Common Minth U.S. ARMY AIR FORE Seneral = Major General : Namur (VJ 3612 Chantilly TACTICAL AIR COMMAND = H. General = Major General : H.Q. Liege/Bierset (A92 Officer = Brig. General : Le Culot (A89) Florennes (A78) Le Culot (A89) Florennes (A78) Chievres (A84)	nand.  CE  Hoyt S. Vandenberg  O. Verviers  Elwood R. Quesada  D)  H. L. McCaulay  P 17  P 17  P 17  P 38  P 51	
70TH FIGHTER WIN 36th Grp. 365th # 373rd #	Commanding Adv. H.Q. Main H.Q. IXth  Commanding  Commanding  Commanding  Commanding  22-23-53 386-367-388 410-411-412 428-429-430 328-486-487	Of R.A.F. Transport Community  NINTH U.S. ARMY AIR FORG  General = Major General   Namur (VJ 3612) Chantilly  TACTICAL AIR COMMAND = H.  General = Major General   H.Q. Liege/Bierset (A92)  Officer = Brig. General   Le Culot (A89) Florennes (A78) Le Culot (A89) Florennes (A78)	DE Hoyt S. Vandenberg  O. Verviers  Elwood R. Quesada  D. L. Hocaulay  P 17  P 17  P 17  P 38	Attached from VIIIth

Note: (a) Temporarily under Operational Control of Second T.A.F.

H.Q.

429-491-1914 389-390-391 506-507-508 401-402-485 33 PR 161 TR

n (Recce)

48th Grp. 366th " 404th "

370th 363rd

(a) XXIXth TACTICAL AIR COMMAND Commanding General - Brig. General Richard E. Nugent H.Q. - Maastricht

St. Trond (A92)
Asch (Y29)
St. Trond (A92)
Ophoven (Y32)
Le Culot East (Y10)
" (Y10)

P 47 P 47 P 38 F 6

#### 358th s 115th (NF) Sqdn. Croix de Hetz Ochey Provisional Recce Group;

111 TR 162 TR Nancy Azelot (A95) 34 PR 1/33 PR FAF Land Bomb Wing

H.Q. Dijon (Y9)

Commanding General - Brige General John Pe Doyle 34-37-95-432 441-442-443-444 FAF 1/9 1/22 11/20 # 1/32 11/52 11/63 B 26 B 26 17th Bomb Gro. (Y9) Dijon 320th M B 26 31st (¥6) Lyon/Bron 34th

DS 96326/1(280)

SECRET

Tantonville

(Y1)

(A90) (A96)

P 47

P 47

Beaufighter

	FPENDIX NO.
TYPE OF A/C	REMARKS
ardot	
P 47 P 47 Spitfire VIII	I/IX (a)
u A\IX	Attached 1st
Potez Morone JU 88 Douglas DB 87 A 24 Dewoltine 520	Maryland
SBD	
orne Army)	
Williams	
c 47 c 53	
ld Clark	
C 47 C 53	
1 1	
C 47 C 53	
11 11	
1 0	
. M. Chappell	
C LT C 53	
)	c 47 C 53

#### RECAPITULATION

#### HeQ. SECOND T.A.F.

#### (1) No. 83 Group

12 Typhoon Sqdns
5 Tempest V Sqdns.
4 Spitfire IX Sqdns.
1 " XI PR Sqdn.
4 " XVI Sqdns.
1 " IX FR Sqdn.
2 " XIV Sqdns.
4 Auster IV Sqdns.
(37 Sqdns.)

## (ii) No. 84 Group

9 Typhoon Sqdns.

1 "FR Sqdn.
2 Tempest V Sqdns.
11 Spitrire IX Sqdns.
4 "XVI Sqdns.
1 "XIV FR Sqdn.
1 "XIV FR Sqdn.
3 Auster IV Sqdns.
(32 Sqdns.)

# (111) No. 85 Group

3 Mosquito XXX Sqdns. 3 " XIII " 1 ASR Sqdn. (7 Sqdns.)

#### (iv) No. 2 Group

4 Mitchell II/III Sqdns. 2 Boston II/IV " 8 Mosquito VI " (14 Sqdns.)

# (v) No. 34 Wing

1 Spitfire IX/XI Sqdn. 1 Wellington XIII " 1 Mosquito IX/XVI " (3 Sqdns.)

#### No. 38 Group

6 Stirling IV Sqdns. 2 Halifax V " 2 " III " (10 Sqdns.)

# No. 46 Group

6 Dakota Sqdns.

## NINTH AIR FORCE

# (1) IXth T.A.C.

3 P 47 Groups
1 P 38 Group
1 P 61 Sqdn.
2 F 6 Sqdns.
1 F 5 Sqdn.
1 F 51 Group
(19 Sqdns.)

#### (11) XIXth T.A.C.

5 P 47 Groups
1 P 61 Sqdn.
3 F 6 Sqdn.
1 F 5 Sqdn.
1 F 3 Sqdn.
1 P 38 Group
1 P 51 Group
(27 Sqdn.)

# (111) XXIXDh T.A.C.

3 P 17 Groups 1 P 38 Group 1 F 5 Sqdn. 1 F 6 Sqdn. (14 Sqdns.)

#### (iv) IXth BC

8 B 26 Groups 1 B 26 (PFF Sqdn.) 2 A 26 Groups 1 A 20 Group (45 Sqdns.)

# FIRST TACTICAL AIR FORCE

## (1) XIIth T.A.C.

4 P 47 Groups
1 Beaufighter Sqdn.
2 F 6 Sqdns.
2 F 5 "
4 B 26 Groups
(31 Sqdns.)

# (11) FIRST FRENCH AIR CORPS

5 P 17 Sqdns. 4 Spitfire Sqdns. 5 Groupe Patrie Sqdns. 2 Naval Sqdns. (16 Sqdns.)

IX TROOP CARRIER COMMAND

60 C 47 C 53 Sqdns.

# TOTAL SQUADRONS

Second ToAoFo Ninth Air Force First ToAoCo Air Force IX ToCoCo. Others

365 4686

# SUPREME HEADQUARTERS ALLIED EXPEDITIONARY FORCE

# AIR FORCE

# OFERATIONAL UNITS AS AT 2200 HOURS ON 4 MAY 1945

WING	SQUADRON		LOCATION		TYPE OF	REMARK
	SECOND TACTICAL AIR FOR	Rear H. O.	Residence I	Palace, Bros	ssels.	
	No. 83 Group - Main H.Q. Rear H.Q. A.O.C A/V/M H.	Bispingen (S N. W. Boye ( Broadhurst.	5201) X 541526)			-5
39 (R) (RCAF)	400 (RCAF (PR) 4114 " 430 "	Reinsehlen	(B154)	Spitfire	XI PR XI V PR XI V PR	
121	175 184 245	Hustedt	(B150)	Typhoon	RP	
122	3 56 80 486 (RNZAF) 616	Fassberg	(B152)	Tempest	V	
124	137 181 182 247		(B156)	Typhoon	RP	
125	41 130 350 (Belge)	Celle	(B118)	Spitfire	XIV	
126 (RCAF)	401 (RCAF) 411 " 412 " 402 "	Wunstorf a a a	(B116)	Spitfire	IX LF	n 125 Wing
127 (RCAF)	403 (RCAF) 416 " 421 " 443 "	Reinsehlen " "	(BI54)	Spitfire	XVI LF	
143 (RCAF)	438 (RCAF) 439 " 440 "	Hustedt	(B150)	Typhoon/	F Bomber	
A, O. P. Sqdns.	653 658 659 662			Auster IV	/ Allocated	to XII Corp
	No. 84 Group - Main H.Q. Rear H.Q. A.O.C. + A/V/N E.	Delden (V 30	08)			
35 (R)	2 4 (PR)	Twente/Ensc	hede (B106)	Spitfire	XIV FR XI FR	
123	164 183 198 609	Plantlunne "	(8103)	Typhoon	, RP	
131 · (Pol)	302 (Pol) 308 " 317 "	Varrelbusch	(B113)	Spitfire		APC
132 (Nor)	66 127 322 (Dutch)	Twente/Ense	hede (B106)	Spitfire	XVI LF	
135	53 222 274 349 (Belge)	Quakentruck	(B109)	Tempest	٧	

	12		APPENDIA NO. 1		
WING	SQUADRON	LOCATION	TYPE OF A/C	REMARKS	
	No. 84 Gr	cup - Main H.Q. Delden (V : Rear H.Q. " - A/V/M E C Hudleston	" (Contd.)		
415	4				
145 (Fr)	74 341 (Fr)	Drope (B105)	Spitfire XVI LF.5		
	340 " 345 "		" XVI LF		
	195 (NVZLF) 193 197 263	Ahlorn (B111)	" IX LF Typhoon F/Bomber		
	197	8			
	266	11	n RP	At APC	
AOP	652		Auster IV Allocated	i to I Corps.	
Sqdns.	660 661		7 7	" II Can Corps.	
	664 (RCAF)		11 11	" I Can Corps	
	657 665			. H I H H	
	No. 85 Gro	up - H.Q. Chent - A/V/M D A Boyle			
142	276 (ASR)	Knocke le Zoute (B 83)	Spitfire V Walrus		
148	409 (RCAF)	Rheine (B108)	Mosquito XIII		
140	264	Gilze Rijen (B77)	" XII/XIII		
149	219	Gilze Rijen (B77)	" XXX		
	40 (RCAF) 488 (RNZAF)		" XXX		
136	A.O C 448 (RCAF)	- A/V/M B E Embry Volkel (B80)	Mosquito VI		
	605	"	1	*	
137	226 342 (fr)	Gilze Rijen (B77)	Mitchell II/III		
138	107	Epinoy (A75)	Mosquito VI		
	305 (Pol) 613	1	0		
139	98	Achmer (B110)	Mitchell II/III		
	180 320 (Dutch)	0			
140	21				
140	464 (RAAF)	Melsbrook (B58)	Mosquito VI		
	487 (RNZAF)				
34 (PR)	16 (PR)	Eindhoven (B78)	Spitfire XI PR to r		
	69 (NR) 140 (PR)	- 1	Wellington XIII (SI Mosquito IX/XVI PR	oitfire XIX PR)	
	No. 38 Gro	oup (a) = H.Q. Earls Colne = A/V/M J R Scarlet	t-Streatfelld	des la description de la constant de	
Rivenhall	295	Rivenhall	Stirling IV		
Earls Colne	570 296	Earls Colne	Halifax I/VII		
Enepherds	297	Shepherds Grove	Stirling IV		
Grove Tarrant	299 196 298	Tarrant Rushton	Halifax III/VII		
Rushton Great Dunmow	644		10	No. 27 Contract Contr	
OF DOLD INCHINORY	620	Personal Personalis	Of the term Till on the	tentin Hold Com Trying	
Tompsford	620 190 161 (S <sub>*</sub> D <sub>*</sub> )	Tempsford	Stirling IV to remo	equip Halifax III/VII	

Note: (a) Under Operational Control of S.H.A.E.F. Except for Airborne Operations: Under Admin. Control of R.A.F. Fighter Command.

C 8 1 2 3 7 (RCAF) 5 tional Cont	LOCATION  ) - Main H.Q. Harrow Weald Adv. H.Q. Netheravon - A/Odr. L. Darvall  Down Ampney  Broadwell  Blakehill Farm  " " " " " " Tol of S.H.A.E.F. except for f R.A.F. Transport Command.  NINTH U.S. ARMY AIR FORCE	Dakota u u u u u u u u u u u u u u u u u u u	E OF /C	REMARKS
C 8 1 2 2 3 7 (RCAF) 5 tional Control o	Adv. H.Q. Netheravon - A/Odr. L. Darvall  Down Ampney  Broadwell Blakehill Farm  " " " " " " " " " " " " " " " " " "	# # # # # # # # # # # # # # # # # # #	Operations:	
8 1 2 3 7 (RCAF) 5 ational Cont. Control o	- A/Odr. L. Darvall  Down Ampney  Broadwell  Blakehill Farm  "  "  rol of S.H.A.E.F. except for  f R.A.F. Transport Command.  NINTH U.S. ARMY AIR FORCE	# # # # # # # # # # # # # # # # # # #	Operations:	
1 2 3 7 (RCAF) 5 tional Cont . Control o	Broadwell Blakehill Farm  " " " " " " " " " " " " " " " " " "	# # # # # # # # # # # # # # # # # # #	Operations:	
1 2 3 7 (RCAF) 5 tional Cont . Control o	Broadwell Blakehill Farm  " " " " " " " " " " " " " " " " " "	# # # # # # # # # # # # # # # # # # #	Operations:	
7 (RCAF) 5 tional Cont Control o	Blakehill Farm  " " " " rol of S.H.A.E.F. except for f R.A.F. Transport Command.  NINTH U.S. ARMY AIR FORCE	1	Operations:	
tional Cont. Control o	rol of S.H.A.E.F. except for f R.A.F. Transport Command.		Operations:	
. Control o	f R.A.F. Transport Command. NINTH U.S. ARMY AIR FORCE	Airborne	Operations:	
nding Gener				
H. Q.	al - Lieutenant General Hoyt - Wiesbaden - Chantilly	S. Vanden	berg	
)	Wiesbaden (Y80)			
TR.		P=6		
PR (N)		F=3		
TR	Control of the same	F-6		
Ī	Xth TACTICAL AIR COMMAND			
unding Gener	al - Brigadier General Ralph - Weimar (J 5570)	F. Stearl	ey	
	H. Q. Bruhl (F 4248)			
anding Gener	al - Brigadier General James	W. McCaul	ey	
23-53	Kassel/Rothwestern (R12)	P	107	
87-388 607-508	Fritzlar (Y86)	P	147	
129-130	Lagensala (R2)	P	38	
109	Eachwege (R11)	P	61 A 20	
XIXT	TACTICAL AIR COMMAND			
ending Gener	- Eisenach	leyland		
H. Q.	- Bad Nauheim (M 7494)			
	Furth (R28)	F	-5 F-6	
1	1			
	111111111111111111111111111111111111111		a u	
	H.Q. Konigstein			
anding Gener	ral - Brig. General Homer L.	Saunders		
193-494	Illesheim (R10)			
355 <b>~</b> 356 578 <b>~</b> 379	Ansbach (R45) Illesheim (R10)	P	51 17	
393-394	Frankfort/Eschborn (Y74)	P	42	
405-406	Frankfort/Eschborn (Y74)	P	147	
510-511	Kitzingen (R6)	P	147	
	Tar out Indiant toursen (100)		- 1 h	
XXIX	TH TACTICAL AIR COMMAND (PROV	ISIONAL)		
anding Gener H.Q.	ral = Brig. General Richard E = Brunswick = #	Nugent		
390-391	Handorf (Y94)	1	17	
411-412	Lippstadt (Y98)	1	147	
402-485	Guttersloh (Y99)	1	51	
PR TR	Brunswick/Waggum (R37)	1	5	
	TR PR PR PR (N) TR  I Inding Gener  23-53 887-388 907-508 429-130 109  XIXTH  anding Gener H. Q.	TR PR PR PR N  IXth TACTICAL AIR COMMAND  IXTR  IXth TACTICAL AIR COMMAND  IXIXTH TACTICAL AIR COMMAND (PROVING COMMAND COMMAND COMMAND COMMAND COMMAND COMMAND COMMAND  IXIXTH TACTICAL AIR COMMAND (PROVING COMMAND	TR	TR

REMARKS

CROUP	SQUADRON	LOCATION		TYPE OF
		IXTH BOMBARDM	ENT DIVISIO	N .
	Command:	ing General - Major - Namur	General Sam	uel E. Anderson
ist Pathfinder	Squadron		Ve	nlo (Y55)
98th Bomb Wing			He	A Havrincourt (N 677
	Command	ng General - Brig.	General Har	old L. Mace
323rd Group 387th # 394th # 397th #	453-451-455-456 556-557-558-559 581-585-586-587 596-597-598-599	Cambrai (A	83) 44) 74) 55)	3 26 3 26 3 26 3 26 3 26
99th Bomb Wing		H. C. Tirlemont		
	Command i	ng Officer - Colone	1 Reginald F	. C. Vance
322nd Group 314th # 386th # 391st #	149-150-151-152 1491-1495-1496-1497 552-553-551-555 572-573-571-575	Florence (A)	89) 78) 92) 29)	3 26 3 26 A 26 A 26
97th Bomb Light	Wing	H.Q. Marchais (No	0. 1818)	
	Command	ng General - Brig.	Ceneral Edwa	ard N. Backus
109th Group	610-614-612-613	*	4	
410th # 416th #	614-645-646-647 668-669-670-671	Juvincourt (68	70) 8) 69)	A 26 A 20 A 26 B 26 A 26
		FIRST TACTICAL AIR F		
	Command H. Q.	FIRST TACTICAL AIR H	General Robe	
	Command H. Q.	ng General - Major	General Robe berg	ert M. Webster
	H.Q.	mg General - Major - Heidelt  XIITH TACTICA  mg General - Brig. 0  - Gemund	General Robe berg L AIR COMMA General Glen (S 515245)	ort M. Webster
64th Fighter Wi	Commandi Adv. H.Q Rear H.Q	mg General - Major - Heidelt  XIITH TACTICA  mg General - Brig. 0  - Gemund	General Robe berg L AIR COMMA General Glen (S 515245)	ort M. Webster
64th Fighter Wi	Commandi Adv. H.O Rear H.Q	Major - Heideld  XIITH TACTICA  mg General - Brig. 0  Genund - Darmsta	General Robe berg L AIR COMMA General Glen (S 515245)	ND n O. Barcus
64th Fighter Wi	Commandi Adv. H. Q Rear H. Q ng Commandi 522-523-524 10-61-313 529-526-527 314-315-316 365-366-367	mg General - Major - Heideld  XIITH TACTICA  mg General - Brig. 0 - Genund - Darmsts  H.Q. (R 260765)  mg Officer - Colonel  Biblis (Y Giebelstadt (Y Braumshardt (Y Sandhofen (Y Braunshardt (Y)	General Robe berg L AIR COMMA General Glen (S 515245) adt L Nelson P.	Jackson  P 17 P 1
27th Group 50th # 86th # 324th # 325th # 415th (NF) Sqdn	Commandi Adv. H. Q Rear H. Q Commandi 522-523-524 10-61-313 525-526-527 314-315-316	mg General - Major - Heideld  XIITH TACTICA  mg General - Brig. 0 - Genund - Darmsts  H.Q. (R 260765)  mg Officer - Colonel  Biblis (Y Giebelstadt (Y Braumshardt (Y Sandhofen (Y Braunshardt (Y)	General Robe berg  L AIR COMMA General Glen (S 515245)  adt  L Nelson P.  (78) (90) (72) (72) (77)	Jackson  P 17 P 1
27th Group 50th # 86th # 324th # 325th # 415th (NF) Sqdn	Commandi Adv. H. Q Rear H. Q ng Commandi 522-523-524 10-61-313 525-526-527 314-315-316 365-366-367	Ing General - Major - Heidelt  XIITH TACTICA  Ing General - Brig. 0 - Genund - Darmsta  H.Q. (R 260765)  Ing Officer - Colonel  Biblis (Y	General Robe berg L AIR COMMA General Glen (S 515245) adt L Nelson P.	Jackson  P 17 P 1
27th Group 50th # 30th # 32kth # 358th # 415th (NF) Sqdn 417th # 69th (Recoe) G	Commandi Adv. H. Q Rear H. Q ng Commandi 522-523-524 10-61-313 525-526-527 314-315-316 365-366-367	Ing General - Major - Heideld  XIITH TACTICA  Ing General - Brig. 0 - Genund - Darmsta  H. Q. (R 260765)  Ing Officer - Colonel  Biblis (Y Giebelstadt (Y Braunshardt (Y Luneville (Y Sandhofen (Y Giebelstadt (Y Hagenau ()	General Robe berg L AIR COMMA General Glen (S 515245) adt L Nelson P. (78) (79) (72) (72) (79) (79) (79) (79) (79) (79)	Jackson  P 17 F 17 F 17 F 17 F 17 F 5
27th Group 50th # 30th # 32kth # 358th # 415th (NF) Sqdn 417th # 69th (Recoe) G	Commandi Adv. H. Q Rear H. Q ng Commandi 522-523-524 10-61-313 529-526-527 314-315-316 365-366-367 commandi	Ing General - Major - Heideld  XIITH TACTICA  Ing General - Brig. 0 - Gemund - Darmsta  H. Q. (R 260765)  Ing Officer - Colonel  Biblis (Y. Braunshardt (Y. Br	General Robe berg L AIR COMMA General Glen (S 515245) adt L Nelson P. (78) (79) (72) (72) (79) (79) (79) (79) (79) (79)	Jackson  P 17 F 17 F 17 F 17 F 17 F 5

REMARKS

GROUP	SQUADRON	LOCATION	TYPE OF
			A/C
		FIRST FRENCH AIR CORP	8
	Command Adv. He Main H.		al Paul Geradot
1st Grp. FAF 3rd " " 4th " "	1/3 1/7 11/7 1/4 1/5 111/6 11/3 11/5 111/3	Sachgenheim (R27) Entzheim (Y40) Colmar (Y53)	Spitfire VIII/IX (a P U7 P U7
II/33 (TR) Sqdn. I/33 (PR)		1 1	F 6 F 5
Western Air Ford	ces	H. Q. Cognac	
	Comman	ding Officer - Colonel O.	Milinior
Group Patric	111/33 TR 1/31 B	Cognac (Y36) Cazaux (0 2454)	Potez, Morane Simou JU 88, Maryland,
	1/18 F/B	Cognac (Y36)	Douglas DC 87 A 24, Dewoitine 520 det at Vannes A 3
	11/18 F	Bordemix (Y37)	Equip A 24 Spitfires
Naval Group			
	VFB I	Cognac	SHD
Note: (a) Unde	er Administrative Con	trol of No. 85 Group	
Note: (a) Unde	er Administrative Con	trol of No. 85 Group  IXTH TROOP CARRIER COM	MAND
Note: (a) Unde	(Under Op	IXTH TROOP CARRIER COM erational Control of 1st ng General - Major General - Ascot	Allied Airborne Army) 1 P. L. Williams
IX T.C. Pathfind	(Under Op Command in Main H. Q.	IXTH TROOP CARRIER COM erational Control of 1st ng General - Major Genera - Ascot - Louveciennes	Allied Airborne Army) 1 P. L. Williams
IX T.C. Pathfind	(Under Op Command in Main H.O. Adv. H.O. der Group (Prov.)	IXTH TROOP CARRIER COM erational Control of 1st ng General - Major Genera - Ascot - Louveciennes	Allied Airborne Army) 1 P. L. Williams
IX T.C. Pathfind	(Under Op Command in Main H.O. Adv. H.O. der Group (Prov.) der Squadrons (Prov.)	IXTH TROOP CARRIER COM erational Control of 1st ng General - Major Genera - Ascot - Louveciennes Chartres (Ali	Allied Airborne Army) 1 P. L. Williams  O) C 47 C 53
IX T.C. Pathfind 1-2-3-1-Pathfind 52nd T.C. Wing 61st Grp. 313th "	(Under Op Command in Main H. O. Adv. H. O. der Group (Prov.) der Squadrons (Prov.) Command in 11-15-53-59 29-47-48-49 32-50-61-62	IXTH TROOP CARRIER COM erational Control of 1st ng General - Major Genera - Ascot - Louveciennes Chartres (Alg H. O. Amiens ng General - Brig. Genera Abbeville/Drucat (B92 Achiet (B54) Poix (B44)	Allied Airborne Army) 1 P. L. Williams  0) C 47 C 53  1 Herold L. Clark  ) C 47 C 53
IX T.C. Pathfind 1-2-3-1-Pathfind 52nd T.C. Wing 61st Grp. 313th "	(Under Op Command in Main H. O. Adv. H. Q. der Group (Prov.) der Squadrons (Prov.) Command in 11-15-53-59 29-47-48-49	IXTH TROOP CARRIER COM erational Control of 1st ng General - Major Genera - Ascot - Louveciennes Chartres (All H. O. Amiens ng General - Brig. Genera Abbeville/Drucat (B92 Achiet (B54)	Allied Airborne Army) 1 P. L. Williams  0) C 47 C 53  1 Herold L. Clark ) C 47 C 53
IX T.C. Pathfind 1-2-3-1-Pathfind 52nd T.C. Wing 61st Grp. 313th # 311th # 315th #	(Under Op Command: Main H.O. Adv. H.O. der Group (Prov.) der Squadrons (Prov.) Command: 11-15-53-59 29-17-18-19 32-50-61-62 31-13-309-310 36-37-14-15	IXTH TROOP CARRIER COM erational Control of 1st ng General - Major Genera - Ascot - Louveciennes Chartres (Ali H.O. Amiens ng General - Brig. Genera Abbeville/Drucat (B92 Achiet (B54) Poix (B44) Amiens (B48) Cottesmore	Allied Airborne Army) 1 P. L. Williams  0) C 47 C 53  1 Harold L. Clark ) C 47 C 53  " " " " " "
IX T.C. Pathfind 1-2-3-1-Pathfind 52nd T.C. Wing 61st Grp. 313th " 311th " 315th " 316th "	(Under Op Command in Main H. O. Adv. H. O. der Group (Prov.) der Squadrons (Prov.) Command in 11-15-53-59 29-17-18-19 32-50-61-62 31-13-309-310 36-37-11-15 23-312-313-314	IXTH TROOP CARRIER COM erational Control of ist ng General - Major Genera - Ascot - Louveciennes Chartres (Ali H. O. Amiens ng General - Brig. Genera Abbeville/Drucat (B92 Achiet (B54) Poix (B44) Amiens (B48) Cottesmore Roye/Amy (A73)	Allied Airborne Army) 1 P. L. Williams  0) C 47 C 53  1 Herold L. Clark ) C 47 C 53  " " " " " " " " "
IX T.C. Pathfind 1-2-3-1-Pathfind 52nd T.C. Wing 61st Grp. 313th " 314th " 315th " 315th " 315th " 315th " 315th " 1315th " 1315th "	(Under Op Command in Main H. O. Adv. H. O. A	IXTH TROOP CARRIER COM  erational Control of 1st ng General - Major General - Ascot - Louveciennes Chartres (Ala  H. O. Amiens ng General - Brig. General Abbeville/Drucat (B92 Achiet (B54) Poix (B44) Amiens (B48) Cottesmore Roye/Amy (A73)  H. Q. Voisenon ng Officer - Colonel Maur- Mourmelon (A80) Bretigny (A48) Helum (A55)	Allied Airborne Army) 1 P. L. Williams  0) C 47 C 53  1 Herold L. Clark ) C 47 C 53  " " " " " " " " "
IX T.C. Pathfind 1-2-3-1-Pathfind 52nd T.C. Wing 61st Grp. 313th " 315th " 315th " 316th " 316th " 316th "	(Under Op Command in Main H. O. Adv. H. O. A	IXTH TROOP CARRIER COM erational Control of 1st mg General - Major Genera - Ascot - Louveciennes Chartres (Ali H.O. Amiens mg General - Brig. Genera Abbeville/Drucat (B92 Achiet (B54) Poix (B54) Poix (B54) Amiens Miners (B48) Cottesmore Roye/Amy (A73) H.O. Voisenon mg Officer - Colonel Maur Mourmelon (A80) Bretigny (A48)	Allied Airborne Army) 1 P. L. Williams  O) C 47 C 53  Herold L. Clark  C 47 C 53  R R R  R R  R R  R R  R R  R R  R R

h39th Grp. hLOth " hL1st " hL2nd "

C 47 C 53

91-92-93-94 Chateaudun (A39) 95-96-97-98 Orleans/Ericy (A50) 99-100-301-302 Dreux (A41) 303-301-305-306 St. Andre de Lieure (E24)

#### RECAPITULATION

#### H.Q. SECOND T.A.F.

#### (1) No. 83 Group

10 Typhoon Sqdns.
4 Tempest V Sqdns.
3 Spitfire IX Sqdns.
1 " XI PR Sqdns.
4 " XVI Sqdns.
2 " XIV FR Sqdns.
4 " XIV Sqdns.
4 " XIV Sqdns.
1 Master IX Sqdns.
1 Meteor I/III Sqdn.
(33 Sqdadrons)

#### (11) No. 84 Group

#### (111) No. 85 Group

3 Mosquito XXX Sqdns. 2 " XIII Sqdrs. 1 ASR Sqdn. (6 Squadrons)

# (1v) No. 2 Group

5 Mitchell II/III Sqdns. 8 Mcsquito VI Sqdns. (13 Squadrons)

#### (v) No. 34 Wing

1 Spitfire IX/II Sqdn, 1 Wellington XIII Sqdn, 1 Mosquito IX/XVI Sqdn, (3 Squadrons)

# No. 38 Group

7 Stirling IV Sqdns. 4 Halifax III/VII Sqdns. (11 Squadrons)

#### No. 46 Group

6 Dakota Sqdns.

#### NINTH AIR FORCE

(1) 1 F-3 Sqdn. 1 F-5 " 2 F-6 "

#### (11) IXTH T.A.C.

3 P 47 Croups 1 P 38 Croup 1 P 61 and A 20 Sqdn. 2 F 6 Sqdns. 1 F 5 Sqdn. (16 Squadrons)

# (111) XIXTH T.A.C.

6 P 17 1 P 61 and A 20 Sqdn. 3 F 6 Sqdns. 1 P 51 Group (25 Squadrons)

#### (iv) XXIXTH T.A.C.

3 P 47 Groups 1 P 51 Group 1 F 5 Sqdn. 2 F 6 Sqdns. (15 Squadrons)

# (v) IXTH B.C.

6 B 26 Groups 1 B 26 (PFF) Sqdn. 5 A 26 Groups (45 Squadrons)

#### FIRST TACTICAL AIR FORCE

#### (1) XIITH T.A.C.

5 P 47 Groups
1 Beaufighter Sqdn,
5 F-6 Squadrons
1 F-5 Groups
4 B-26 Groups
(34 Squadrons)

# (11) FIRST FRENCH AIR CORPS

6 P LT Sqdns.
3 Spitfire Sqdns.
4 Group Patrie Sqdns.
2 Navel Sqdns.
1 F=6 Sqdn.
1 F=5 Sqdn.
(17 Squadrons)

1XTH TROOP CARRIER COMMAND 64 C 47 C 53 Sqdns

# TOTAL SQUADRONS

Second Tactical Air Force
Ninth Air Force
First Tactical Air Force
IX Troop Carrier Command
Others

86
105
64
17

DS 96326/1(288)

STRENGTH OF ALLIED AIR FORCES

As at 1/10/44

Av Str Av Serv % Fighters

VIII A. F.

942

1274

R. A.F. B.C. XVth A.F.

IXth A.F.

064

616

1166

1351

309

425

1064

1240

Ist T. A.F.

R. A. F. E. C. 2nd T. A. F.

719

955

0697

5861

SECRET

FORCE

# FURTHER AIRBORNE OPERATIONS IN EUROPE(1)

# Developments Prior to Operation Varsity

#### Control of No. 46 Group

A.E.A.F. File/ TS.22518/A.3 Encl. 26A Shortly after Operation Market had been completed, the question of qualifying the operational relationship between the First Allied Airborne Army and Nos. 38 and 46 Groups was again raised by General Brereton in a signal to S.H.A.E.F. Forward Headquarters, on 30 September 1944. It was desired to have a permanently clear relationship to facilitate the training and planning for future projected airborne operations. The available resources of nos. 38 and 46 Groups were, therefore, placed underthe control of the First Allied Airborne Army, after allowing for the demands on No 38 Group by SAS/SOE commitments and on No. 46 Group by transport work. The latter group screened two aircraft per squadron from transport operations to carry out airborne training.

H.Q. F.A.A.A., File A.P.O.740, 21/9/44

# Naples II

During September 1944 the outline plan for Operation Naples II was produced by First Allied Airborne Army. The object of this operation was to assist the advance of the central group of Armies by seizing a bridgehead on the east Bank of the Rhine in the general area Koln/Bonn and to achieve this the use of airborne troops was considered necessary. It was intended to use 6th Airborne Division, which would be ready for combat during October and the XVIIth U.S. Airborne Division, which had arrived from the U.S.A. in September.

For the purpose of Operation Naples II, all No. 38 Group aircraft, except 25 which were to be retained for SAS/SOE operations, were made available and, with the exception of 40 serviceable aircraft for transport purposes, all No. 46 Group aircraft as well(2).

D.S.C./T.S./ 100/9, Part III, Encl. 18A It was originally intended to launch Naples II in November, but in view of the strategic situation it was decided at S.H.A.E.F. Chiefs of Staff Conference, on 20 November 1944, that Varsity and Naples II should take place on 1 January 1945, and be operated from the U.K. For operations beyond the Rhine, however, airfields on the continent would be required, but the earliest date by which these would be available was 1 February 1945.

The whole situation was altered by the German offensive in the Ardennes in December, after which it became apparent that the assault over the Rhine could not be undertaken until the spring of 1945.

A.E.A.F./File T.S.22518/A.3 Encl. 32A (2) The 25 aircraft of No. 38 Group might be available for the initial lift of Naples II, but not the 40 aircraft of No. 46 Group. It was the intention to maintain all scheduled air services to 2nd T.A.F. and Twenty-First Army Group at all times, but this did not preclude the possibility of No. 46 Group aircraft being required for an airborne operation if it were deemed important enough. Thus all No. 46 Group air and glider crews were kept fully trained and available.

<sup>(1)</sup> This chapter has been extracted from R.A.F. Monograph 'The History of Airborne Forces.'

When the operation for crossing the Rhine assumed reality, the First Allied Airborne Army requested operational control of the total strength of the two R.A.F. Groups, dating from 1 March, 1945. This was granted, with the exception of one squadron (25 aircraft) of No. 46 Group, which was to be retained for air transport work. A further 25 of the 125 remaining aircraft were retained on transport work until three days before the operation.

A.M.S.O. File IM. 273/D.D.O.(P)

#### No. 38 Group Moves to New Location

As the operations in Europe moved further to the east, the range for aircraft based in Britain greatly increased and, at a meeting of the A.E.A.F. Airfield Committee on 23 September, 1944, it was decided to move No. 38 Group and its squadrons to East Anglia, in order to facilitate flying for any future operations.

The moves took place during the early part of October and were as follows:-

H.Q. No. 38 Group to Marks Hall

All 38 Group Units at Brize Norton to Earls Colne

" " Fairford to Gt. Dunmow

" " " Harwell to Rivenhall (including the satellite at Hampstead Norris)

" " Keevil to Wethersfield

All these stations were in Essex.

Section II, No. 38 Group Report

No. 38G/T.S.3 Air/Part II, Encl. 67A Pre-Crew Training SAS/SOE Operations

During July 1944 an attempt was made by the Director of Operational Training, Air Ministry, to alter the Training Syllabus of No. 38 Group to conform to that in use at a Bomber Command Wellington Operational Training Unit.

Air Vice Marshall Hollinghurst, A.O.C. No. 38 Group, strongly opposed this suggestion and stated in a letter dated 29 July 1944, the absolute necessity for a high standard of training, which was in no way diminished by the use of No. 38 Group crews in SAS/SOE operations. This lesson, he said, had been outstanding from previous airborne operations. The A.O.C. pointed out that the problems confronting No. 38 Group were different to those of Bomber Command and that there was no point, therefore, in standardising the training. The very nature of the work involved in SAS/SOE operations rendered individual pre-crew training of the highest standard to be more essential that in any other phase of air activity.

Thid Encl. 69A

The emphatic defence by the A.O.C. No. 38 Group of the training method then in use had the desired effect. H.Q. A.E.A.F. supported his view that no economy in pre-crew training could be effected in No. 38 Group without considerable detriment to the future operational success of the Group, and no deviation from the high standard then maintained was permitted.

# Training prior to May, 1945

No. 38 Group Report. Section II. Paras, 76-80 All training in No. 38 Group was now being carried out in order to fit aircrews to complete their duties as laid down in the Standard Operational Procedure (see Appendix 3)(1) and training became more or less static.

On 18 October, 1944, Air Vice Marshal J. R. Scarlett-Streatfeild was appointed A.O.C. No. 38 Group in place of Air Vice Marshal L. N. Hollinghurst, who was due to be posted to South East Asia. The new A.O.C. soon foresaw the necessity of revising the method of supply dropping. It had been demonstrated in Operation Market that low level supply dropping could prove extremely costly. Therefore he ordered experiments to be made in dropping supplies from medium altitudes.

Throughout the winter months of 1944-1945, No. 38
Group continued to carry out SAS/SOE operations, although bad weather caused many cancellations. Normal training in large scale glider and parachute exercises took place, designed in preparation for any operations which might be called for in crossing the Rhine.

It was decided by the A.O.C. No. 38 Group and the Commanding General IXth Troop Carrier Command that at least one wing of the IXth T.C.C. would have to be available for lifting any British airborne division from the United Kingdom to Europe. A large scale combined exercise was therefore planned in which both British and American aircraft would come under the control and command of the A.O.C. No. 38 Group.

Exercise Eve was carried out on 21 November 1944, and comprised a large scale parachute landing by day from both British and American aircraft together with a glider landing, the gliders being towed by British aircraft. Although there was some delay in take off, the exercise was fairly successful and was used as a basis for the planning of Operation Varsity. Exercises in D.R. Navigation were also held under the code name Quiver as it was apparent that many crews were relying too much on radar as a means of, rather than an aid to navigation.

#### RE-ORGANISATION OF TRAINING UNITS

A.M. File S.95943/11/T.0.3 dated 12/12/44 On 12 December 1944, the Director of Operational Training, Air Ministry, wrote a letter on the re-organisation of No. 38 Group Training Units. In the proposed re-organisation, No. 81 O.T.U. was to expand in order to reach the output of 26 trained crews per month. It was also to be equipped with Wellington X aircraft. The re-equipment of the O.T.U. with the Wellington X, fitted with radar and other specialist equipment and capable of carrying pre-crew navigators doubled up with the crew doing advanced training, was intended to dispense with a certain proportion of the precrew training then being carried out on Anson and Oxford aircraft. It was also thought that the pilots flying time on the Service type at the O.T.U.s could be reduced to mearer 80-85 hours instead of the 102 already in existence.

File S.H.A.E.F. A.R.S./72081 The Director of Operational Training also ordered a revised Training Syllabus for the re-organisation of No. 81 O.T.U. to be prepared. On 5 January 1945, H.Q. A.E.A.F. agreed to this proposal. The new syllabus was drawn up and remained in force until after the end of the war.

<sup>(1)</sup> Of the A.H.B. Monograph 'History of Airborne Forces',

No. 38G/S.3/Air

The re-organisation of the Training Units was described in a letter from No. 38 Group on 24 January 1945, and included the following points:-

The future replacement for the Group was agreed at fifteen Halifax and ten Stirling crews a month, thus it was necessary to intake 26 crews per month allowing one crew per month wastage in the Training Units.

#### No. 1665 Heavy Conversion Unit

The new aircraft establishment for this Unit was seventeen Halifax Mark III and thirteen Stirling Mark IV aircraft.

#### Operational Training Units

In view of the new replacement rate of 25 crews per month, it was decided to close down No. 42 O.T.U. at Ashbourne and its satellite and to increase No. 81 O.T.U. at Tilstock and Sleap. Ashbourne, situated as it was amongst the Derbyshire hills, had never been very suitable in view of the poor weather and it had always experienced difficulty in maintaining its output in the past.

Once this re-organisation of the Training Units had been put into effect, there was little or no alteration until after the cessation of hostilities in Europe.

No. 38 Group Report, Section IV, paras. 15, 16,

# Special Training Prior to Operation Varsity

Owing to the inexperience of many of the R.A.F. and Army crews an intensive training programme was carried out during the month preceding Varsity. It was as follows:-

		Flying time Hours Minutes
(i)	Army	
	(a) Light lifts per day 1 (b) Heavy lifts per day 1 (c) Station Balbos 2 (d) Group Balbos 1	30 30 3 00 2 00
(ii)	R.A.F.	
	(a) Light lifts per day 10 (b) Heavy lifts per day 2 (c) Station Balbos 2 (d) Group Balbos 1	5 00 1 00 3 00 2 00

Hammilcar crews were posted to "C" Squadron, Glider Pilot Regiment at Tarrant Rushton for further intensive training and reached a high standard.

No. 38 Group Appendix 63

# Exercise Token

In order to test communications and other arrangements for Operation Varsity, Exercise Token was planned. Nos. 46 and 38 Groups and 52 Wing U.S. XIth T.C.C. successfully participated in an air lift and tow over a stimulated dropping landing zone area in France on 16 March 1945.

# Crossing the Rhine - Operation Varsity

#### General Situation

During the Autumn of 1944 while the Allied Armies moved inexorably towards Germany the Planning Staff of the First Allied Airborne Army were engaged in preparing plans for the potential use of Airborne Forces in support of the ground advance.

On 15 October 1944, General Eisenhower stated that the First Allied Airborne Army would operate in support of the Central Group of Armies for the crossing of the Rhine. Meanwhile six airborne operations were planned - three to breach the Siegried line and three to assist the Rhine crossing - before the first outline plan for operation Varsity was produced on 7 November 1944.

The area chosen for the operation was the general one of Emmerich - Wesel, as it was found to be most suitable for airborne landings. It consisted of a flat plain some five to ten miles wise, similar to Dutch "polder" land but, unlike Arnhem, the banks of the Rhine were high and reinforced against flooding. In order to establish a bridgehead, two Airborne Divisions would be required and the bridgehead would have to be five to ten miles wide and approximately five miles deep to avoid hindrance by enemy artillery. On 17 October, the United States IX Army had been moved to the left flank of the U.S. Army Group in order to be in readiness for a crossing of the Rhine. However, many months were to pass before the last great airborne operation of the European war could be launched.

The German counter-attack in the Ardennes in December effectively destroyed any hopes of a Rhine crossing before the Spring of 1945. By mid February 1945 the plan for operation Plunder (the ground assault across the Rhine) began to take shape. The main Allied effort involved the use of three Allied Armies under the command of Field Marshal Mantpomery. The U.S. IX Army on the right flank and the British Second Army on the left were to attack between Rheinberg and Rees, capture the communication centre of Wesel and then emand southwards to seize the roads through Wesel and northwards to secure a firm bridgehead for future operations. The U.S. IX Army with its bridging area at Rheinberg was to attack south of Wesel and the British Second Army north of The latter, in addition to capturing the town, so that the IX Army could create bridgeheads there, was also to bridge the river at Kanteen and Rees. To assist the Second Army advance the First Allied Airborne Army was to drop the U.S. XVIII Airborne Corps, comprising the U.S. XVII and the British Sixth Airborne Divisions - north and northwest of Wesel in order to seize key terrain in that area.

#### Airborne Planning

The plan for this sirborne operation was promilgated on 10 February 1945, and differed from the original plan of 7 November 1944 in that the Airborne Forces were to operate a few hours after the ground assault across the Rhine, whereas in the original plan a simultaneous attack by ground and airborne forces had been proposed. This change of plan was caused by the discovery of strongly established enemy positions a few miles east of the Rhine from which counter attacks and artillery and opposition might be expected. It was also feared that a night attack would expose the airborne

D.S.C. File. T.S./100/14. Part I. Encl. 13A.

Tbid. Encl. 16B.

s.A.C.'s. report on operations in Europe 6 June, 1944, to 8 May 1945.

Revised outline Plan for operation Varsity. First Allied Airborne Army APO.740.

File D.S.C./T.S./ 100/14 Pt.2 Encl. 11A. forces to opposition by German night fighter aircraft without the chance of protection by Allied aircraft. On the suggestion of the British Second Army the revised plan for a one - lift simultaneous drop by two airborne divisions east of the Rhine during daylight, a few hours after the assault across the river had been made under cover of darkness by ground forces.

The British Sixth Airborne Division were to secure the northern part of the assault area; seize high ground east of Bergen and bridges over the Issel river; capture the town of Hamminkeln, protect the northern flank of the U.S. XVIII Corps (Airborne) and establish contact with the British XII Corps and the U.S. XVII Airborne Division.

The U.S. XVII Airborne Division were to land on the southern part of the area, seize the high ground east of Diersfordt and bridges over the Issel river, protect the southern flank of the U.S. XVIII Corps and establish contact with 1 Commando Brigade, British XII Corps and Sixth Airborne Division.

The Commanding General U.S. XVIII Corps, Major General M. B. Ridgway, was ordered to be prepared to marshal airborne troops for this operation to take place by 24 March, 1945.

The modus operandi of the airborne operations involved in crossing the Rhine differed essentially from those in Neptune and Market. In these operations airborne forces played a strategic role in advance of the main military effort: the success of the whole operation in each case depended upon the airborne troops being able to obtain their objectives. In operation Varsity the airborne forces were ancillary to the main assault; their use was tactical rather than strategic. The airborne tasks were sub-divided and allotted to smaller groups and units which were to be landed as near as possible to the objectives. Unlike any previous airborne operation the forces arrived after the ground assault had been joined.

The decision to use airborne troops in this manner was made by the General Officer Commanding, Sixth Airborne Division and the Air Officer Commanding No. 38 Group after detailed study of the terrain around Hamminkeln had been made by the Commander of the Glider Pilot Regiment. He was of the opinion that units of the airborne division could be landed in gliders close enough to their objectives to accomplish their tasks immediately after landing. This was taking full advantage of the lesson so drastically learnt at Arnhem that to land airborne troops a considerable distance from their objectives was to court disaster.

The advantages of the method used for operation Varsity were that the enemy would be less likely to anticipate the points of landing and even if they did, would be unable to organise any large scale counter attack because of the scattered nature of the opposition. Subsequent events justified the plan. The enemy were confused and unable to co-ordinate their defences, with the result that the objectives were taken before they could organise effective opposition.

Detailed Airborne Planning

The detailed airborne planning was jointly assigned to the Commanding General XVIII U.S. Corps (Airborne) who was in control of the U.S. XVII and the British Sixth Airborne Divisions and Major General Paul Williams, Commanding U.S.

No. 38 Group Report Operation Varsity Sect. 3. Appx. S.

IX Troop Carrier Command, who controlled the British and American Troop Carrier units. Further division of planning was necessary for the air lift as the U.S. XVII Airborne Division were based on the Continent and were to be lifted from there by U.S. XI Troop Carrier Command, whereas the British Sixth Airborne Division were stationed in the United Kingdom and were to be lifted by the R.A.F. Groups, Nos. 38 and 46 and 52 Wing of U.S. IX Troop Carrier Command.

As in former operations, the control of the R.A.F. share of the lift was vested in the Air Officer Commanding, No. 38 Group.(1)

Each of the troop carrier formations was, therefore, responsible for issuing its own operational orders. (2) British Sixth Airborne Division in the United Kingdom comprised 3rd and 5th Parachute Brigade and the 6th Air Landing Brigade Group. All glider towing was to be undertaken by Nos. 38 and 46 Groups and all parachute dropping by three Groups of No. 52 Wing U.S. IX Troop Carrier Command, which was also stationed in England.

Narrative Operation Varsity H.Q. borne Army. Page 3.

No. 38 Group Report Operation Varsity Sect. 3

38 Group/T.S/10/ 94/1 Air.

Appx. S.

Early in March, the final decision as to where and when the operation was to take place was made, and the operational staffs of the formations concerned began their task of pre-First Allied Air- paring for the largest airborne operation of the war.

# Providing Aircraft and Crews for the Lift

The provision of sufficient transport support aircraft and crews to accomplish the movement of Sixth Airborne Division in one lift provided a considerable problem for the Commanders of Nos. 38 and 46 Groups. The production of transport aircraft had, for some time, been allocated a low priority, so to find 500 serviceable aircraft for the operation strained the Group resources to the limit.

Air Officer Commanding, No. 38 Group, in a letter to the Air Ministry on 1 March, 1945, requested an additional 50 Halifax III's and 54 Stirling IV's to increase squadron establishment to 34 aircraft. Although the Director General of Organization, Air Ministry, was not able to fulfil this request completely, his promise that 35 Halifaxes and 32 Stirlings would be available by 15 March 1945, and that the remainder would be forthcoming as soon as possible but probably not quite in time for the operation, was accepted by the Air Officer Commanding, No. 38 Group.

The aircrew shortage was overcome by retaining tour expired crews in the squadrons and using every crew within the limits of the Group, by this means 320 crews became available for the operation.

- Air Vice Marshal J. R. Scarlett Streatfeild had taken over this post from Air Vice Marshal L. N. Hollinghurst who had gone to India.
- It is not proposed to detail the American Troop Carrier share of Operation Varsity except in so far as it directly concerns the lift of British forces. The overall military and air tasks of Varsity were largely interdependent but it is beyond the scope of the narrative to describe fully the American operations. For information on this phase of Varsity, reference should be made to "Air Operations in support of Rhine Crossing", the H.Q's First Allied Airborne Army's report on Operation Versity, sto.

No. 46 Group

No. 46 Group also had its problem. In addition to having History, Page 88 to maintain essential transport schedules, the Group was committed to provide 120 Dakotas for the Airborne Operation(1) and approximately 60 for possible resupply on the same day. In order to increase the availability, crews and aircraft from the Operational Training unit had to be called in.

> The R. A. F. contingent was thus finally able to provide 440 aircraft and crews for a simultaneous lift of Sixth Airborne Division.

Clider Pilot Regiment Report on operation Varsity. Pages 42-43

After the Arnhen Operation only 48 officers and 666 other ranks remained in the Glider Pilot Regiment and as approximately one thousand crews were required for the British Airborne effort in Varsity, the deficiency had to be made up from R.A.F. reserve of aircrew. These pilots were given glider refresher courses - First pilots on Horses and Second pilots on Hotspurs - and a military course at the Glider Pilot Although the R.A.F. element were operationally inexperienced this was overcome by judicious mixing of Army and R.A.F. personnel in the squadrons and excellent results were achieved.

#### Table I

#### Order of Battle Air Forces

6th British Airborne Division Lift

#### Glider Towing

(a) No. 38 Group (R.A.F.)

	Airfield	Squadron No.	Aircraft
(i)	Rivenhall	295 570	Stirlings 60 Stirlings
(ii)	Shepherds Grov		Stirlings 60
(iii)	Great Dunmow	190 620	Stirlings 60
(iv)	Earls Colne	296 297	Halifaxes 60
(v)	Woodbridge	298 644	Halifaxes 12 Halifaxes 48
(vi)	Matching	O.R.T.U.	Stirlings 20
(b) No. 46 Group (R.A.F.)	Airfield	Squadron No.	Aircraft
(i)	Gosfield	512 575 271	C-47 C-47 C-47
(ii)	Birch	233 437 48	C-47 C-47 C-47 }60

#### Paratroop Carrying

(c) 52nd Wing IX U.S.T.C.C.

Group	Airfield	Aircraf	t
315 Bore	ham	C-47	81
316 Weth	ersfield	C-47	81
	ping Ongar	C-47	81

# Supporting Air Effort

H.Q. First
Allied Airborne
Army Report
on Varsity
A.P.O. 757,
Page 10

The overall air planning was initiated on 28 February 1945, at a conference at S.H.A.E.F. attended by representatives of Twenty-First Army Group, British Second Army and First Allied Airborne Army. The basic air tasks were allotted to the various American and British Formations, and Second Tactical Air Force was given the responsibility of making detailed air plans and controlling all co-operating air forces. The final plan was completed by Second T.A.F. and submitted to S.H.A.E.F. on 20 March, 1945.

The fact that the control of all air operations in connection with airborne assault was again vested in the theatre air commander, Commander-in-Chief Second T.A.F., Air Marshal Sir Arthur Coningham, was another instance of a lesson learned at Arnhem. This principle of theatre air commander being in control of all activity in support of an airborne operation was adhered to in subsequent operations in the Far East.

The two main objectives of the supporting air effort were the neutralisation of enemy air forces and flak positions. Special attention was to be given to the latter, both by artillery fire and by fighter and fighter bomber operations. A special anti-flak committee was set up to study all flak problems and collect up-to-date information in the area. Artillery fire against flak positions was to be continued until the first elements of the troop carrier stream crossed the Rhine. At the same time, fighter bombers and fighters were to attack all flak positions which were then known. During the landings a continuous patrol of anti-flak fighters was to be maintained in the area to deal with any flak positions which might provide opposition against the troop aircraft.

D.S.C. T.S.100/14 Pt.II Appendix 'E'

#### Fighter Cover

Operation Market showed that with overwhelming fighter cover airborne landings could be made with little or no interference from the German Air Force. Up-to-date appreciations of the German fighter strength led to the following conclusions:-

- (i) The German Air Force was not strong enough to offer effective opposition to Operation Varsity.
- (ii) Jet propelled aircraft, although technically superior to our own, were not in sufficient numbers seriously to affect the position.
- (iii) The German Air Force would be better able to interfere if the operation were to be mounted at night.

# Air Defence of the Dropping Zones

It was thought that the Germans might bring in about 600 aircraft to oppose the operation. Therefore, a fighter screen would be necessary east of the dropping zones as well as heavy bombers to attack airfields from which jet aircraft would operate. The Second T.A.F. were responsible for the defence of the dropping and landing zones by day and night,

and were also to provide squadrons to be employed on ground strafing of enemy troop movements.(1)

A.M. File C.M.S.754/ D. Ops./TAC

#### Allocation of the Tasks

The various tasks in support of the Operation were allocated as follows:-

#### Fighter

- (a) The U.S. VIIIth Air Force were to provide a fighter screen east of the landing area during the period of the landings.
- (b) R.A.F. squadrons were to provide air escort of Troop Carrier Command columns from the United Kingdom until tney were relieved by Second Tactical Air Force.
- (c) The IXth U.S. Air Force were responsible for the air escort of the Troop Carrier Formation from the French airfields until it was taken over by Second T.A.F.

Second T.A.F. were responsible for fighter cover during the final stages of the fly in.

#### Bomber

- (a) The U.S. VIIIth Air Force were to attack jet airfields prior to the operation, flak positions near the area, communication targets east of the battle area, and also carry out diversionary attacks. R.A.F. Bomber Command were to bomb other targets and attack communications not already undertaken by the U.S. VIIIth Air Force.
- (b) Radar counter-measures.
- (c) Coastal Command were also to provide day and night diversionary operations.

Two major diversionary operations were conducted on 24 March. Berlin was bombed by U.S. XIVth Air Force based in Italy and R.A.F. Bomber Command attacked the rail centre of Sterkrade as well as oil targets in the Rhur.

#### The Flight Plan

No. 38 Group Report, Varsity, paras. 45-46 The combined flight plan was drawn up by the Joint Planning Staff of No. 38 Group and IXth U.S. Troop Carrier Command at the latter Headquarters, Maison Lafitte, near Paris. Two groups of base airfields for the operation were to be used; in the United Kingdom eight British and three American airfields and, on the continent, fifteen American airfields. The Troop Carrier Formation based in the United Kingdom were to assemble north and east of London, converge to cross the channel near Folkstone to Cap Gris-Nez, turn south east to Bethune, then east-north-east to Wavre, where it would join the U.S. XVIIIth Airborne Division from their bases in France. The whole stream would then proceed north east to Weeze. It was decided in this operation that American and British aircraft should fly in on parallel streams. These streams were kept

<sup>(1)</sup> This was the result of a lesson learnt from German comments on the Arnhem operation criticising over-concentration of defence against air attack and ignoring the danger of ground attack.

respectively one mile north and one mile south of the route, maintaining a space of two miles between the columns until the target rendezvous was reached. From this point the columns were to diverge on to their respective dropping and landing zones and turn left or right respectively after their release or drop. The American paratroop aircraft were to fly in formations of 81, that is nine formations of nine, and their glider towing aircraft in formations of three. The British aircraft towing gliders were to fly in pairs at ten second intervals.

# Navigational Aids

In addition to the usual navigational aids, the Eureka beacons and Compass beacons were to be set up at the various turning points, with additional beacons mid-way between Wavre and the target area. There were no ground markings to be put on the dropping/landing zones, but immediately prior to crossing the Rhine the Eureka beacons and coloured strips with distinctive letter panels were to be set up for the guidance of all formations. This was considered to be sufficient in view of the close proximity of the Rhine to the zones.

H.Q. No. 38 Group Varsity. Report, paras. 25-26

# The Choice of Dropping/Landing Zones

Once the decision to use the airborne forces in a tactical manner had been made, the next step was to select areas for landing near to the objectives. Photographic recommaissance had shown that suitable areas existed.

U.S. IXth T.C.C. Field Order No. 5 Reg. No. A85 Below the town of Bonn the Rhine flows through a flat almost featureless plain, averaging 45-80 feet above sea level, and closely resembling Dutch polderland. The immediate terrain was firm farm land consisting of meadows 2-300 yards in length and of combined farming areas from 5-600 yards in length, highly suitable for glider landing. For the dropping and landing of 6th Airborne Division, six zones were chosen and landing of 6th Airborne Division, six zones and B were for A, B, P, O, U and R. Of these, dropping zones A and B were for the two parachute Brigades, 3rd and 5th, and the other four landing zones for the air landing Brigade gliders.

The zones presented little difficulty for identification from the air. The towns of Hamminkeln and Wesel, the Issel canal, the double track railway from Emmerich to Wesel, a large woodland area and the main road running north from Hamminkeln all provided excellent land marks.

# The Lift of 6th Airborne Division

The tasks of the 6th Airborne Division were sub-divided as follows:-

- (a) The first stage of the operation was to be the dropping of 3rd and 5th Parachute Trigades on landing zones ping of 3rd and 5th Parachute Trigades on landing zones A and B from aircraft of 52 Wing U.S. Exth Troop Carrier A and B from aircraft of 52 Wing U.S. Extraft of 52
- (b) Prior to the main glider landing of the 6th Air Landing Brigade Group, two coup de main parties were to be landed on zones '0' and 'U' to capture one road bridge of the river Issel at Ringenberg and another about one mile east of Hamminkeln.

H.Q. No. 38 Group Report. Varsity Paras. 21.

6th Airborne Division Report. Varsity.

SECRET

- (c) The main glider landings on zones 'P', 'O', 'U' and 'R' involved the carrying of elements of 6th Air Landing Brigade Group. These troops were to be carried in 321 Horsa gliders and 34 Hamiltons and released immediately following the paratroop drop. Their task was to capture Hamminkeln and road and rail bridges over Issel river also to secure dropping zones on which the 6th Division H.Q. would land.
- (d) At 10.57 hours, 46 minutes after the last paratroop drop on dropping zone 'B', the remainder of the remaining elements of 3rd and 5th Parachute Brigade Groups and 6 Air Landing Brigade Group were to be transported to dropping zones 'A' and 'B' in 56 Horsa and 14 Hamilton gliders.

#### Re-supply

As in previous airborne operations, plans for re-supply were made as part of the original plan. Again, a lesson of Arnhem influenced the planners to change the method of supply Instead of having one supply dropping point as at dropping. Arnhem, six were chosen and their positions were given to all crews of the supply dropping aircraft. On the day of the operation, however, only one supply dropping point would be used for both British and American lifts, and it was intended that this point be detailed at the briefing. As an emergency measure, the aircrews were instructed to carry the pin-points of all six supply dropping points so that, if necessary, the main one could be changed even as late as after the aircraft were airborne. Arrangements were also made for a Master Supply aircraft to direct aircrews by means of R/T to their Three Master Supply Halifax aircraft correct dropping zone. were fitted for this purpose and the procedure was laid down that the leader of the supply aircraft, when within 50 miles of the target area, was to call up the Forward Visual Control Post, (1) which was to be flown in with the airborne force, and verify the supply dropping point; when within ten minutes from the target the Forward Visual Control Post would broadcast by VHF to the re-supply aircraft the location of the supply dropping point.

#### The Re-supply Tasks

The first re-supply immediately following the landings was to be carried out by 240 Liberators of the Second Bomb Division, VIIIth U.S. Army Air Force, who were to drop 24 hours supply of food and ammunition equally to each airborne division.

No. 38 Group Operation Order. Varsity. 38G/T.S.10/94/ Air.

Further re-supply, if required, was to be carried out by six Halifax aircraft of No. 38 Group, who were to load six Jeeps and six pounder guns, and all other serviceable aircraft in the Group were to load containers and stand-by at one and a half hours call from 07.00 hours on D plus 1.

<sup>(1)</sup> Forward Visual Control Posts were R.A.F. units consisting of one Squadron Leader controller and two wireless operator mechanics with a jeep and trailer fitted with three radio sets and generators. One Forward Visual Control Post was allocated to each airborne division, and that attached to H.Q. 6th Airborne division was set up within an hour and a half of landing. Forward Visual Control Posts could also be used for directing Second T.A.F. aircraft on to targets selected by the forward troops of the Airborne Division. (For full re ort on F.V.C.P. see Appendix A No. 38 Group Report. Operation Varsity.)

# OPERATION VARSITY. RHINE



THE RHINE CROSSING.

HALIFAX A/C TOWING HORSA GLIDERS OVER
THE FRENCH COAST ON 24TH MARCH 1945.

Three squadrons of No. 46 Group aircraft, after the airborne lift, were to land at Nivelles and load supply panniers. These aircraft were for emergency re-supply only and were to be at two hours call from dawn on D plus 1.

If after D plus 1 emergency re-supply was required, it was to be carried out by 100 aircraft of No. 38 Group.

# The Final Stages of Preparation

Lecture on Varsity to School of Air Support by A.O.C. No. 38 Group (A.M.W.13) p.5. H.Q. F.A.A.A. Report A.P.O. 7h0 Weather: Owing to the nature of the operation the final decision as to the suitability of the weather could not be made until about 17.00 hours on D minus 1. The Commander, Twenty-First Army Group, was prepared, if necessary on account of bad weather, to postpone the Rhine crossing up to seven days in order to ensure support of the airborne forces. The decision as to whether the operation would take place was made by the Commanding General First Allied Airborne Army and Air Officer Commanding Second Tactical Air Force. It was then the responsibility of the Commander of the Troop Carrier Formations to decide the timing of the operation in the light of the weather forecast.

No difficulty arose on the score of weather as a very favourable forecast was issued for 24 March, 1945, and no alterations were necessary. Everything was in readiness for the spearhead of the airborne assault to begin dropping at the originally chosen 'P' hour (10.00) 24 March, 1945.

No. 46 Group O.R.B. No. 38 Group O.R.B. 19 March, 1945 Briefing: The briefing of Station and Squadron Commanders by the Air Officer Commanding No. 38 Group took place at 11.00 hours on 19 March, 1945, at Headquarters No. 38 Group, Marks Hall. Individual aircrew briefing followed on 21 March, 1945. Once briefing had started all stations were sealed.(1)

Clider Pilot Regt. Report on Varsity page 7 In view of the possibility that the visibility might be bad in the battle area, all glider pilots were individually briefed as to their own landing point. This was no small task as each pilot had to know the air plan, their own glide plan and any alternatives, as well as the exact tasks of the troops they were carrying in the event of them themselves being called upon to assist. This meticulous briefing was undoubtedly justified because, on the actual day, although the area was largely obscured with smoke and haze, accuracy of the landings was remarkable. Many glider pilots landed within 20-30 yards of their objectives despite not seeing the ground until they were within a few hundred feet of it.

# The Operation(2)

H.Q. F.A.A.A. Report on Varsity, A.B.O.740 The Air Offensive, preparatory to the launching of Operation Plunder, the crossing of the Rhine, began on 21 February, 1945, when the plan to isolate the Ruhr area was

<sup>(1)</sup> The weight of maps, photos and briefing material involved was in the vicinity of five tons.

<sup>(2)</sup> Principal Sources of Material
O.R.B. Appendices to 38 and 46 Groups
38 Group Weekly Intelligence Summaries
38 Report on Operation Varsity
Olider Pilot Regiment Report on Varsity
46 Group Unofficial History
6 Airborne Division Report
Headquarters ist Allied Airborne Army Report on Varsity, A.P.O.740
IX Troop Carrier Command Report, A.P.O.133
IX Troop Carrier Command Field Order No. 5
Deputy Supreme Commander's Airborne Operation Files
Miscellaneous 2nd T.A.F.
38 and 46 Group Files

From that day until D Day large scale put into operation. heavy and medium bomber attacks were rained on rail bridges and viaducts, road and rail traffic and marshalling and repair yards along a line from Fremen southward to Coblenz. Fighter bombers carried out extensive armed reconnaissance and attacks on bridges and trains west of this line. first 20 days of March 1945 Allied Air Forces flew 3,966 sorties. (1) This air onslaught, unsurpassed since the Invasion of Normandy, culminated during the three days prior to D Day in tremendous attacks on rail and road communications, airfields, enemy troop concentrations and targets inside the Tactical Zone. The town of Wesel was smashed and, by the dawn of D Day, the whole area had been effectively "softened". The result of this air preparation was shown on D Day by the fact that, although Allied Air Forces flew more than 8,000 sorties and over 1,300 gliders were airborne over Germany, less than 100 enemy aircraft were seen. An indication of the comprehensive nature of the air cover provided can be obtained from the following account by the 2nd Tactical Air Force of the day's operations: -

File 2 T.A.F./ S.74/10/0ps. "The very large total of 2100 sorties by fighters and fighter bombers of Nos. 83 and 84 Groups, and Mätchells and Bostons of No. 2 Group, during the day concentrated on supporting and hastening 21 Army Group crossing of the Rhine.

In the morning 71 Mitchells and Bostons attacked 4 flak positions under M.R.C.P. (2) control and claimed good results on two of them. They were followed by fighter bombers attacking similar flak concentrations in the area of the Airborne landings.

Others flew immediate support missions from the Cab Rank and under F.C.P. (3) control against gun positions, factories and centres of energy resistance.

Previous to this three Headquarters behind the battle area had been attacked by Typhoons with good results, and Tempests had swept the North German airfields without finding any activity to deal with.

On the turn round the Bostons attacked three medium gun positions and the Mitchells bombed a troop concentration at Raesfeld and Brunen with good results.

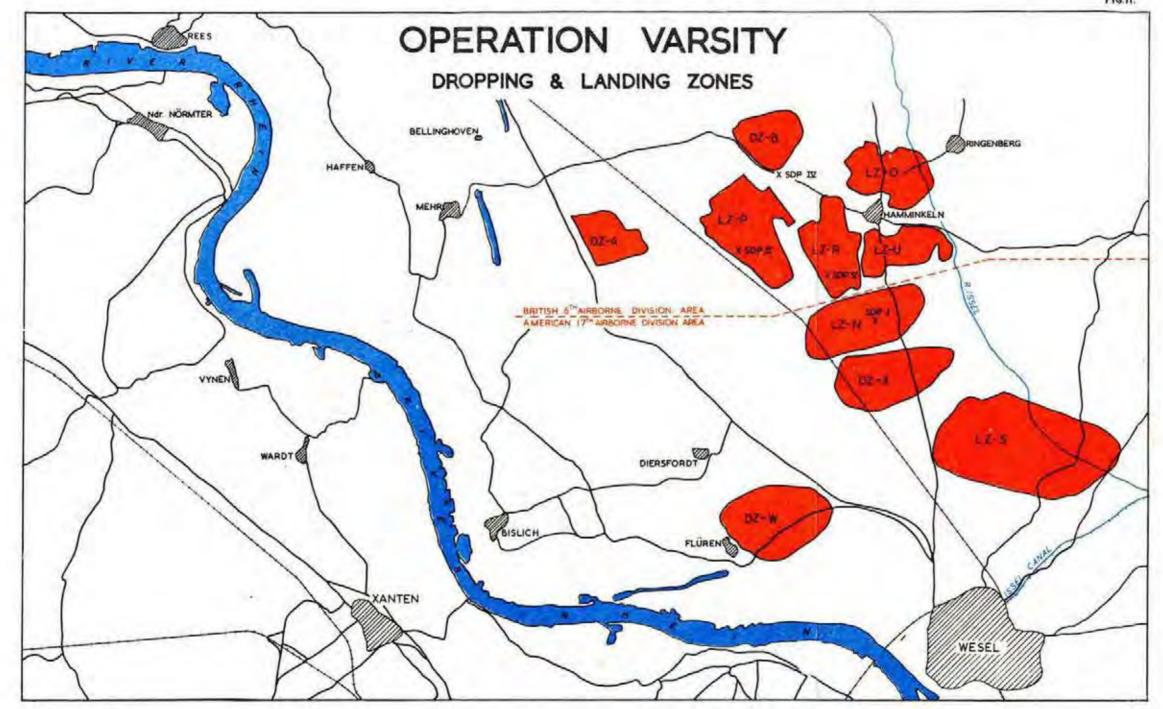
All the time relays of four Typhoons kept attacking flak positions, guns and hutted camps, and fighters flew free lance and defensive patrols in the battle area.

Reconnaissance, aircraft also put in a full day on Tac R, artillery reconnaissance, contact reconnaissance and photo reconnaissance.

<sup>(1)</sup> For detailed description of Air Preparations see <u>Liberation</u> of NW. Europe. Vol V Chap 6. (Prepared in A.H.B.)

<sup>(2)</sup> Mobile Radar Control Post.

<sup>(3)</sup> Forward Control Post.



Facing page 188

# Total sorties divided as follows:-

84 Groups	(Armed Reconnaissances (Immediate support (Pre-arranged support (Mitchells,	212 254 550
	Bostons and escorts)	

Nos. 83 and	(Reconnaissance	180
	(Fighter operations	904

The following message was sent by A.O.C. No. 38 Group to A.O.C. No. 83 Group on the evening of 24th March:-

'Thank you and your chaps for the magnificent cover we had today. No enemy fighters and little flak.'

# The Airborne Operation - Varsity

The weather was perfect on the morning of 24 March, 1945, and everything was in readiness for the greatest airborne offensive in history to begin. Gliders had been marshalled overnight and the launching of the force proceeded without hitch or delay. The efficiency and well timed control of the ground organisation on the eight Royal Air Force sirfields will be appreciated when it is realised that, out of 440 tug glider combinations scheduled to operate, all but one were on their way within one hour of the first glider being towed off at 06.00 hours. In addition, No. 46 Group were compelled to operate from two strange airfields at Gosfield and Birch, from each of which 60 gliders had to be towed. Simultaneously, from their three airfields - Boreham, Wethersfield and Chipping Ongar, 242, out of 243 scheduled aircraft of 52 Wing U.S. IX Troop Carrier Command, were airborne, carrying the main paratroop elements of the division.

The long journey to the Rhine was uneventful. The weather remained excellent with clear visibility and no enemy fighters were encountered - so effective was the huge fighter umbrella that protected the whole route, which lay over British occupied territory - hence there was no flak opposition until the area of the Dropping/Landing Zones was reached. When the stream of aircraft from Britain reached Wavre it was joined by that carrying the 17th U.S. Airborne Division from Continental bases and the huge mass of more than 1,500 aircraft and 1,300 gliders flew on in parallel streams to the target. It took 2½ hours to pass one given point.

No. 38 Group Report on Varsity, 38G/S.10/94/Air.

#### The Paratroop Lift

Three Groups, Nos. 61, 315 and 316 of 52 Wing, IX U.S. Troop Carrier Command were used to carry out the lift of 3rd and 5th Parachute Brigade Groups and also to make the jettison supply drop. 242 C-47 and C-53 aircraft took off from East Anglia on schedule and successfully dropped 3rd Parachute Brigade Group on Dropping Zone A and 5th Parachute Brigade Group on Dropping Zone B. Both these drops were extremely accurate and the supply containers fell to hand and were retrieved without difficulty. Although only eight aircraft were lost in this phase of the operation, 115 were damaged by flak from defence positions in the target area, especially heavy gun batteries north of Rees and Ringenberg.

Thid

#### The Glider Lift

Of the 439 tug glider combinations that took off, 34 failed to carry out their mission. Eight of these were due to technical failures, 16 to slip stream trouble and nine to broken tow ropes. The slip stream failures were not altogether unexpected in view of the extremely close concentration of the flight. Two of the gliders ditched in the North Sea but were picked up by Air/Sea Rescue. No interference from the enemy was experienced until the target zone was reached, when considerable opposition from the ground was encountered; the enemy were using 88 m.m. and Self propelled guns as well as anti aircraft.

Glider Pilot Regiment's Report on Varsity Although the weather was still perfect over the target area, the smoke from the enemy guns in addition to that caused by the Allies' anti flak barrage and also by the general fighting on the ground, created a thick haze. This proved to be a mixed blessing for, although the smoke had the advantage of confusing the enemy gunners who were unable to see where the landings were taking place, it created some difficulty for the glider pilots in finding their landing zones after they had been released and tended to spoil what would have otherwise been an almost flawless performance. Notwithstanding this handicap and the unenviable task of being raked with fire from the ground whilst slowly gliding earthwards, the landings showed a remarkable percentage of accuracy. Almost 300 of the gliders suffered damage from fire from the ground, although only 10 were actually shot down.

No. 38 Group Weekly Intelligence Summary, Form 54.0 Appendix 77

#### The Coup De Pain Landing Zones - O and U

The 15 aircraft responsible for towing the gliders carrying the coup de main parties achieved 100% successfully release. The landings were accurate, complete surprise was achieved and the two road bridges over the Issel were easily captured.

#### Dropping Zones A and B

In addition to the paratroop landings, 24 gliders were detailed to land on Dropping Zone A and 46 on Dropping Zone B. These 56 Horsas and 14 Hamiltoars carried the remaining element of 3rd and 5th Parachute Brigade Croups and a portion of 6th Air Landing Brigade Group. On Dropping Zone A 22 gliders were successfully released, but on B some flak was encountered two aircraft were shot down and five others damaged.

38 gliders were correctly released. The landings on these zones, especially on A, were perfectly concentrated.

#### Landing Zones, O, U, R and P

A high percentage of successful releases was also achieved on the other four zones where elements of 6th Air Landing Brigade Group and 6th Airborne Division Headquarters (Zone P) were landed. Out of 354 aircraft detailed to these zones, all but 27 reported successful releases. Photographic reconnaissance on D Day shows the excellent concentration achieved which resulted in all objectives being captured within two hours of landing.

Seventy aircraft of No. 46 Group returned, after fulfilling their missions, to bases on the Continent to prepare for the resupply should the need arise.

A.H.B.1. DIA. NO. 190 OPERATION VARSITY

何

GERMAN CHIDREN WATCHING DAYOTAS
PASSING CHERERO DAY 24TH MATCH 1945

H.Q. F.A.A.A. Report on Varsity, A.P.O.740

#### 17 U.S. Airborne Division

Simultaneously with the dropping of 6th Airborne Division, the 17th U.S. Airborne Division were being dropped on their four zones of the southern sector by U.S. IX Troop Carrier Command. This lift was carried out by 298 paratroop aircraft and 908 Waco (C.G./4A) gliders towed in single and double tow by 610 tug aircraft. Of this number, over 200 were damaged and 32 shot down by enemy action. These losses were entirely due to opposition from the ground as considerably less than a score of enemy aircraft were seen.

# Resupply

Almost immediately following the landing of the last glider, the automatic resupply aircraft began dropping their cargoes on the Supply dropping point. This mission was carried out by 239 Liberators of U.S. VIII Air Force. By using heavy bombers for resupply, advantage was taken of another lesson learned in previous operations - that as many men and as much equipment and supplies should be landed in the shortest possible time. If the Liberators had not been used, delay would have been caused whilst aircraft employed in the actual operation returned to their bases and loaded with supplies.

The resupply, in this instance, cost 15 Liberators shot down and many others damaged by flak, but as approximately 85% of the 600 tons of supplies dropped fell in the areas of the two airborne divisions, the result more than justified casualties.

Further resupply was not found to be necessary, owing to the extremely favourable progress on the ground and the arrangements which had been made for air resupply to both airborne divisions were cancelled on D Day and D plus 1 by the General Officer Commanding the Second Army. It was possible to undertake the supply by normal surface transport. By the evening of D + 1 the operation was complete. The Germans had been overwhelmed and both airborne divisions joined in the advance to north east Germany.

#### Conclusions

The planning and execution of the operation was an outstanding example of profiting from experience gained in earlier operations and attention being paid to enemy criticism of these operations. It can be stated, without fear of contradiction, that it was completely successful and this can be entirely attributed to the adherence, by the planners, to certain principles now fundamental to airborne operations. The main conclusions to be drawn from the operation were as follows:-

# (a) Air Commander

The importance of the appointment as Air Commander for the operation of the Tactical Air Force Commander of the theatre was most emphatically illustrated. The highly effective air operation during the month preceding the operation over the whole area and the huge cover provided for the actual flying completely negatived any attempt at air defence by the enemy.

# (b) One Lift

The operation was carried out in one highly concentrated lift, the whole force being landed in one hour. The enemy were thus unable to recover from the initial surprise and prepare for any subsequent landings as at Arnhem, but were overwhelmed almost before they were aware of what was happening.

# (c) Resupply

Resupply followed immediately after landing and was carried out within one hour. Results indicated that one day's resupply should always be flown in as soon as possible after the landing.

# (d) Tactical Landings

Possibly the outstanding feature of Varsity was the landing of the airborne forces in a tactical manner. The tasks of the division were sub-divided and allotted to Units within the Brigades and these units were landed as close as possible to their objectives. In previous operations the troops had been landed all together at one or more zones and divided after landing. The speed with which 6 Airborne Division captured its objectives, within two hours of landing, can be attributed largely to the tactical landings causing complete confusion to the enemy who had anticipated a concentrated landing in the vicinity of an aerodrome near Hamminkeln.

# (e) Artillery Support

For the first time an airborne landing area was within allied artillery range. This was of valuable assistance until the actual landings began, when it had to be withheld. If resupply had been needed, an awkward position might have arisen as to which was most important, resupply or artillery support. Fortunately, resupply was not needed because of the success of the operation.

#### (f) Communications

No difficulties were presented by communications and the whole system operated most efficiently despite the distances betwen the Commands and the number of Headquarters and Control Posts involved. Three factors were mainly responsible:-

- (i) The operation was carried out in a very short time, thus there was no widely fluctuating ground position as at Arnhem;
- (ii) The weather was very good;
- (iii) A large practice communication exercise Token had been held on 16 March, 1945.

#### Enemy Opposition

No. 38 Group O.R.B. Weekly Intelligence Summary App. 77. Although enemy opposition from the air had been completely negatived by the magnificent work of the Allied supporting Air Forces, there was appreciable opposition from flak. This was not as bad as had been anticipated but a considerable amount of damage was done to gliders and aircraft by small arms fire as well as flak weapons. One lesson was apparent.

Aircraft flying at low level (600 feet) were liable to suffer as much damage from these small arms as from heavier This was the case in Varsity. The U.S. IX Troop Carrier Command, flying well below 1,000 feet, lost 46 aircraft shot down by ground fire and 348 damaged, whereas the R.A.F. Groups, flying at 2,500 feet, lost only four aircraft through flak and 32 suffered damage.

#### Glider Loading

No. 38 Group W.I.S. Appendix 77.

Apart from the difficulties experienced in carrying out the loading on schedule due to the aircraft from Tarrant Rushton and No. 46 Group having to move to staging airfields, trouble was again encountered with lashings for the Hamilcar loads. This was due to three factors:-

- (i) Types of loads were constantly being changed, requiring different types of lashings;
- (ii) Old types of loads underwent modifications which were not notified;
- (iii) Modifications to loads were made without notification of the new lashing requirements.

A great deal of delay and unnecessary work could have been avoided were it possible to decide on standard loads for Hamilcars and the responsibility for ensuring that these standards were adhered to and also that changes in load were notified in order that new lashings might be designed.

# Glider Unloading

In Operation Varsity the Horsas Mark II were used principally for all vehicle loads and the Mark I for troops. The advantage of using Mark II for equipment was that it could be unloaded through the nose as well as the tail and This saved valuable seconds after landing. side.

# Glider and Glider Pilot Casualties

Glider Pilot on Varsity 38 Group Report on Varsity para.

A distinct disparity between the glider pilot casualties Regiment's Report in the British sector of 27% and in the American section of approximately 11% was apparent. This was probably due to the fact that the British gliders were released from 2,500 feet or above and the Americans from about 600 feet, thus the former were exposed to fire from the ground for a much longer period. Conversely the Americans suffered a much greater proportion of parachute and tug aircraft damage than did the British. The conclusion to be drawn from this was that a low release height exposed the tug aircraft to damage as opposed to the gliders, whereas a high release had the opposite effect. However, one reason for the heavier casualties to the British gliders and pilots was that, owing to the shortage of glider crew available, many inexperienced men had been pressed into service and thus the standard of training was not up to the high level of the previous operations. Three additions to the high casualties:-Three additional factors also

> (i) The difficulties of attempting a tactical landing in conditions of bad visibility and a more severe concentration of enemy fire than the Americans experienced;

- (ii) Several of the tug glider combinations arrived at the target area at 3,500 feet instead of 2,500 feet; the gliders were released too high causing a tendency to overshoot;
- (iii) Damage to gliders also caused on the ground by landing too fast due to lack of experience.

No. 46 Group Unofficial History, Page 94.

Supreme

Commander's

Chiefs of Staff

on Operations in Europe of

Report to

Combined

A.E.F.

# R.A.F. No. 46 Group

The success of this Transport Support Group, in spite of the fact that all its squadrons had to move from their home stations on to two unoccupied airfields whence they launched their quota of the lift and that the Group carried out all its transport commitments until D minus 2, indicates that, provided facilities are always available for glider training, the launching of even a large scale airborne operation such as Varsity does not present so many fearsome problems of organisation for air transport as had been previously experienced.

This last of the great airborne operations to take place in the European war was, undoubtedly, the most successful. The glider landings and parachute drops were carried out with great accuracy and almost 100% of the supplies dropped were recovered. The timing of the airborne attack achieved the surprise as planned and the rapidity with which the force reformed and established positions after landing resulted in the objectives being taken without delay and casualties being extremely low.

In the words of the Supreme Commander himself, General Eisenhower, "The great operation of forcing the Lower Rhine proved successful to the fullest extent of my desire".

# Minor Airborne Operations

2nd T.A.F./File 30317/86 Ops. Encl. 2A.

No. 38 Group Report.

Thid, Encl. 27A.

#### Amherst and Keystone

As the Canadian First Army advanced into Holland, Twenty First Army Group proposed to use S.A.S. troops to create confusion in enemy rear areas, stimulate local resistance and generally assist the Canadian First Army. S.H.A.E.F. did not consider that the operation could be launched before 5 April, 1945, and preliminary planning conferences were held on 2 April and 3 April, 1945. The first of these conferences was between No. 38 Group and Headquarters, S.A.S. Troops and the second was held at the Canadian First Army Headquarters between representatives of all formations concerned, including No. 84 Group R.A.F., who were the controlling Tactical Air Force in the area. The plan was finalised at a further meeting between No. 38 Group and S.A.S. Headquarters, Essex and, on 5 April 1945, operational instructions were issued by Headquarters, First Canadian Army.

# The Plan

#### Amherst

Forty-seven Stirlings of No. 38 Group, R.A.F., were to drop 2nd and 3rd Regiments de Chasseurs Parachutistes on 20 selected dropping points with the task of securing airfields at Steenwijk, Helve and Leeuwarden, 15 road and 3 railway bridges. Simultaneously 18 Halifaxes of No. 38 Group were to drop the same number of jeeps on six of these Dropping Zones.

# Keystone

Seven Stirlings of No. 38 Group were to convey troops of the 2nd S.A.S. Regiment, with two Jedburgh wireless teams and three jeeps carried in three Halifaxes to four previously selected dropping zones. Their task was to take the airfield at Teure and seven road bridges. The area of the dropping zones was that east of the Zuider Zee, South of Groningen and north of Zwolle, and was chosen by planning staffs of S.A.S. Headquarters and No. 38 Group. (1)

# Control

A combined Headquarters, with representatives of Nos. 38 and 84 Groups and the Commander S.A.S. Troops was established at Headquarters, First Canadian Army on 5 April 1945. Decisions regarding the air force rested with the Air Officer. Commanding No. 38 Group, Air Vice Marshal J. R. Scarlett-Streatfield at his Headquarters, Marks Hall, Essex.

Tbid, Encl. 4 and 13.

# Cover Plan

In order to exaggerate the size of the operation in the mind of the enemy, it was decided to drop simulators (dummies) from the parachute carrying aircraft and for Bomber Command and No. 100 Group to operate in the areas as they would in the event of a normal airborne landing. In this connection, permission for direct contact between No. 38 Group and Bomber Command was granted. A special bomb-line was agreed upon, beyond which the First Canadian Army would not advance between the hours of 21.00 and 06.00 on the night of the operation.

# Thid, Encl. 24A. Route

The flight plan, drawn up by No. 38 Group, routed the aircraft in from a southerly direction via Dungeness and Cape Grisnez, over friendly territory returning direct from Holland to their bases in east Anglia. Allied anti-aircraft defences en route were restricted for the night and prohibited within a corridor 10 miles wide of a line Brussels/Gooh/Enselde/Emmen for 45 minutes before and after certain fixed times.

# Thid, Encl. 3A. Resupply

Although S.A.S. Headquarters did not wish to plan for resupply, the R.A.F. representative stated that, as aircraft were available, provision for resupply should be made. Daylight resupply by fighter aircraft of No. 84 Group was agreed upon.

The final decision as to the date of the operation was made on 7 April 1945, for it to take place on the same night - the operation having been postponed 24 hours due to the rapid advance of the Canadian First Army.

Tbid, Encl. 39A, No. 38 Group Report on Amherst, Ref. 38G/S.10/ 114/Air.

#### Execution - Amherst

The weather was poor on the night of the operation with low stratus cloud and fog over the dropping area. No. 38 Group accordingly warned the Canadian First Army, No. 84 Group and 2nd T.A.F. that the drop would have to be made

<sup>(1)</sup> For details and map references of the dropping zones, see No. 38 Group Report on Operation Amherst/Reystone. Reference 38G File/S.10/114/Air.

No. 38 Group O.R.B. Appendix 86. "blind" from 1,500 feet above the cloud and fog, using Gee fixes and that dropping errors up to three miles might be expected. In view of ground reception lights for dropping the jeeps from the Halifaxes not being visible from the air, it was decided to cancel this part of the operation and drop only the troops.

Forty-six of the 47 Stirlings dropped their loads of troops successfully on the night of 7/8 April, 1945, and the remaining aircraft carried out its mission on the following night. No interference was encountered and all aircraft returned safely to their bases. Subsequent analysis of the drops by Brigadier J. M. Calvert, Commanding S.A.S. Troops, showed an average error in drop of slightly more than three miles, which was not unsatisfactory in view of the fact that there was insufficient time for special deployment of Gee stations and that there was poor Gee cover in the area. The 18 jeeps were flown to an airfield in the Canadian sector on the following day and driven overland to the operational area.

#### Keystone

Operation Keystone was postponed until the night of 11/12 April 1945. Five Stirlings and three Halifaxes were detailed. The aircraft took off as arranged but, owing to bad weather and consequent inability to make contact with the Amherst ground parties, the operation had to be abandoned. Similar conditions on the following night again prevented the operation being carried out.

On the ground the situation progressed favourably; casualties were not high and reports from the S.A.S. Head-quarters indicated that the operation was successful. There were no casualties in No. 38 Group, R.A.F.

#### Conclusions

- (1) Operation Amherst proved that it was possible to plan and execute an airborne operation of this nature within 3 days, provided the Army and Air Force were co-ordinated in one Headquarters.
- (2) Although, at the time of planning, resupply may not appear to be necessary, it is always advisable to plan for it. In this case it was found to be necessary.
- (3) Selection of dropping zones in an operation of this nature may not always be possible in time to brief crews without a last minute rush. It was recommended that a small committee of Army and Air Force personnel should continually be reconnoitring for suitable dropping zones ahead of the advancing armies, so that an immediate decision may be taken, thus expediting the launching of the operation and simplifying the problem of briefing.
- (4) The jeep dropping part of the operation had to be cancelled owing to bad weather preventing the ground reception being visible to the aircraft. This could have been avoided had parachute teams been dropped simultaneously with the jeeps.
- (5) In order to facilitate linking up on the ground without delay, paratroops, when dropping at night, should always be dropped in as short a stick as possible. The reason for this was that it was impossible, at night = and possibly under unfavourable

SECRET

weather conditions, for the aircraft to guarantee to drop two separate sticks of drops in the same place. Even in the event of the drops being made "blind" on a Gee fix, it would be almost impossible to make the two drops in the same place. Lastly the safety of the aircraft was jeopardised by having to make more than one run over the Dropping Zone.

# (6) "Blind" Paratroop Dropping

Operation Amherst proved that, when it was necessary to drop paratroops "blind", with no assistance from the ground, use of Gee fixes was probably the most effective navigational aid. In view of the fact that the target area was badly placed for Gee coverage and as the angle of cut of the lattice lines were 16 degrees, the error of drop of three miles was not unexpected. However, even although it were possible to create the best possible conditions for the use of Gee - resulting in an accuracy of drop of approximately 100 yards, this would be scarcely practical, as it would involve setting up a special Gee chain which would take anything from one to six months, according to the area.

# Operation Schnapps

No. 38 Group O.R.B. Appendix 109. On 8 May 1945, personnel and equipment of 1st Airborne Division were landed in Copenhagen by 33 Stirlings, nine Halifaxes and 10 C-46s of No. 38 Group. The operation was carried out without undue incident and subsequent resupply was maintained at intervals during the remainder of the month.

# Operation Doomsday

No. 38 Group O.R.B. Appendix 152.

No. 38 Group Report Operation Doomsday. Although hostilities had ceased in Europe on 8 May 1945, and Operation Doomsday did not take place until the following day, thus scarcely coming under the category of operations against the enemy, it is worthy of mention in view of the fact that more than 7,000 troops and over 2,000 tons of equipment and supplies were transported by aircraft of No. 38 Group across several hundred miles of sea.

The object of the operation was to land Allied troops in Norway as soon as possible after the German surrender. The purpose of this was to provide support for the Norwegian Resistance Movement and to provide for the arrival of the main forces. It was also possible that minor operations might have to be performed against stray elements of Germans or Norwegians. From the political view point it was necessary to establish Allied control in Norway without delay in view of the fact that Sweden and Soviet Russia might also have aims in this direction.

#### Planning

Ibid. Paras, 15-20.

The first suggestion of the air landing of a force in Norway, after the German surrender, was made at a conference held at Headquarters, Scottish Command on 21 November 1944. Arising out of this meeting, a Special Planning Committee was formed and a draft plan was prepared. On 23 April 1945, a conference at 1st British Airborne Corps decided that, as S.A.S. troops were fully engaged at that time, it would be better to employ one of the British airborne divisions in the landing. Final orders to carry out Operation Doomsday were received by First Allied Airborne Army from the Supreme Command on 5 May 1945 and, on the following day, No. 38 Group

were ordered to furnish the lift, assisted by C-46 aircraft from IX Troop Carrier Command.

#### Command

The Air Officer Commanding, No. 88 Group, R.A.F., was appointed Air Commander to co-ordinate and control all Air Forces for the operation. The Air Officer Commanding No. 38 Group was appointed Commander of the troop carrier forces.

# The Objectives

Told. Paras. 25-35. The main objectives of the operation were as follows:-

- (i) Oslo, capital of Norway and centre of administration both German and Norwegian;
- (ii) Stavanger, because of its good airfield and having one of the nearest good harbours to the United Kingdom. It was also suitable for the operation of fighter aircraft:
- (iii) Kristiansands, because of its importance as a minesweeping base in the Skagerrak. After detailed study
  had been made of the airfields chosen for these objectives, it was decided to use only Gardermoen, near Oslo
  and Sola, near Stavanger, because they were the only
  suitable airfields on which four-engine transport aircraft might safely be landed. Any troops intended for
  the Kristiansands area were to be landed at Sola and
  make the rest of the journey by road.

# Fighter Protection

It was not considered that there would be any enemy fighter opposition to the operation, but, as a precaution, 12 Mustangs were to cover Gardermoen airfield and six Mustangs, Sola airfield, during the initial landings.

#### Execution

Told. Paras. 43-67. The operation was carried out in four phases between the 9 and 13 May. Delay was caused by unfavourable weather conditions and the operation took 36 hours longer than had been intended. As no enemy opposition was expected, the shortest possible route was taken by the aircraft and the landings were successfully accomplished. Only one aircraft was lost and that contained the Air Officer Commanding No. 38 Group, Air Vice Marshal J. R. Scarlett-Streatfield, on 10 May 1945. Despite an intensive search and special air/sea rescue being carried out throughout the whole period of the operation, no trace of the missing aircraft was ever found.

The fly-in of maintenance and S.A.S. troops, in addition to supplies, was carried out by Stirlings, Halifaxes and O-46 aircraft when the weather permitted on the subsequent days during the month. The operation was completed and the last maintenance was flown into Norway on 27 May 1945.

# Conclusion

Thid. Paras. 68-96. Although No. 38 Group had had little experience in transport operations, it proved itself capable of carrying them out. Using Halifax Mk. III and VII and Stirling Mk.IV, in addition to C-46 aircraft of U.S. IX Troop Carrier Command,

DS 96326/1(314)

it was found possible to make the return flight from the bases of the United Kingdom direct to the Norwegian aerodromes without having to refuel.

The Halifax and Stirling bomber aircraft were not entirely suitable for a transport role. They were not designed to land with a heavy petrol and freight load, therefore the all-up landing weight had to be carefully considered when planning, so that, after landing at their destinations in Norway, the aircraft had enough petrol for the return journey. Some of the freight was carried in parachute containers in the bomb bays and jettisoned before landing, thus overcoming the danger of landing with an excessive all-up weight.

#### Summary

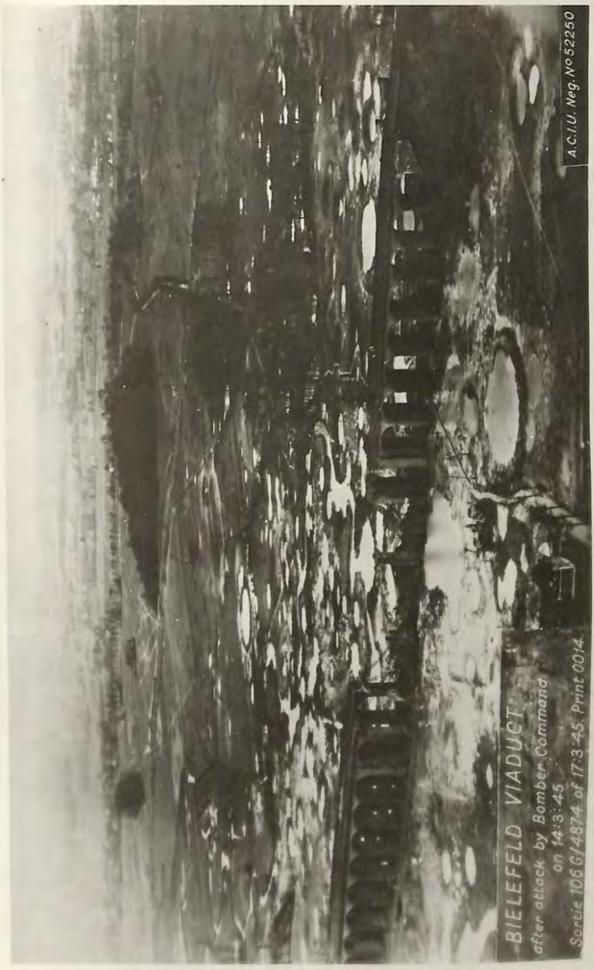
Aircraft	Destination	No. of Aircraft Detailed	No. of Aircraft Airborne	No. Success- ful	No. Missing
No. 38 Group	Gardermoen	815	714	613	100 abortive 1 lost
U.S. 52nd Wing	· u	77	50	50	0
No. 38 Group	Sola	84	83	83	0
U.S. 52nd Wing		322	322	322	0
TOTAL		1,298	1,169	1,068	100 abortive 1 lost

It will be seen from these figures that the C-46 aircraft, employed by U.S. 52 Wing, was more successful than the Halifaxes and Stirlings in an operation of this nature.

#### Loads Carried

Between the 9 and 27 May, 1945, the following were amongst the loads carried to Norway:-

Main Force	4	Supplies	
Troops	7,139		
Jeeps	654		
Trailers	503		
Motor cycles	234		
	eta, eta.		
Total tonnage	1,896	Total tomage	710



AHEI DIAG No. 844

ATTACK BY ROCKET TYPHOONS ON TERBORG TELEPHONE JUNCTION.

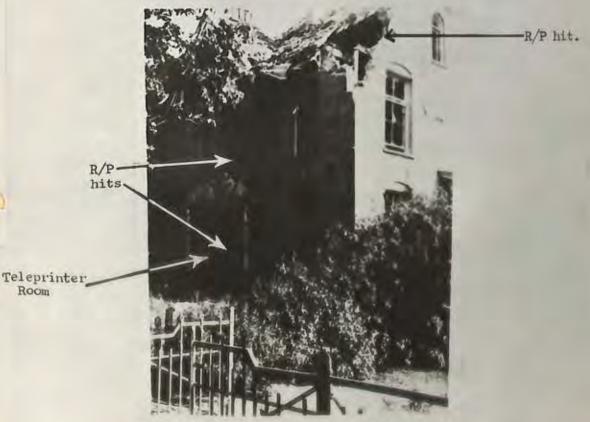
Building 1: the Telephone Control



Cables under ground floor in basement

Building hit: Telephone switch-board on ground floor destroyed, but cables in basement still usable.

Building 3: the Teleprinter House.



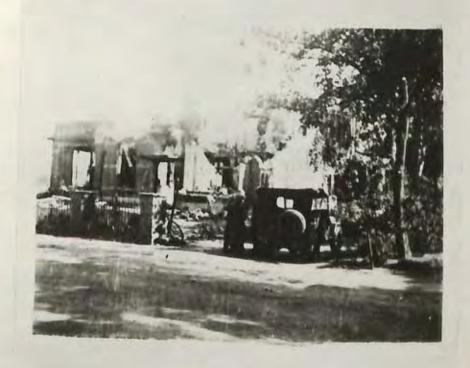
3 D/H with R/P: room containing Teleprinters hit.

Room

ATTACK BY ROCKET TYPHOONS ON

TERBORG TELEPHONE JUNCTION

Building 4: General Windig's House.



Hit by unknown number of R/F.

Gutted by fire

General wounded and died.



400/2343. - 0003. - Liner attacked by Typhoons of 121 Wing, set on fire and destroyed.



430/874. - 0034. - Forward facing oblique. The experiment of a forward facing oblique on a Spitfire proved very successful. This photograph illustrates a typical interdiction rail cut on the Emmerich-Rees-Wesel line.