

SECRET

R.A.F. NARRATIVE
(First Draft)

THE LIBERATION OF NORTH - WEST EUROPE
VOLUME IV

THE BREAK - OUT AND THE ADVANCE
TO THE
LOWER RHINE

12 JUNE TO 30 SEPTEMBER 1944

AIR HISTORICAL BRANCH (I)
AIR MINISTRY

SECRET

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PREFACE

During the summer of 1944 the German Armies in France were defeated and sent reeling back to the frontiers of the Reich. For the Allies, the long period of planning and preparation was brought to fruition and by September three Groups of Armies under the Supreme Allied Commander, were securely established on the Continent. There can be no doubt of the great influence that air power exercised on the campaign in Normandy during the three months following D-Day. In the bitterly contested struggle for Caen, the fierce battles fought along the road to Falaise and the break through at St. Lo the British and American heavy bombers played an indispensable part, although it was not always possible for the Armies to take full advantage of their aid. That the ground forces began to rely on support from the Strategic Air Forces became evident when large numbers of heavy bombers were employed in battering into submission the enemy garrisons left behind in the Atlantic and Channel ports at a time when they might perhaps have paralysed the communications and industrial centres of Germany. It should not be forgotten that from June to August the heavy bombers, in addition to their other tasks, also made a great contribution to the offensive against the flying bomb sites in northern France.

While the Strategic Air Forces attacked the railway centres and airfields in the enemy's rear, movement in the battle area was stultified by the Tactical Air Forces. In particular these air operations proved the great value of the ubiquitous fighter bomber in close support and armed reconnaissance. During the month of August when, for once, fine weather favoured the Air Forces, there were two occasions when this aircraft proved to be a decisive factor in the battle. At Mortain the British rocket-carrying Typhoons halted the desperate attempt of Von Kluge to reach the Atlantic and so delay the Allied advance towards the Seine. A few days later, the German Army having at last cracked, its retreat was harassed by the fighter bomber and the roads east of Argentan were filled with wrecked transport. Probably the best testimony to the effectiveness of the Tactical Air Forces comes from the words of the enemy himself and throughout the narrative much use has been made of German documents, especially the War Diary of the Seventh Army.

After the battle for Normandy the Supreme Commander had to decide whether to advance towards the Rhine on a broad or a narrow front. The adoption of the former line of approach with the main effort directed to the north led to the battle for Arnhem, the first attempt to gain a foothold beyond the Rhine. At this point the volume closes with the Allied Expeditionary Force facing the Meuse and the Moselle with its communications stretched to the utmost.

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CHAPTER 1

THE CAPTURE OF CHERBOURG AND CAEN

By the middle of June 1944, after little more than a week of operations, the situation in the Normandy beachhead was that the Allies had successfully landed over 320,000 men with 100,000 tons of stores and had established a continuous lodgement area some 50 miles wide and ten miles deep.⁽¹⁾ Though Caen, the most important of the initial objectives, had not been taken, the beachhead was firmly held and the strategically important centres of Bayeux, Carentan and Isigny were in Allied hands. Sheltered anchorages had been created, small ports had been cleared and two artificial harbours were rapidly taking shape. Despite the spell of bad weather, the rate of Allied build-up compared very favourably with that of the enemy.

Half a dozen landing strips had been cleared and fighter aircraft were already operating from them. Allied strength was such as to be able to guarantee a virtual immunity from direct enemy air attacks by day to both shipping and the ground forces although the complete answer had not at that stage been found to the night raider and particularly to the mine laying aircraft. Until the lodgement area was greatly extended there was little chance of organising night air defences that could secure a high degree of protection.

From the onset, little had been seen of the German Air Force in the daytime. Taken completely by surprise on D-Day, the Luftwaffe had been slow to appreciate the Allied intentions and had made little effort against the liberating forces during the first 24 hours. Even when re-inforcements had built up the strength of Luftflotte 3 in France and the Low Countries, it was so heavily outnumbered by the Allied Air Forces that it was incapable of gaining the initiative. Its bases were constantly attacked all round the clock and every part of the organisation was incessantly harassed. Its servicing installations were destroyed, its airfields bombed, its transport wrecked and its aircraft shot out of the sky by superior forces.

The most immediate requirements of the Allied forces after they had successfully established a foothold on the Continent were the following:-

- (a) A major deep water port or group of ports to serve a secure base area.
- (b) The capture of terrain lying to the south-east of the lodgement area which was the most suitable country both for the operations of tanks and for the rapid construction of airfields. Thus the first logical development after consolidating the beachheads was the attempts of the British to seize Caen and those of the Americans to take Cherbourg.

(1) (a) Totals landed up to 18 June:-

Brit/Canadian Sector: 314,500 men; 54,280 vehicles; 102,600 tons stores
U.S. " : 307,400 " ; 41,460 " ; 115,000 " "

(b) Casualties: Total; 36,000

Brit/Canadian Sector: 1,760 killed; 7,600 wounded; 3,700 missing
U.S. " 2,600 " ; 12,600 " ; 7,700 "

In the concluding remarks on the initial assault (see Vol. III) it was observed that Neptune was not outstanding for the use of completely new tactics or new weapons in the air but only for the immense scale on which existing techniques and equipment were employed. As soon as the initial moves across the Channel had been completed however, two important innovations were made in the technique of air warfare. They were the use of pilotless aircraft and the employment of heavy night bombers in daylight operations. The first of these was introduced by the enemy when he decided to begin the long-expected Diver offensive. The first flying bombs were launched on the night of 12/13 June, and after a pause for two nights, the attack was resumed on the night of the 15/16th. Though many facts about this weapon and concerning others still being developed, had long been known to Allied intelligence, so that effective counter-measures had already been undertaken to reduce the scale of attacks, it was not found possible to ignore the threat once they began. Thus the successful exploitation of pilotless aircraft on a large scale at this juncture, compelled the Allies to take immediate counter-measures at the same time as it sustained the hopes of the enemy that they might yet snatch a victory. (1)

The second innovation was brought about by the Allies when they decided to risk the employment of a large force of R.A.F. heavy night bombers in a daylight attack on a strongly defended enemy objective. On the evening of the 14 June 330 Lancasters and Halifaxes dropped over 1200 tons of bombs on the harbour area of Le Havre. The attack was carried out at dusk so that crews were able to find their targets by daylight and return to their bases under cover of darkness. A strong escort of Spitfires accompanied the bombers. The object of the attack was to cripple the E. and R. Boat activity centred on Havre which had been seriously interfering with the cross-Channel convoys and which, being protected by powerful batteries, could not be suitably dealt with by the Navy. The raid was a complete success in that it dealt a knock-out blow to the light surface craft traffic in the port and in that the German Air Force was unable to retaliate upon the attacking bombers. Two and a half hours later it was followed up by another raid on the shipping at Havre in which 118 bombers dropped a further 588 tons.

It will be recollected that in the original plan it had been hoped to seize Caen on D-Day or as soon afterwards as possible before the enemy had arrived in force. Unfortunately for the fulfilment of these hopes the enemy though confused about the size, nature and objects of the Allied landings immediately appreciated the crucial importance of Caen as a route centre, and reacted with greater vigour in that area than in any other. In their efforts to defend the city they were favoured by their dispositions of armoured divisions which were well situated to make a speedy concentration in that area. The bad weather was also of considerable assistance in preventing the Allied Air Forces from blocking their routes and attacking them in transit on a decisive scale.

The 21st Panzer Division already disposed in the Caen-Falaise area, the 12th S.S. Panzer Division moving through Lisieux from the neighbourhood of Evreux, and the Panzer Lehr Division coming through Argentan from Chartres and Le Mans, though delayed and weakened by air attacks were soon in

(1) See R.A.F. Narrative: 'Air Defence of Great Britain Vol. VII The Flying Bomb and Rocket Campaign'.

A.E.A.F.Int/Op.
Summary No.148,
Section C, p.13

Ibid, Section
B, page 5.
A.M.W.I.S.
No. 251, p.3

position around the city. Far from being dislodged by the limited forces used against them it was not long before their concentration became a definite menace to the Second British Army.

Having discovered that a frontal attack could make no impression against Caen, it was planned to make an armoured thrust in the Tilly-Villers Bocage area to meet a second thrust by the 51st Highland Division along the east bank of the Orne. This pincers movement was to be supported by the bombing of the Caen bridges and the dropping of the 1st Airborne Division near Evrecy, south of Caen.

Air C-in-C.
A.E.A.F., ORB,
June 1944,
App. J/19

The plan was opposed by Air Chief Marshal Leigh Mallory on the advice of the Air Officer Commanding No. 38 Group and the Commanding General of the IXth Troop Carrier Command. Air Vice Marshal Hollinghurst and General Williams both condemned it on the grounds that while it was virtually impossible as a day operation in face of enemy flak strength around Caen, the Allied Navy would not undertake to withhold fire during the night. These views were telephoned to General de Guingand who told the Air Commander-in-Chief at a later date that they were very distasteful to General Montgomery.

A.P.W.I.U.
373.2/1945
para. 20

See this Narrative,
Vol.3 Chap.VII

The Germans were also preparing for an armoured attack which aimed at cutting through to the sea but this was frustrated by the bombing of the H.Q. of Panzer Gruppe West on 11 June by the aircraft of No. 2 Group which completely disorganised arrangements for the co-ordination of the enemy counter-offensive.

The attack by the 51st Highland Division east of Caen began on the night of 12/13 June; in support 100 aircraft of R.A.F. Bomber Command bombed the Orne bridges in Caen. Photographic reconnaissance flown on the following morning showed two road bridges badly damaged and the railway bridge in the river. However, the ground forces failed to make any progress.

West of the city, the 7th Armoured Division went into action on 10 June and in two days of stiff fighting took Tilly-sur-Seulles and Villers Bocage. The Panzer Lehr Division was thereupon re-inforced⁽¹⁾ and the British troops were compelled to withdraw with heavy losses (14 June).

Air C-in-C.
A.E.A.F. ORB,
June 1944,
p.13

In view of the fact that neither of the two jaws of the pincers had made much progress the airborne plan was dropped and the Second British Army was in fact forced to revert to the defensive. The delays in build-up due to rough seas and the shortage of ammunition prevented General Montgomery from sending his reserves forward to re-inforce the divisions taking part in the attempted pincers movement. The presence of the 12th S.S. and the 21st Panzer Divisions in strength north of Caen enforced a policy of caution on General Montgomery who feared an attempt by the enemy armoured formations at breaking through to the sea.⁽²⁾

On the whole it would seem that this possibility was a real one for in the area north of Caen the enemy were very near to the sea. However, the Telephone Log of the

-
- (1) The 2nd Panzer Division was newly arriving from Amiens.
(2) With the arrival of the 2nd Panzer Division there were now four Panzer Divisions facing the Second British Army.

A.H.B.6
Trans VII/70
German Seventh
Army Telephone
Log. pp 20, 21,
23.

Seventh Army shows that the Germans were badly disorganised around Caumont and Villers Bocage up to 14 June when the 2nd Panzer Division was arriving in strength. Headquarters of the 47th Panzer Corps had arrived in the Caumont area on 11 June to direct the tactical battle but on the 13th had still not established communications with the Seventh Army H.Q. General Marcks commanding the LXXXIV Corps (H.Q. St. Lo) was killed by a fighter bomber attack on 12 June. There are three separate references in the Log⁽¹⁾ to the weakly held gap in the Caumont area. One of them records that the C.in C. West had ordered that the gap was to be closed and the 2nd Panzer Division was diverted to the sector for this purpose.

The net result of the operations was that the British were unable to take advantage of this weakness so as to encircle Caen: on the other hand, the enemy also failed to mount a counter-offensive powerful enough to endanger the beach-head.

Minutes 14th
Air Cmdrs.
Meeting
para. 14.

For a day or two there was some talk of a crisis before Caen in Allied Air Force circles. At the Stanmore Conference on the morning of the 14 June the Deputy Supreme Commander said that the situation in the Eastern Sector might become critical at any moment. All Air Forces were to be held in readiness lest they should be required to assist the Army. The Air C. in C. flew to France to discuss air co-operation in the battle for Caen with General Montgomery but the latter saw no reason to regard the situation as critical. They agreed that General Dempsey should arrange with Air Marshal Coningham and Air Commodore Kingston McLoughry⁽²⁾ what assistance should be given by the Air Forces in the Caen battle.

Air C.in C.
A.E.A.F. O.R.B.,
June 1944,
p. 13.

Ibid p. 14.

The proposal was that heavy bombers assisted by mediums should lay down a barrage behind which the ground forces could advance and seize the four or five miles that lay between them and Caen. The R.A.F. representatives⁽³⁾ objected to this on the following grounds:-

- (a) It was difficult to find satisfactory aiming points for high level bombers in the country north of Caen where the German strongpoints were placed.
- (b) The bombers would have to leave a safety margin of at least 1,000 yards in front of our own troops. This would mean that the first 1,000 yards of their advance would have to be made over country that had not been bombarded. This could only be avoided if the Army agreed to withdraw our troops 1,000 yards before bombing began.

The result of these objections was that the proposal to employ the heavy bombers was abandoned for the time being (until 7 July in front of Caen) and it was left to Twenty-First Army Group and the Commander Advanced A.E.A.F. to work out the details of a scheme whereby the advance of the Army should be aided by attacks on individual strongpoints carried out by medium and fighter bombers. This policy of inaction in the Caen area was heavily criticised on all sides but no section of Allied opinion was quite so disturbed by its implications

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- (1) References to this Log are mainly from A.H.B.6 Trans VII/70 but certain use has also been made of a U.S. Translation.
 - (2) Deputy Chief of Operations, H.Q., A.E.A.F.
 - (3) This meeting, which was also attended by A/C/M Tedder, was held on the 15 June.

Minutes the
16 Air Cmds.
Meeting para 13.

as were the Air Commanders. For them it meant that their plans for basing Air forces on airfields in the lodgement area would have to be reconsidered and they would have to face the difficulties of operating at extreme range for periods much larger than those planned. Air Marshal Coningham asked the Army to keep in mind where they had expected to be by D plus 10: nothing was to be gained by saying that all was well. A greater sense of urgency was needed. These views were broadly those shared by the Deputy Supreme Commander, the Air Commander in Chief and by some of the American Generals as well as by the Commander, Advanced A.E.A.F.

Bomber Cmd.
Night Raid
Report
No. 654.

During the next week there were sharp local engagements but no large scale fighting around Caen. On the night of the 14th 224 aircraft of Bomber Command delivered a most accurate attack against troop concentrations at Aunay sur Odon (nearly 1170 tons of bombs) the target given by the Second British Army. Preparations were made for a determined attempt to take Caen the operation to begin on 22 June. It was realised that this delay gave the enemy an opportunity to bring up re-inforcements and to construct defence works which would have to be reckoned with later but the adverse weather was affecting the arrival of armoured units and ammunition over the beaches so that General Montgomery felt obliged to wait. Meanwhile pressure was maintained in local actions designed to prevent the enemy withdrawing units from the line and thus forming a mobile reserve.

Despite the general continuance of bad weather the air forces were very active during this period though the targets being attacked were in greater variety than usual owing to the lack of army support demands.

On the night of 15/16 June, Bomber Command followed up their successful raid on Havre docks of the evening before by a night raid on Boulogne harbour in which over 1,300 tons of bombs did great damage to light surface craft and shore installations. Two railway centres and two fuel and ammunition dumps in N.E. France were also attacked. On the following night over 1,200 tons were dropped on the synthetic oil-plant at Sterlrade/Holten.

Diversion of air effort against Flying Bombs

But for many weeks, enemy attacks on London by flying bombs, resumed on the night 15/16 June and continued for several months, rivalled the Allied re-entry into north west Europe as a topic of general interest. Despite the fact that in a whole day the weight of explosives carried to London represented little more than the equivalent of an average Mosquito raid on Berlin, the staccato stutter and the shattering roar of the flying bomb, day after day and night after night soon became a factor that made itself felt. The Allied leaders were determined that they would not be forced into diverting effort from the offensive but in the course of time they had no other alternative and large airforces were tied up in an elaborate defensive organisation and in offensive counter-measures.

Hill Despatch,
paras 54 - 56.

The first Flying Bomb fell at 0418 hours on the 13th near Gravesend but as it was followed by only three others, Air Marshal Hill did not put his defence plan into execution. The forces under his operational control included ten squadrons of day fighters and seven squadrons of night fighters in his own Command, about 250 heavy A.A. and 400 light A.A. guns in A.A. Command, and about 2,000 balloons in Balloon Command.

C.O.S.(44)
191st Intg.
13 June

At the morning meeting of the British Chiefs of Staff only a few hours later, Sir Charles Portal said that it was uncertain whether the pilotless aircraft had been launched from 'ski' sites or from 'modified' sites. If as seemed most likely, they came from the latter, then some 3,000 Fortress sorties or 5,000 Marauder sorties would be required to neutralise them. This represented an appalling diversion from Overlord. On the other hand less than a thousand Fortress sorties would be required to neutralise four main constructions which were believed to be supply sites. Consequently, the Air Staff recommended that heavy attacks be made by the Strategic Bombers on the supply sites with lighter but frequent attacks on launching sites by the Tactical Air Forces.

W.P.(44)320,
13 June.

The order or priority as passed to the War Cabinet and as sent to the Air Commander in Chief A.E.A.F. from the Air Ministry was as follows:-

Air C. in C.
A.E.A.F., ORB,
June 1944.
Appendix J/27

- (a) Four supply sites (Domleger, Beauvoir, Renescure, Sautrecourt)
- (b) Thirteen of the most advanced 'modified' sites in the Pas de Calais/Seine/Somme areas.
- (c) Eleven of the original 'ski' sites that were known to be capable of firing.
- (d) Ten further 'modified' sites which were approaching completion.

W.M.(44)77th
Mtg.
Conclusions,
13 June.

The War Cabinet decided that counter-measures would be required and requested the Supreme Commander, under whose control the Strategic Bomber forces operated, to order attacks on the targets recommended by the Air Ministry in so far as this could be done without prejudicing the urgent needs of the battle in France. General Eisenhower readily agreed and within a few days R.A.F. Bomber Command and the U.S. VIIIth Air Force had received S.H.A.E.F. directives on the subject. The directive received by Bomber Command accorded these Crossbow operations first priority and they retained this ranking until late August.

Bomber Command
ORB, OL Supplement,
p.13

Minutes 16th
Air Cnds.
Meeting

Two supply sites, Beauvoir and Domleger were attacked on the 14th, a repeat attack on the former was carried out on the 15th and all four sites were attacked on the 16th, by heavy bombers of the U.S. VIIIth Air Force. The resumption of attacks by pilotless aircraft on a heavy scale during the night of 15/16 June caused them to be regarded with greater seriousness. At the Stanmore conference on the 16th it was reported that about 160 flying bombs had been launched and the conference on the 17th heard a report that 245 had been plotted in the 24 hours ending at 06.00 hours that morning. In these circumstances there is little wonder that early counter-measures were regarded as a matter of the utmost urgency and thus the VIIIth Air Force attacked all four sites which were first priority targets on 16 June and Bomber Command attacked them again after nightfall on the 16th/17th. Both attacks were heavy but the R.A.F. attack was believed to be the more effective largely owing to the fact that the 150 Liberators of the VIIIth Air Force were forced by the weather to make use of the G-H technique for blind bombing. The night attack was carried out by 391 Lancasters and Halifaxes using Oboe technique and despite the weather good concentrations were obtained at least on Sautrecourt. On the following night thick clouds in north France restricted operations to

Bomber Command
Night Raid
Report No. 636

attacks on other targets and for a week the only operations connected with Crossbow made by Bomber Command were a small Oboe attack by 10 Mosquitoes on a construction at Watten on the night of 18/19 June and another by No. 617 Squadron which made an evening attack on the same target with 12,000lb bombs on the 19th. This attack was also carried out with Oboe technique because of the weather.

The U.S. VIIIth Air Force using Liberators equipped with G-H for the most part, attacked Watten with 220 (short) tons on the 18th and thereafter, on the seven successive days from the 19 to 25 June, tonnages of 1,130; 750; 200; 600; 530; 420 and 526 (all in short tons) were dropped on Crossbow sites.⁽¹⁾

Crossbow
Weekly
Summary
No. 27.

During the week from 14 to 20 June inclusive, the heavy night bombers dropped about 1,400 tons on supply sites and nearly 100 tons on Watten. They did not attack launching sites. The heavy day bombers, on the other hand dropped about 944 tons on supply sites with a further 220 tons on Watten but also attacked 28 launching sites with 1,030 tons.

Minutes 16th
Air Cnds.
Meeting.

At the Air Commander's Conference on the morning of the 16 June to which reference has already been made, Air Chief Marshal Leigh-Mallory regretfully observed that help against the flying bomb would be required from 2nd Tactical Air Force as well as from the Strategic Air Forces if launching sites were to be effectively neutralised. Air Marshal Coningham's response to this was forthcoming on the following morning when he announced that seven squadrons had been allotted from 2nd Tactical Air Force to attack 'modified' (Launching) sites.

2nd T.A.F.
Daily Logs

As this was a task for specialists who could learn by experience how to recognise these difficult targets, the same squadrons were kept on these duties for some time. Their attacks were ineffective and, owing to the light flak installed to protect the sites, relatively costly. During the week from 13 to 20 June, 213 tons of bombs were dropped by fighter-bombers of 2nd Tactical Air Force on these operations. At the same time medium and light bombers dropped 165 tons.

Crossbow
Summary
No. 28

During the fortnight following this period, fighter-bombers attacked only three targets (16 tons) but medium and light bombers made a contribution from the Tactical Air Forces by attacking 24 sites with nearly 880 tons of bombs. In this same period Bomber Command joined the Tactical Air Forces and the heavy day bombers in their attacks on the launching sites. Over 6,200 tons were dropped by the night heavies on sixteen modified sites while 31 sites were attacked with 1,200 tons by the heavy day bombers. Supply sites were also attacked by the heavy bombers, about 6,000 tons being dropped by the U.S.A.A.F. and 4,000 tons by the R.A.F. on their targets.

Thus in three weeks, at a period in the war when this might have been decisive, the Allies were compelled to undertake a bombing programme which resulted in the dropping of over 32,000 tons of bombs on targets not directly related to the re-conquest of occupied Europe. These huge tonnages represented a very large diversion of effort from the main tasks that the Allied Air Forces had to face. Little was known either about the targets or about the effectiveness of

(1) A small proportion of these tonnages was dropped on sites whose purpose was not completely understood. For example, Watten was believed to be a rocket ("Big Ben") supply site.

the bombing. Targets were difficult to locate and hit and it was doubtful whether many of the attacks were directed against suitable objectives. Neither the Commanders of the Strategic Air Forces who saw their mission as the destruction of the German capacity and will to fight, nor the Commanders of the Tactical Air Forces whose aim was to support the ground forces in their advance across France into the heart of Germany, looked upon Crossbow operations with favour. Nevertheless it should be recalled that a certain number of sites were being put out of action and the scale of attack was probably kept down by the counter-bombing. And finally it must be added that the civilian casualties during the first week of the attacks were 735 killed and 5,435 injured.

Reaction of the German High Command to the Allied Success

If statements made by Blumentritt⁽¹⁾ as late as December, 1948, are to be relied on, it would appear that after the Allied beachheads had been linked up, Rundstedt no longer believed that a second landing would be made in the Fifteenth Army region across the Straits of Dover. But this was not the opinion of his subordinate Rommel (who commanded Army Group B covering both areas) nor was it held by Hitler and the Supreme Command of the Armed Forces (O.K.W.) and thus there was considerable reluctance to remove any troops from the Somme and Pas de Calais regions to reinforce the Seventh Army which was struggling to seal off the lodgement area in Normandy. The damaged railway system and the destruction of the Seine bridges meant that no speedy return of Fifteenth Army troops could be hoped for had the threatened Allied landing taken place in the Pas de Calais after German divisions had been moved to Normandy.

Blumentritt
Questionnaire,
First Series,
Q.8.

A.H.B.6.
Transl.
No.VII/73
p. 15.

On 12 June Rommel sent his first appreciation of the situation to Rundstedt and asked for it to be forwarded to Hitler and the O.K.W. The Allied operations were, he said, aimed at establishing a beachhead from which to drive into the heart of France. They also wanted Cherbourg and the Cotentin peninsula. Various factors had prevented the German forces from throwing the Allies into the sea, the chief of which were the following:-

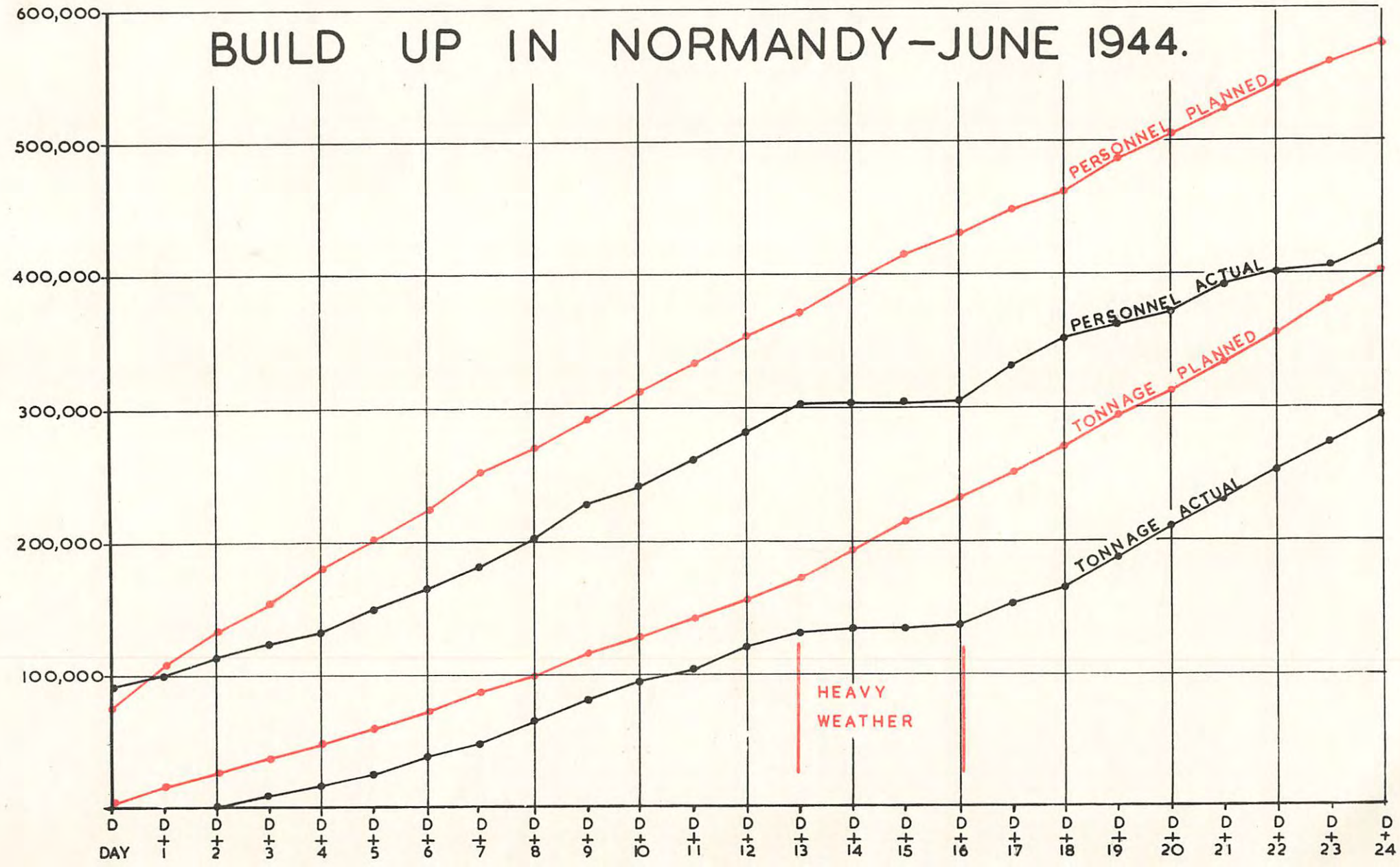
- (a) the overwhelming superiority of the enemy air force
- (b) the effect of heavy naval artillery
- (c) the superiority of Allied equipment
- (d) the effective use of airborne troops.

This disturbing report apparently brought Hitler to the Western Front for with Keitel and Jodl he met Rundstedt and Rommel at Soissons on 17 June. The latter explained the seriousness of the situation and asked for permission to withdraw initially behind the Orne. While they were at Soissons the news of the American break-through at St. Sauveur le Vicomte arrived but even this news did not persuade Hitler to yield to Rommel's request. The only result of the conference seems to have been a further repetition of the order by Hitler to hold fast everywhere and defend Cherbourg at all costs. The impracticability of such a course with the resources available, and the restrictive effect of such orders on the strategy that could be employed by his generals did not seem to weigh with the Fuehrer.

Blumentritt
Questionnaire,
First Series,
Q.9.

(1) In answer to questions put by Mr. Chester Wilmot.

BUILD UP IN NORMANDY—JUNE 1944.



The great gale, 19 - 21 June

The next setback to the attempt to take Caen early in the campaign was the north-easterly gale which struck the anchorages on the 19 June and raged for three days with hardly a lull. Nothing as severe as this had been experienced in these waters during any June within memory. Provision for such a disaster had been made when the operation had been planned so that reserves of supplies were available to tide over the three days when cross-Channel traffic dropped to a mere trickle. But the immense damage done to shipping, to the Mulberries and to unloading facilities on the beaches was an unexpected handicap whose repercussions were seen in the reduced scale of the offensive for the following week.

Owing to the rough weather that had lasted the whole fortnight before this catastrophe the Allied build-up had already fallen behind schedule but this had not attained serious proportions until the interruption and damage resulting from the great gale. In any case the air attacks on the French transportation system had so reduced the rate of enemy build-up as to put the Allied forces in a relatively favourable position.

Where craft had been caught close to the shore or actually unloading at open beaches when the gale blew up the result was that vessels were either stranded or holed on the numerous obstructions and sunk in shallow water. The American Mulberry at St. Laurent, was open to the north east and being in a partly finished state, was completely wrecked and had to be abandoned without any attempt to rehabilitate it. The great concrete breakwaters and blockships were dislodged, some of them breaking up and some subsiding. Piers and wharves were smashed: scores of landing craft and landing ships were wrecked.

On 22 June there were hundreds of landing craft, ferries, barges and small ships of many types piled up in indescribable confusion on the beaches. For some days the only harbours that could be used were the five small anchorages protected by blockships (Gooseberries) and weeks of strenuous efforts had to be made before vessels could be salvaged, refloated and repaired. A great number were total losses and remained to rust on the beaches.

Fortunately the British Mulberry (Arromanches), being better protected than the one at St. Laurent, was less badly damaged. Despite the total loss of the outer breakwater, the main structure held and thus 155 ships and landing craft were saved. Nevertheless over 850 craft of all types were disabled for the time being, including about 50% of the Landing Craft (Tanks) available.(1)

Thus in spite of the growing requirements due to expanding operations and larger forces ashore, the average number of shipping arrivals at the beachhead was lower in the last week of June than it had been in the week after D-day.(2) This had a restrictive effect upon the number and scale of offensives that could be waged simultaneously and, incidentally, upon the lift that could be allotted to Air Forces build-up. In effect, the great gale had done in three days more than all the forces

Neptune
Report by
A.N.C.X.F.,
Vol.1, p.97.

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- (1) 320 out of a total of 650 Landing Craft (Tanks).
(2) Arrivals of merchant shipping in France from 7 - 30 June are shown in a table which omits the initial assault lift.

at the disposal of the enemy had been able to do since the assault was launched. During the period from D-Day plus seven to D-Day plus 18 nearly 400 craft were put out of action by bad weather while enemy action had only resulted in 56 shipping casualties. Total losses were 118 and 27 respectively.

The closing of Sword beaches

One other set-back was also suffered in the Caen area when during the last two weeks of June the most easterly beaches had to be closed to shipping. This was not due, as might have been expected, to the attacks of the E and R-boats based on Havre though these were sometimes very troublesome. Nor was it due to the accumulation of mines which had been laid by aircraft as well as by light surface craft.

What made the Ouistreham beaches untenable was the constant menace from mortars and guns which fired across the Orne from the Franceville area and did considerable execution. Cruisers, destroyers and other bombarding vessels, artillery from shore positions and aircraft with bombs and rockets, had made repeated attempts to find and attack enemy gun positions but after a short interval of silence the guns came to life again. Personnel craft were routed further west after losses on the 15 and 16 June while stores were diverted after the 25 June. The area was finally closed to Allied shipping on the 1 July.

The plan to raid Berlin 21 June 1944

On the second day of the gale the clouds lifted and the Allied Air Forces had their most active day for a long time. Encouraged by the hopes of improved weather the American Air Commanders suggested an operation which they believed would be a far more effective reply to the V.1. than the attacks being made upon Crossbow sites. It was suggested at the Stannore conference that the U.S. Strategic Bombers and the R.A.F. Heavy Bombers should join forces in a heavy daylight raid on Berlin. If the maximum effort was committed about 6,000 tons of bombs would be dropped on Berlin as compared with about 60 tons dropped on London in one day of flying bomb operations. This was the contrast drawn by the Deputy Supreme Commander when he gave his approval to the scheme.

This was not a plan that would be expected to commend itself to the Air Commander-in-Chief as his interest was centred upon what would directly affect the battle area but as he had no suitable alternative targets to offer he made no objection to the proposal. From his point of view the loss of fighters and fighter-bombers which would be called upon for special escort tasks was the most practical disadvantage of the plan but it was no doubt galling to his amour-propre that although he was responsible for the overall air plan during the initial stage of 'Overlord' no one had consulted him when the Berlin plan was first mooted to find out whether or how it would affect the battle in Normandy. His personal history records that the first he heard of it was at the Morning Conference on the 20 June although it was due to take place on the following morning.

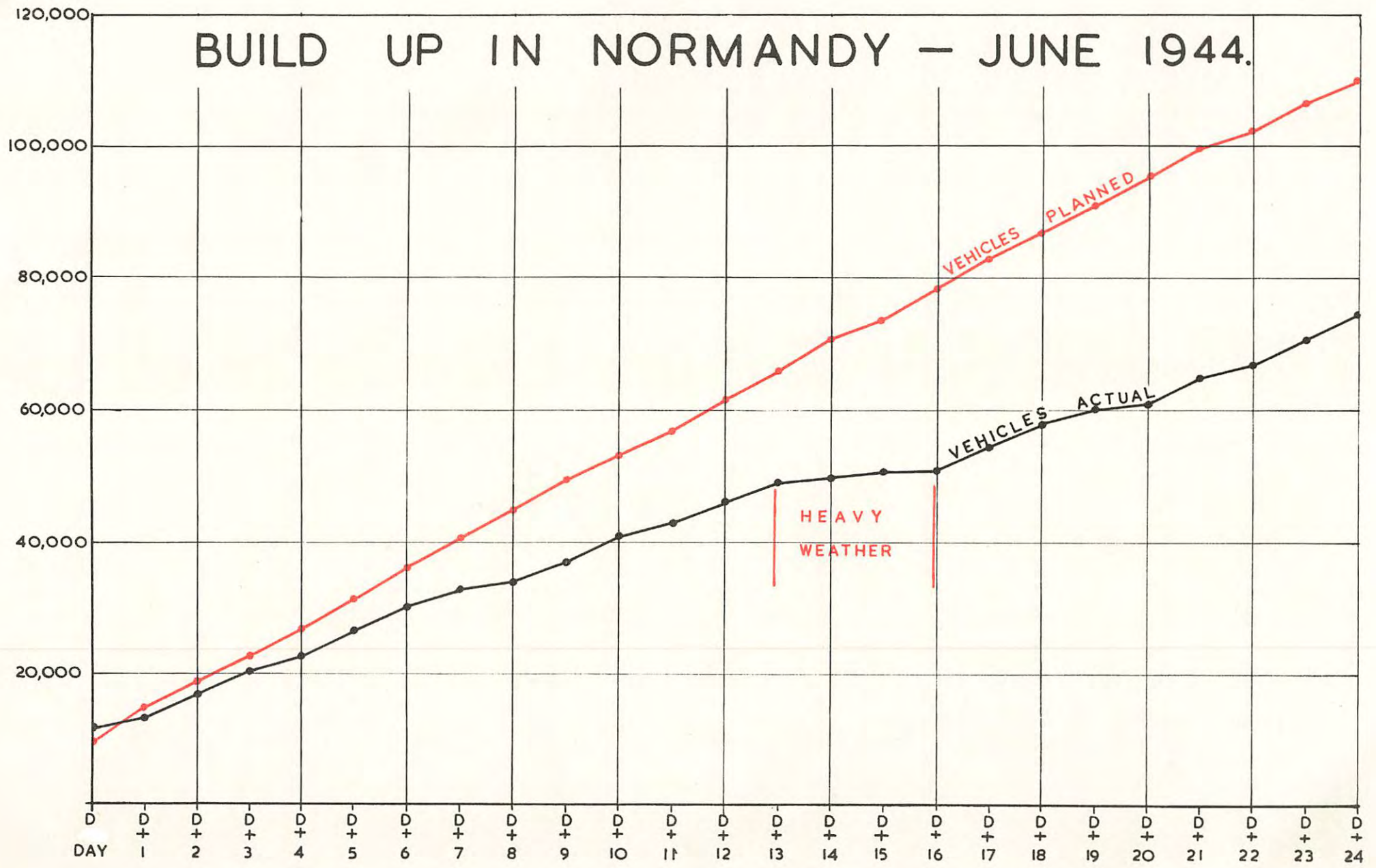
At midnight on 20/21 June, A.C.M. Harris cancelled Bomber Command's share in the operation. His reason for doing this has not been discovered in R.A.F. records but it might well have resulted from an unfavourable weather

Minutes Air
Commanders
20th Mtg,
paras. 12
to 15

Ibid,
para. 15

Air C. in C.
A.E.A.F., O.R.B.
June 1944
p. 18

BUILD UP IN NORMANDY — JUNE 1944.



VIII Air Force
Monthly Sum. of
Ops, June 1944.

well have resulted from an unfavourable weather forecast.⁽¹⁾ The weather was not kind and although 1,300 Fortresses and Liberators flew on the operation there was no chance of succeeding in the main object. About 600 aircraft dropped their bombs on Berlin while the remainder attacked a score of other targets. In the circumstances the raid could not produce any overwhelming impression upon the German mind and the enemy war effort.

Its practical effect on the Allies was also rather unfortunate. About 50 bombers were shot down and about 300 aircraft-fighters and bombers - flew on the Russia where most of them had to remain for some little time. It was on this date too, the first occasion for shuttle bombing from England to Russia, that the Germans staged a heavy raid on Poltava which resulted in the destruction of 50 U.S.A.A.F. Fortresses. Between 21 and 29 June, for one reason and another, less than 700 heavy bomber sorties were flown by the U.S. VIIIth Air Force.

The isolation and capture of Cherbourg

On 16 June, the U.S. 9th Infantry Division assisted by the 101st Airborne Division, attacking across the Merderet river in the direction of the west coast of the Cotentin Peninsula, captured St. Sauveur le Vicomte which had been an objective of the Airborne plan before revision. Two days later, the Peninsula was cut off when the 9th U.S. Infantry Division reached the sea at Barneville. The enemy was thrown into confusion, three Divisions being severed with remnants both north and south of the corridor.⁽²⁾ Rather slowly but with little difficulty, the corridor was widened and the American forces were reorganised so that a new VIIIth Corps⁽³⁾ faced south along with the XIXth and Vth Corps while the VIIth Corps with three divisions faced north to advance on Cherbourg.

German Seventh
Army Log,
P. 23.

Ibid., p.24.

Ibid., p. 27.

Ibid., p. 35.

The whole operation was however rather slower than expected, partly owing to difficulties experienced in build-up due to the heavy seas. The Germans, knowing that Cherbourg was to be attacked as soon as possible, noted on 13 June that 'The outstanding development of 13 June is that the enemy is attempting with heavy tank forces to break out of the Ste Mere Eglise area and force his way to the west coast.....'. On the following day Rommel ordered everything to be thrown in to prevent the cutting off of the Cotentin but owing to the slowness with which reinforcements and supplies arrived on the scene as a result of Allied air operations, the Seventh Army regarded the situation as grave by the evening of the 15 June. On the 16th Hitler ordered that Cherbourg must be held at all costs but permitted a retreat to the north as this appeared inevitable. The Log kept at H.Q. German Seventh Army records at 2300 hours on the 17th the surprise of

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- (1) In 'Bomber Offensive' A.C.M. Harris declares that, in his opinion, there were insufficient U.S. long-range fighters available to escort the British and U.S. bomber force. (Cf. pp.245-246.)
 - (2) These were the German 91st, 243rd and 77th Infantry Divisions. Some of these were cut off but broke through to the South rather than join in the retreat on Cherbourg.
 - (3) It was this VIIIth Corps which, under the command of General Patton (Third Army), broke through at Avranches and reached the open country behind the German Seventh Army.

the Germans that no large scale operations had been undertaken towards Cherbourg - a fact which had enabled General Von Schlieben to organise its defence. The same entry recorded that General Hellmich had been killed in a fighter-bomber attack but no time or place were indicated.

On 19 June Montebourg fell after the enemy had been worn down by sea and air bombardment and on the 20th Valognes was entered without heavy fighting. The enemy had already withdrawn his main forces within the outer ring of the Cherbourg defence works and on the 21st noted that 'the entire front was surprisingly quiet..... The enemy had six and a half divisions at his disposal for an attack on Cherbourg.'

Up to that time the IXth Air Force fighter-bombers operated by the IXth Tactical Air Command had been able to provide all the air support required by the ground forces as there was no hard crust to be broken. But when the First U.S. Army came up to the fortified line a set plan of air support was drawn up by the Commander, Advanced A.E.A.F. and the Commanding General, IXth Air Force. The latter also flew to Normandy for hour to hour consultation with the Commanding General of the VIIth Corps. By then, the IXth Air Force had two Groups of fighter-bombers established on the Continent and two and a half Groups going over in the morning to return at dusk. The R.A.F. had six Rocket Projectile squadrons based in Normandy and another Squadron moving there at dawn and returning at dusk. Three Spitfire squadrons were also operating from newly constructed airstrips in the beachhead.

The ground forces fixed an assault H-hour for 1400 hours on 22 June. The air plan was to support the troops by bombing two 'L' shaped areas south of Cherbourg and a number of gun positions, strong points, troop concentrations, dumps etc.

At about 1200 hours on 22 June the ground forces withdrew 1,000 yards and the U.S. artillery laid on an anti-flak barrage to assist the air forces. Four Rocket-Projectile Typhoon squadrons and six Mustang squadrons of 2nd T.A.F. led off by attacking strongpoints from 1240 to 1300 hours. The R.A.F. squadrons were followed at five minute intervals during the next hour by group after group of Thunderbolts of the IXth Air Force which bombed and strafed all defences and personnel observed in the areas. Altogether, 12 groups of Thunderbolts operated, making a total of 46 squadrons of U.S. and British fighters in action at Cherbourg over a period of little more than one and a half hours. (1)

At H-hour, nine boxes of Marauders (2) made Oboe attacks on selected dominant features in the defence system including Fort du Roule, the fortress which commanded the whole neighbourhood including the approaches from the south.

The IXth Air Force devoted a major part of its effort during the day to the support of the preliminary assault on the outer perimeter of the Cherbourg defences. This amounted to 1,100 sorties by Marauders, Thunderbolts, Mustangs and Lightnings which only ceased with the onset of darkness. The 2nd Tactical Air Force effort amounted to 59 Typhoon

(1) 2nd T.A.F. Op. Order No.188 may be found at Appendix 80 to 2nd T.A.F. O.R.B., June 1944.

(2) Each box consisted of 16 Marauder bombers led by one Oboe pathfinder aircraft.

Ibid.,
p. 46.

Minutes 19th
Air Comdrs.
Meeting.

A.D.V. H.Q.,
A.E.A.F., O.R.B.
June 1944,
p. 44.

Ibid.,
pp. 47, 48 and
49.

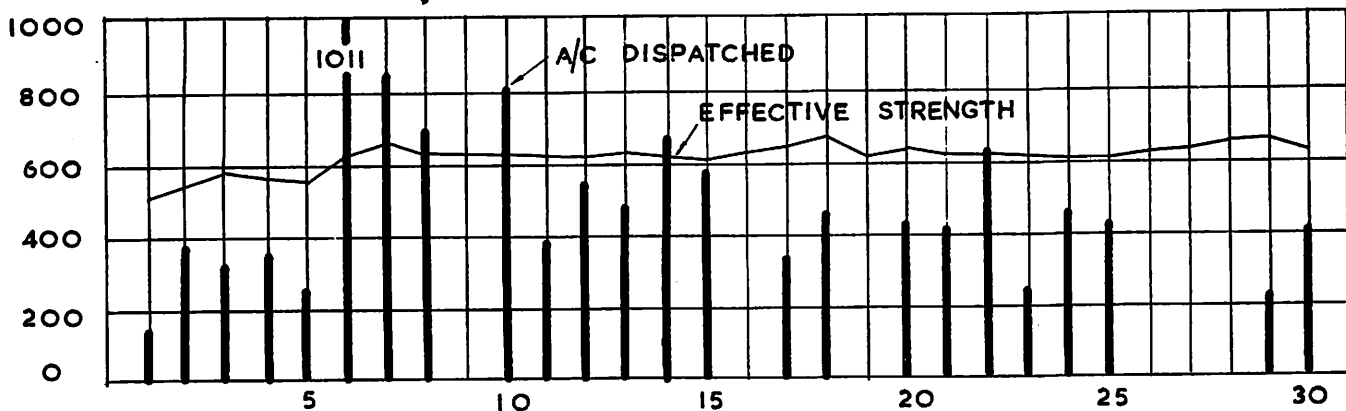
2nd T.A.F.
Op. Order
No. 188

Minutes 23rd
Air Comdrs.
Meeting
para. 13.

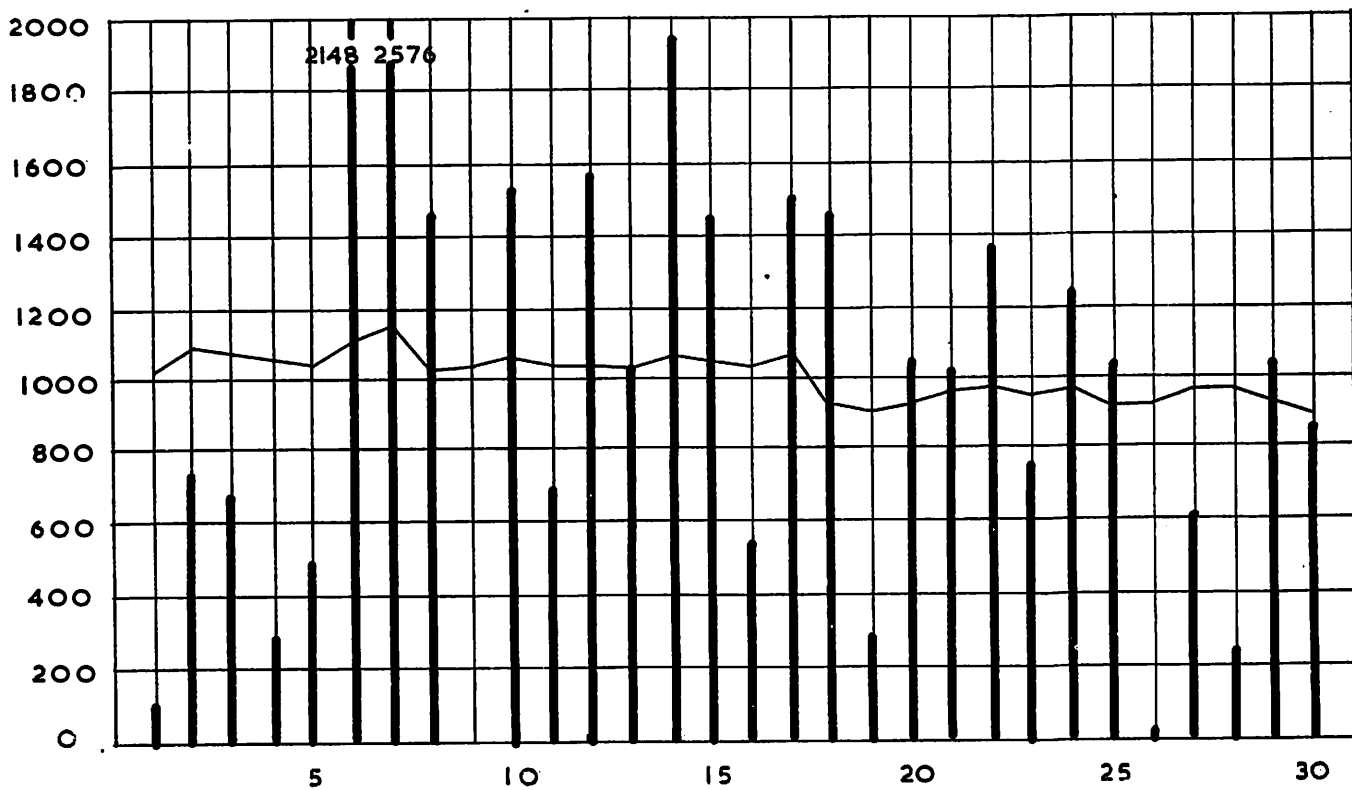
NINTH AIR FORCE

STRENGTH AND EFFORT

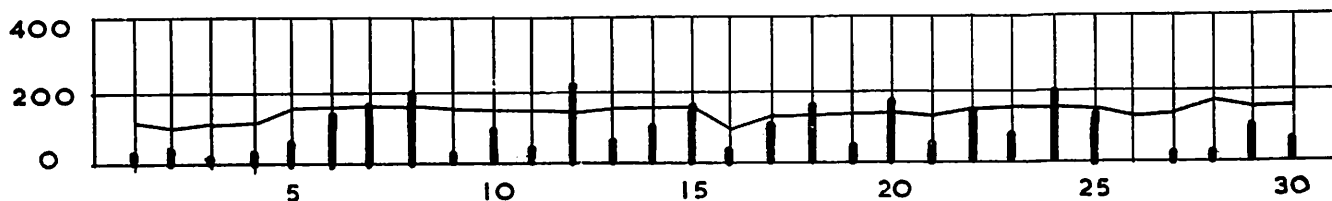
JUNE 1944



BOMBERS



FIGHTERS



RECCE

2 T.A.F. Op.
Order
No. 188

Rocket Projectile and 72 Mustang sorties in the attacks before H-hour already mentioned. On other parts of the front, 26 squadrons of R.A.F. and U.S.A.A.F. aircraft were answering other calls for army support.

Minutes 23rd
Air Cmdrs.
Meeting
para. 13.

At the time, Generals Bradley and Brereton were well satisfied with the accuracy and effectiveness of the air attacks though the latter believed that the Marauders had been more successful than the fighter-bombers. Subsequent examination of gun positions hollowed out of the rock appeared to show that no physical damage was done by bombing these well protected targets but accuracy on other targets was fair to good. There seemed to be no doubt that the moral effect of the air bombardment by low flying aircraft was overwhelming and this is confirmed by reliable evidence from the Germans' own reports. Lieut. Colonel Hoffman of the Schlieben group defending Cherbourg reporting on the situation to H.Q. German Seventh Army on the evening of the 24 June said that the troops "were worn down by the incessant bombardment by enemy naval artillery and by air attacks". Strong points had suffered heavy losses owing to air attacks.

U.S.A.A.F.
Evaluation Board,
"Effectiveness of
Tac. Air Ops. in
European Theatre",
p. 76.

German Seventh
Army Log
pp. 55 and 56.

In spite of the heavy bombardment, little ground was gained on the 22nd and 23rd but after several individual defended localities had been eliminated, considerable progress was made on 24 June. The general advance to the city limits was preceded by another operation carried out by the Marauders this time under visual conditions. Nearly 150 medium bombers attacked gun sites in four areas just before 0800 hours apparently with great success. General Von Schlieben himself reported to Seventh Army H.Q. on this attack: 'Heavy bombing of Fort de Roule. Eight batteries shot out of action.'

A.E.A.F. Int/Ops
Summary No. 157,
Section C. p. 3.

German Seventh
Army Log, p. 55.

The inner defences of the town held out until 26 June when most of the enemy including the garrison commander Von Schlieben and the Naval commander, Admiral Hennecke surrendered. But pockets of resistance inside the mole, the arsenal, Fort du Roule and other buildings held out in some cases until the 29th and strong forces which had withdrawn into the Joburg peninsula did not lay down their arms until 1 July.

The protracted siege had given the demolition parties ample time to destroy port facilities and to obstruct the locks and basin. All installations were wrecked, quays and breakwaters were demolished and the basins and anchorages were sown with mines. As Cherbourg was the first major port on the Continent to come into Allied hands its capture was a matter of first importance. Ever since 20 June a task force had been standing by to rush into Cherbourg to begin the work of clearance but when the first minesweepers arrived they discovered that the enemy had done a thorough job. The clearance of Cherbourg was a combined U.S. - British undertaking the Americans taking on the rebuilding of facilities and part of the task of salvaging vessels while the British removed mines, booby traps and obstructions. The first vessel to enter the harbour was a Royal Navy Motor Launch and the first 'mine' that it removed was a crashed Heinkel.

A.N.C.X.F.
Report

It was many weeks before the first berths were available to large ships and many months before it was able to take over most of the responsibility for supplying the Allied force which had been mainly the burden of Mulberry B (Arromanches). Less than half of its original capacity was restored by mid August when the Allies had broken out of the lodgement area but the last block ship was not raised until the end of October.

Operation Epsom

On the 18 June General Montgomery issued a directive which reviewed the situation in the beachhead and issued instructions to the First U.S. Army and the Second British Army for the next phase of the campaign. In addition to the order to capture Cherbourg the U.S. Forces were instructed to develop operations southward towards Coutances and Granville. The task of the Second British Army was to capture Caen.

This aim was to be achieved by means of a pincers movement. A western thrust was to be launched across the Rivers Odon and Orne on the axis St. Manvieu - Esquay - Amaye-sur-Odon while the eastern arm of the pincers was to encircle Colombelles and Vaucelles from the north-east. However, further study caused the cancellation of the thrust from the north-east.

The attack towards the Odon crossings was to have started on 22 June but the havoc and delays occasioned by the great storm of 19 - 21 June made this quite out of the question and a new date - the 25 June - was fixed for its commencement.

The objective of Operation Epsom was the high open ground south and south-east of Caen which was ideal tank country and which was, in addition, the most suitable area for the construction of airfields. Caen was itself a great prize as it was the principal route centre of the whole region.

The occupation of the terrain lying south and east of Caen was required if the original plan of campaign was to develop as planned. Phase lines in the Twenty-first Army Group plan had suggested that by D plus 20 our front line should have run in a semi-circle from the mouth of the Orne almost due south then swinging west and crossing the river about 30 miles south of Caen to reach the sea somewhere in the neighbourhood of Mont St. Michel. The existence of this and other phase lines often caused regrettable misunderstandings because certain influential people took them too literally and made the mistake of regarding them as definite objectives to be reached by definite dates. This led to an unjustifiable amount of talk about stalemates and failure when the beachhead did not expand exactly in the way forecast.

But to the air forces and especially to the British Tactical Air Force one of the most important corollaries of expansion in this area lay in the fact that all the best sites for airfields were located south and east of Caen. And as it was ultimately intended to push out of the beachhead in the direction of Paris, one airfield in this region was worth several in the Cotentin or Brittany. Thus on all sides, the importance of penetrating into the good tank country in the Bourguebus-Fontenay-le-Marmion neighbourhood was clearly recognised.

Air support on a large scale was planned for Operation Epsom by the Air Officer Commanding No.83 Group (A.V.M. Broadhurst) in conjunction with the Second British Army. Bad weather marred the air operations to help the preliminary ground attacks on 25 June but No.83 Group put up 114 aircraft on armed reconnaissance, 97 on dive bombing and 21 aircraft on tactical reconnaissance in the actual battle area while 194 aircraft were engaged on defensive missions. All 416 aircraft operated from bases in Normandy. Despite the bad weather in England which was much worse than that on the Continent, the light bombers of No.2 Group flew over 120 sorties about a half of which were aimed at road movement to

D/SAC/TS
100/17

Normandy to
the Baltic p.63

the battle area, while No.84 Group and the Air Spotting Pool flew over 330 sorties. These were mainly on reconnaissance or defensive duties.

German Seventh
Army Long
p. 58.

Operations on the ground began on 25 June by an attack east of Tilly sur Seulles towards the villages of Fontenay-le-Pesnel, Tessel and Rauray. This was a preliminary movement carried out by the 49th West Riding Division and despite the heavy rain they had cut the main Caumont-Caen road by 1400 hours. Strong opposition and more wet weather then slowed up movement so that on the next two days an average advance of about a mile in depth was achieved before complete standstill.

No.83 Group
Op. Order
No.1 (F)

The air plan⁽¹⁾ for the main operation beginning on 26 June arranged for the ground control of all aircraft in the battle by No.483 Group Control Centre,⁽²⁾ a representative of which returned to England in order to answer all questions coming from home based air forces. This arrangement was usually repeated before operations of a similar kind at later dates.

No calls were made upon the services of heavy bombers as yet although Air Chief Marshal Leigh-Mallory and Air Vice Marshal Broadhurst had suggested that R.A.F. Bomber Command might attack a limited area on the night of 25/26 June and this was actually inserted in the air plan for the operation. Operations by medium bombers, fighter-bombers and fighter aircraft on a very large scale were however called for by the original plan as an integral part of the ground movement. Two areas, one to the west and the other to the east of Carpique village and airfield, were to be bombed by U.S. medium bombers in order to knock out batteries and field defences which would threaten the flank of the ground movement. The first of these attacks was to take place at H-hour and was to accompany an artillery barrage. The nearest troops would be 2,500 yards from the bomblines.

No.83 Group
Op. Order
No.1, p.2.

Gun positions, strongpoints and defended localities were selected for attack by fighter-bombers from 0730 hours onwards when the troops were due to begin their advance. All fighter-bomber aircraft were, of course, under the direct control of the ground radio operating from the 483 Group Control Centre (G.C.C.) which was in intimate touch with General Dempsey's Tactical H.Q. It was also arranged that the Group Control Centre would contact the medium bombers on the radio telephone if they were not to bomb.

On the night of 25/26 June and on the following day weather in England was almost uniformly non-operational with the result that the Army had to start this vital operation without the assistance of the air forces based in England. No.83 Group, though often in difficulties because of low cloud, succeeded in flying 524 sorties from their beachhead airstrips on 53 missions, the majority of which had to be defensive because of the sudden burst of activity on the part of the G.A.F. when the enemy found that the weather on the Continent gave them a certain advantage.

Few clashes of any note occurred. Spitfires engaged a total of about 30 Focke Wulf 190s and Messerschmitt 109s in the battle area during the afternoon but only one enemy

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- (1) No.83 Group Operation Order No.1 (F) may be found at Appendix 23 to the Group O.R.B. for June, 1944.
 - (2) No.483 G.C.C. established near Creully-on-Seulles.

aircraft was claimed and none of our own was lost. In the morning, one formation of about twelve Me.109s was sighted by Spitfires over Lisieux airfield and three of them were shot down (claimed) without loss.

On the ground, while the 49th Division continued to press towards Tessel and Rauray, the 15th Division followed by the 11th Armoured and 43rd Division launched the main thrust on 26 June towards Cheux and southwards. Before the end of the day they were near the Odon in the neighbourhood of Grainville, Colleville and Mouen and on 27 June had secured two bridges and thrown armour across to take Baron and Gavrus.

Fighting was very bitter especially on the flanks of the narrow salient and villages changed hands several times. The 12th S.S. Hitler Jugend Panzer Division under General Meyer in particular gave as good as it received on the eastern flank of the advance. The Chief of General Staff, Seventh Army reported to his opposite number at Army Group B that 'reviewed as a whole, yesterday's battles can be described as a defensive victory' despite the fact that the 12th S.S. Panzer Division which had borne the brunt of the fighting had suffered severe casualties through 'incredibly heavy artillery fire and concentrated bombing'.

During the night weather was worse than ever: Bomber Command operated a few Mosquitoes but none of them in the battle zone while No.2 Group only operated 21 aircraft. These attacked three cross-roads and a bridge in the Thury Harcourt and Bery Bocage districts.

On 27 June weather was still bad so that air forces in England were still grounded until an improvement before dusk. Fortunately, the enemy also suffered from the effects of the low cloud and heavy rain with the consequence that on 27 June the fighter effort of the German Air Force fell to the level of only 150 to 200 sorties throughout the day in North west Europe. Despite the reduction, No.83 Group pilots on armed reconnaissance missions reported that the enemy fighters were much more active than of late. Numbers of enemy aircraft were seen usually engaged in covering the movement of ground forces and combats resulted in claims of 11 enemy aircraft shot down for the loss of five of our own fighters. There were even reports from troops of ground strafing being carried out by enemy fighters.

The proportion of effort devoted to army support by No.83 Group on 27 June was higher than it had been on the day before although the total effort - 349 sorties - was considerably lower. One hundred and fifteen aircraft carried out dive-bombing or Rocket Projectile attacks in response to 17 calls from the Army while 111 aircraft flew 11 missions on armed reconnaissance. The remainder were employed on cover or reconnaissance tasks. Amongst the bombing and Rocket Projectile targets were guns and mortar positions, bridges over the Orne and tanks or motor vehicles hidden in the woods abounding in the district. Particularly useful according to the Army, were attacks on the hangars at Carpiquet airfield which were harbouring tanks.

During the night following (i.e. 27/28 June) Bomber Command took advantage of a rapid improvement in the weather over English bases to send out 1055 aircraft on operations. Most of these operated against Crossbow targets but 107 aircraft were despatched to attack the railway junction at Vaires on the eastern suburbs of Paris and another force of

German Seventh
Army Log, pp. 64,
67 and 68.

Ibid p. 65

Ibid

No.83 Group
O.R.B.,
27.6.44.
Ibid App.G
pp. 18, 26.

File A.E.A.F./
T.S.22005 Part 3,
Encl.8.

Minutes, Air
Air Cmdrs.
29th Mtg,
paras.19 and
20.

116 aircraft were sent against Vitry-le-Francois, half way between Paris and Strasbourg. Both were important centres on the main lines to Germany and eastern Europe and were attacked to delay the movement of the 9th and 10th S.S. Panzer Divisions on their way from Lwow in Poland to Caen.

The attacks were not as successful as hoped so that they were followed up by two daylight attacks by American heavy bombers on 28 June, one on Strasbourg and one on Saarbrucken railway centres. These were also spoiled by the weather with the result that Saarbrucken suffered a repeat attack on 29 June. Bomber Command also despatched 114 heavy bombers against the railway centre at Metz and 116 others to Blainville (near Metz) on the night of 28/29 June. In these two attacks very severe damage was done and it was then discovered that the enemy was routing his troops over railways further south.

File A.E.A.F./
TS.2205/Part 3,
Encls. 7 and 8

German Seventh Army
Log, p. 72.

Accordingly, the railway junction at Vierzon, 40 miles south of Orleans, was very heavily hit by an accurate attack by a force of 118 Lancasters two nights later but by this time most of the rush traffic had passed through. It was subsequently learned however that some of these attacks were more effective than was known at the time. Most of the components of the 9th and 10th S.S. Panzer Divisions were in fact forced to detrain as far east of Paris as Bar-le-duc and thus had to do the rest of the long journey to Caen by road. The German Seventh Army Log in its review of operations for the 28 June has the significant remark 'the delay in the dispositions of the 9th and 10th S.S. Panzer Divisions has been caused by the fact that the units were late in arriving and by enemy air activity.' At 0900 hours on 29 June these divisions had still not taken their assigned places in the line but at 1400 hours a German counter-attack was spearheaded by the 2nd S.S. Panzer Corps i.e. the 9th and 10th S.S. Panzer Divisions.

German Seventh
Army Log,
p. 73.

Ibid p.77.

At that stage the position on the ground was that the Second British Army had been unable to press on much beyond Baron which they had occupied on 27 June. They had for short periods penetrated as far as Esquay and Maltot but elements of the 12th S.S. Panzer, 2nd Panzer, Panzer Lehr and the 2nd S.S. Panzer divisions counter attacking on the flanks and against the spearhead of the penetration halted the British on 28 June. In addition the bad weather was making movement more and more difficult over the muddy cross-country lanes.⁽¹⁾ Nevertheless, the Chief of General Staff, Panzer Group West told H.Q. Seventh Army on the morning of 29 June that a voluntary evacuation of Caen seemed appropriate and at midnight on 30 June/1 July the Chief of General Staff at Army Group appeared to have agreed to this move. But by that time this course of action was no longer urgently necessary because the arrival of the leading elements of two extra panzer divisions in the line opposite the penetration brought all progress in Operation Epsom to an end. Nevertheless it remained the accepted policy of the enemy to abandon Caen and 'to defend South Caen at the Orne' so as to withdraw their front line out of range of Allied Naval fire. In so doing they would be manning a 'system of defences which conserves fighting power, which is specially adapted for the infantry divisions'. The Panzer Lehr Division and two other armoured divisions could then be withdrawn and used as reserves to resume offensive thrusts outside of naval artillery range.'

(1) Owing to the direction of the thrust the British had to make use of tracks and lanes while the Germans could use many excellent main and by roads.

2 T.A.F.
Daily Log

Minutes,
Air Cmdrs.
29th Mtg,
paras. 12 and
15.

Ibid, para.15.

Minutes,
Air Cmdrs.
30th Mtg.
para.11

During the heavy fighting on the disputed ground around the Odon penetration, the Tactical Air Forces intervened whenever the unseasonable weather allowed. On 28 June only 90 aircraft mainly Spitfires operated in support of Overlord from England but 575 aircraft of No.83 Group operated from airstrips in the British sector where the weather was better. The Germans seized the opportunity offered by the bad weather in the U.K. to make a big effort and over 200 single-engined fighters were actually sighted by R.A.F. squadrons resulting in the destruction (claimed) of about a dozen enemy aircraft. The enemy had even used F.W.190s to shoot up one of our airfields in Normandy. About 50 enemy fighters had also been seen by the VIIIth Air Force bombers on their flight to bomb Strasbourg railway centre.(1)

In giving support to the ground forces, General Quesada and A/V/M Broadhurst had agreed to send aircraft to the area of greatest activity and to afford mutual support to each other. Thus at the period under review the IXth Air Force was also available to support 2nd Tactical Air Force if the situation required it. This was done on 28 June but no exact statement of the effort devoted to assisting the Second British Army has been found. However, General Brereton and A/M Coningham were both well satisfied with the results of the R.A.F./U.S.A.A.F. co-operation and they claimed 26 enemy aircraft destroyed on 28 June and 21 destroyed on 29 June.

On 29 June, No.83 Group put up another record number of sorties in conditions which were suitable for fighters and medium bombers. Over 650 sorties were flown and the usual variety of tactical targets such as railways, roads, bridges, dumps, vehicles and troops were attacked. About 120 enemy aircraft were sighted nearly all in the region behind Caen. The greatest obstacle to 2nd Tactical Air Force operations was not however the G.A.F. but the light soil of Normandy now the weather had turned fine. No sooner had the rain dried off the surface of the light soil on the new airstrips than clouds of dust rose into the air, whenever aircraft took off or landed. This problem remained one of the most difficult that the Air Forces had to solve in Normandy. The Sabre engines of the Typhoons soon began to show signs of wear and the trouble was only rectified by fitting all air intakes with filters. Experiments were made with various types of surfacing to keep the dust down but the most successful temporary expedient was to spray the dusty runways with engine oil.

T.A.F.
Daily Log

No.83 Group
O.R.B.
28 June, 1944.

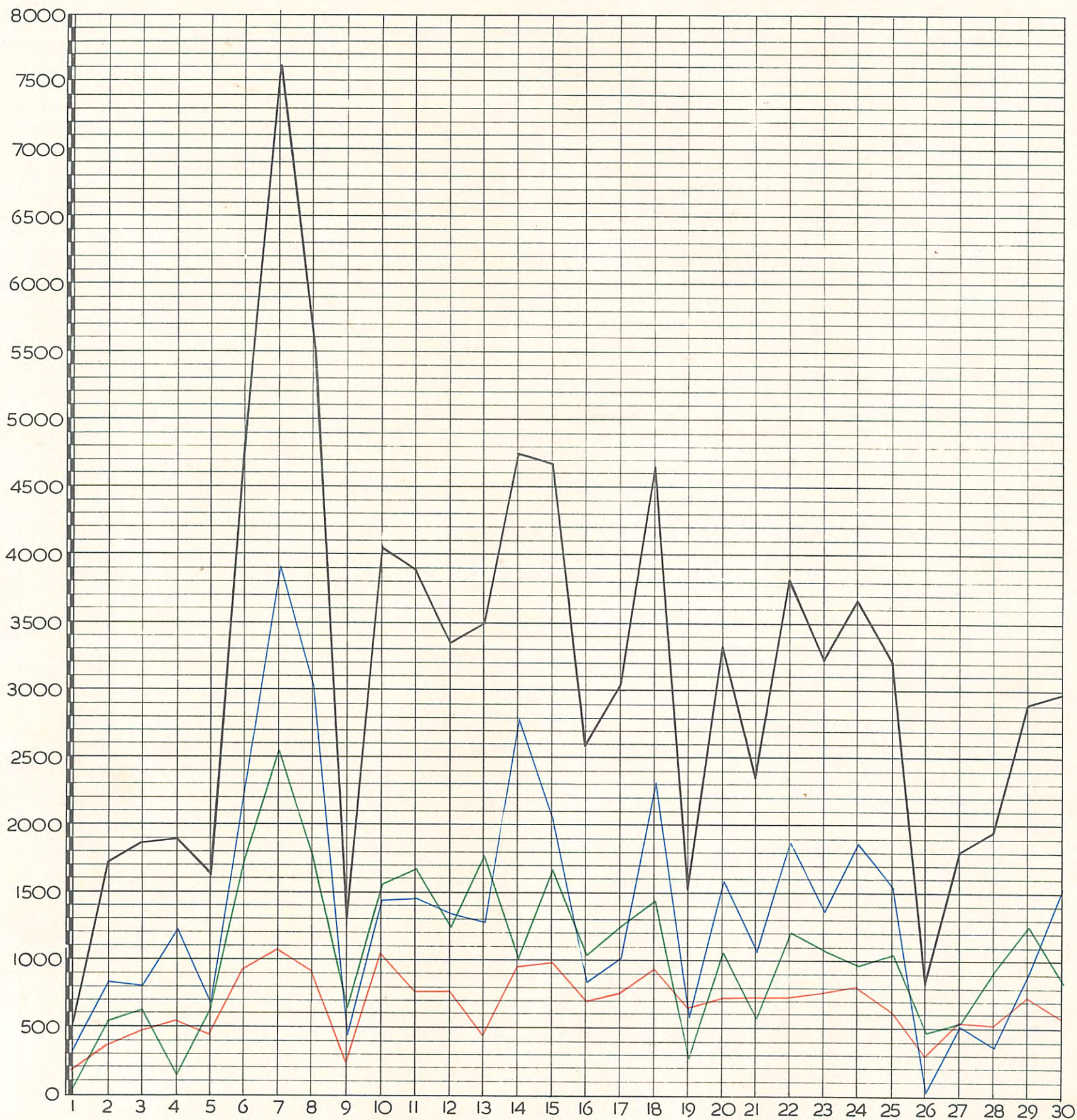
2nd T.A.F.
Daily Log

No.84 Group based in England also had a busy day, flying about 600 sorties on 29 June. About two out of every three of these were on such duties as escort, cover or patrols over our own forces but they met many enemy aircraft and claimed to have destroyed many vehicles and tanks on the ground. As with No.83 Group and with many aircraft of the IXth Tactical Air Command, most of the activity was concerned with the ground operations around the Odon bridgehead and the enemy supply routes leading to the Caen area.

The targets of the Mustangs, Typhoons and Spitfires and of the U.S. fighter-bombers were, as usual, railways, bridges, junctions, roads and all kinds of stationary or moving traffic. On 29 June, over 1,250 R.A.F. tactical aircraft operated and their reports claimed to have destroyed or damaged large numbers of motor vehicles, tanks and railway wagons.

(1) Curiously enough, Col. Dixon, (A.E.A.F. Intelligence) reported to the Air Commanders that only 200 S.E.F. sorties had been flown by the enemy on 28 June.

AEAF DAILY EFFORT BY COMMAND



| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|------|------|------|------|
| IX A.F. | 316 | 838 | 801 | 1213 | 694 | 2282 | 3903 | 3002 | 454 | 1433 | 1445 | 1346 | 1285 | 2800 | 2026 | 869 | 1010 | 2302 | 597 | 1580 | 1077 | 1898 | 1370 | 1878 | 1553 | 45 | 514 | 388 | 916 | 1540 |
| 2 nd T.A.F. | 40 | 532 | 607 | 155 | 525 | 1754 | 2544 | 1761 | 654 | 1558 | 1687 | 1241 | 1768 | 1004 | 1667 | 1030 | 1259 | 1431 | 293 | 1044 | 577 | 1204 | 1093 | 977 | 1057 | 478 | 639 | 938 | 1267 | 851 |
| A.D.G.B. | 187 | 366 | 467 | 530 | 434 | 912 | 1083 | 909 | 236 | 1056 | 773 | 776 | 449 | 947 | 978 | 699 | 749 | 929 | 642 | 707 | 714 | 713 | 769 | 805 | 618 | 300 | 649 | 622 | 737 | 686 |
| TOTAL | 543 | 1736 | 1875 | 1898 | 1654 | 4948 | 7630 | 5519 | 1344 | 4047 | 3905 | 3363 | 3504 | 4751 | 4671 | 2598 | 3018 | 4662 | 1582 | 3331 | 2368 | 3615 | 3232 | 3660 | 3228 | 823 | 1602 | 1948 | 2920 | 2977 |

IX AIR FORCE

A.D.G.B.

2nd T.A.F.

TOTAL

FIGURES SHOWN
DO NOT INCLUDE
TROOP CARRIER
AIRCRAFT

Owing to the possibilities of error in making such estimates it has been the custom in the R.A.F. to scale down these claims. This process has often been carried even further by the Army who, in the absence of exact and concrete evidence, have tended to treat most of such claims with less respect than they deserve. It is therefore worth noting that the telephone log of the German Seventh Army abounds with instances of the difficulties the enemy was experiencing as a result of the attacks being made at this period by the Allied fighter-bombers.

German Seventh
Army Telephone
Log, p.73.

Ibid

Ibid, p.74.

At 0955 hours on 29 June the Chief of Staff, Panzer Group West told the Operations Staff, Seventh Army that the counter-offensive by the 2nd S.S. Panzer Corps could not begin before the afternoon because concentrations were under continuous artillery and air bombardment. At 1340 hours, a further message logged by the Seventh Army referred to the 'heavy losses by fighter-bomber attacks' and ten minutes later a very urgent request was sent to Luftflotte 3 for air support because Allied 'strafing from the air has increased our losses by knocking out several tanks and a large number of vehicles'. It is worth noting the influence of this on the ground battle. Army Group B issued instructions that concentrations were to be ordered only at night for the time being. Thus, Allied air superiority also imposed definite limitations upon the tactics that could be employed by the enemy ground forces.

Minutes,
Air Cndrs.
30th Mtg,
para.6.

German Seventh
Army Log,
p.74

About 250 single-engined fighter sorties were flown by the German Air Force in the battle area South of Caen, and as a result of combats in the air the 2nd Tactical Air Force claimed to have shot down 21 enemy aircraft, the IXth Air Force also flying 1370 sorties and claiming 11 enemy aircraft destroyed. The VIIIth Air Force met about 200 fighters over Germany and claimed to have shot down 50 of them. If claims by the Allies were anywhere near the truth then the loss of about 80 aircraft in some 450 sorties must have been a serious matter for the enemy. It does seem however that for a short time in the evening of 29 June the Luftwaffe was operating effectively in the limited area around Caen.⁽¹⁾ The 2nd S.S. Panzer Corps attacked the Odon bridgehead at 1430 hours and advanced three kilometres over country intersected by hedges during the next few hours. The fighting was however so costly that Panzer Group West ordered the armour to withdraw and before the end of the day the British had regained much of the ground that had been lost.

Ibid, p.79

On the last day of June the Panzer counter-offensive against the Odon penetration had to be suspended in the face of British resistance and because the terrain was difficult for armoured operations. It was the intention of the enemy to 'continue the attack with all available forces but if this policy was not successful in gaining a complete victory, the bridgehead still being held (by the Germans) around Caen must in the opinion of the Army be withdrawn over the Orne, so that the battle-weary troops may be given better defensive positions.'

While the bitterness of the fighting on the ground was gradually dying down, operations in the air fluctuated according to the weather. It was again bad in England on the

(1) The Seventh Army Log repeats a statement - on 30 June - that the 9th S.S. Panzer Division reported twice that they were very satisfied with the Luftwaffe support given in their sector on 29 June.

Adv. A.E.A.F.
O.R.B.,
June 1944,
p.65

morning of 30 June but began to improve before noon. Two attempts by the medium bombers of the IXth Air Force to support the Second British Army in their battle with the 2nd Panzer Corps by bombing attacks on concentration points were rendered abortive by low cloud. Out of about 400 bombers, some 150 were able to attack with unknown effectiveness. As the weather improved the fighter bombers became very active the 2nd Tactical Air Force putting up 1,040 sorties and the IXth Air Force 1,375. About a half of these were in direct support of the battle around Caen and in the course of these operations vehicles, troops, bridges, roads and railways and indeed almost every type of tactical target came in for attention.

The German Air Force also had one of its most active days, fighters making a determined effort to protect the great movements of troops that were taking place behind the line. Other fighters were employed on support duties in the battle often carrying out ground attacks on a small scale. About 600 single-engined fighter sorties were flown during the day representing about three sorties to every serviceable aircraft.

Minutes Air Cmdrs.
31st Mtg, p.6.

During this period when large troop movements were taking place without appreciable changes in the front line the situation was regarded with great gravity by the enemy Commanders-in-Chief. It was apparent to them that the Allied rate of build-up was outstripping their own and in view of the ultimate material resources which could be put in the field by the Americans and the British, both Rundstedt and Rommel felt that they should be taking steps to establish a good defensive line which could be held by infantry. This would enable them to disengage and re-group their armour which could then be employed in a more suitable mobile role.

The first step was to re-organise the command arrangements. The Seventh Army was made responsible for the western sector opposite the Americans while the Panzer Group West which had been subordinated to the Seventh Army up to that time, became responsible for the eastern sector.⁽¹⁾ This arrangement did not come into force until the beginning of July because on 29 June the two Field-Marschals were at Berchtesgaden.

Rundstedt and Rommel had already approved in principle a proposal by Von Schweppenburg⁽²⁾ that the line should be shortened by giving up Caen and this proposal together with the earlier recommendation by Rommel that the German troops should withdraw behind the Orne was now put to Hitler. It was after this meeting that Rundstedt said angrily on the telephone to Keitel 'What are you to do? Make an end, that is what you ought to do, you idiots!' The results of the disharmony are well known - Rundstedt and von Schweppenburg lost their commands and Rommel lost favour with Hitler.

Blumentritt
Questionnaire
Q11 to Q13.

Meanwhile, the battle of the Odon bridgehead was by no means over. On 30 June, information was received that enemy armour was concentrating in the Villers Bocage area on such a scale as to justify an attack by heavy bombers. The request was passed back to H.Q., A.E.A.F. and was accepted at once by Bomber Command.

-
- (1) The boundary line ran due north of Vire and was thus almost a continuation of the boundary between the British and American forces at the River Drome.
 - (2) G.O.C. Panzer Group West.

Bmr. Cmd. Int.
Narrative of
Ops. No. 840,
1944.

Two hundred and thirty-two heavy bombers took advantage of the temporary spell of good weather to attack at 2000 hours on 30 June. The second daylight operation by the heavy night bombers since Overlord was launched, this was carried out three hours before darkness under the protection of a strong Spitfire escort provided by No. 11 Group. Despite the very great activity displayed by the German Air Force on 30 June, no enemy fighters interfered with the 232 heavy bombers and the 34 pathfinders.

Minutes,
Air Cmdrs.
33rd Mtg,
para. 11.

The operation was a great success. The aircrews reported excellent conditions and photographs showed good results. British intelligence officers reported that the raid had had an undoubted effect on the attack which was afterwards launched by the Panzers. Those opinions have since been confirmed by the Germans who specifically mentioned this attack as being the reason for the failure of the 9th S.S. Panzer Division to assemble for a counter-attack planned for the night of 30 June/1 July. (1)

U.S. Transl.
A.O.K.7
Diary, p.98

Air C.in C.
A.E.A.F. O.R.B.
July 1944,
p.1.

The expected counter-attack by the Panzer Divisions was launched at 0730 hours on the 1 July but had petered out by 0930 without achieving anything. During the next few days there were repeated attempts by the enemy to eliminate the Odon bridgehead but these were never carried out in sufficient force to accomplish their object. In any case they were invariably frustrated by the skilful use of artillery, by naval gunfire and by air support in addition to the stubborn defence of the troops on the spot.

Plans for the capture of Caen

With the arrival of the 2nd S.S. Panzer Corps in the line behind Caen General Montgomery realised that he could not hope to gain possession of the terrain between Caen and Falaise without heavy sacrifices and this he was unwilling to risk. There were substantial elements of eight Panzer divisions opposite the Second British Army between Caen and Caumont and although much below full strength these represented the most powerful and experienced enemy armoured force in western Europe. Caen and the country south of it was an important prize but during the last days of June General Montgomery appears to have decided that it would be better strategy to keep the enemy fully occupied in that area while the major attempt at breaking through was being prepared in the American sector where the line was being held more thinly.

D/SAC/TS.
100/12
Encl.3C

With the favourable development in Cherbourg, on 30 June a new directive was issued by General Montgomery to the American and British Armies outlining this conception. On the eastern flank the British and Canadians were to undertake only limited offensives for the time being. While the maximum number of enemy divisions was kept busy in this sector the right flank was to swing southwards and eastwards in a wide sweep so as to threaten the German bases and line of retreat. As the Seine bridges were broken it was hoped that a strong force established in the area Le Mans - Alencon would soon create an impossible situation for the enemy forces situated in the Caen - Villers Bocage - Falaise region.

Here for the first time was enunciated the plan which was successfully executed exactly one month later. The specific

(1) This document is known as 'Document No.1 - German War Diary - 7th Army - Translation 1st copy' and is held by the U.S. War Dept., shelf mark 75106/15.

tasks laid down for the British and Canadian forces were the defeat of all counter-attacks and, if it could be done without heavy casualties, the capture of Caen. The First U.S. Army was ordered to break the enemy line and make a thrust towards Vire, Flers and Avranches preparatory to securing the ground around Laval and Mayenne and the Le Mans - Alencon district. The U.S. operation was to begin on 3 July.

The new directive did not please the Air Commanders as it envisaged little territorial advance in the direction of good airfields country. However, as General Dempsey was instructed to take Caen there were hopes that the important airfield at Carpiquet would thus become available. An additional advantage would be that at least three or four more landing strips would come into use in the British Sector where up to now they had been made untenable by enemy mortar and artillery fire.

Minutes
Air Cndrs.
34th Mtg,
para.15

Operation Charnwood

General Dempsey decided that he would attempt to take Caen by a simultaneous assault on both flanks and in the centre. As a preliminary move, Carpiquet airfield and village were assaulted by the Canadian troops on 4 July but after it was captured, the 12th S.S. Panzer Division regained most of the ground and heavy fighting continued for five more days before the whole area was cleared of the enemy. Unfortunately the weather was so bad especially in England that there was little that the air forces could do to lighten the task of the Canadians.

It was planned to begin the general assault upon Caen on the morning of 8 July at first light and the utmost help was requested from the air. General Eisenhower promised General Montgomery that all available air forces would be at his disposal if required and accordingly the Army asked for help from the heavy bombers. There were many opinions as to whether and how this should be given and in some ways this became a test case.

Air C.in C.
A.E.A.F., O.R.B.
July 1944,
p. 5.

The Deputy Supreme Commander was very anxious that everything possible should be done to break the apparent stalemate at Caen but he believed that while heavy bombers should be used to smother an enemy attack (as at Villers Bocage on the evening of 30 June), or to prevent a crisis, he did not think they should be used in the battle in preparation for an attack by our own troops. Many of the most experienced air commanders⁽¹⁾ also thought that there was a tendency on the part of the Army to rely on the Air Force to carry out tasks for which their own artillery was better fitted. The result was that the Strategic Air Forces were being diverted from their main raison d'etre.

There was an additional reason why many officers did not favour the use of heavy bombers to clear a path for the Army namely that the problems of suitable targets, bombs and fusions had not been sufficiently studied and the problem of forward movement by our own troops over terrain that had been subjected to heavy bombing had still not been solved. The fiasco at Cassino in Italy where the bombing attack had created impassable obstacles to our own advance was still fresh in people's minds.

(1) This belief was widespread: A/C/M's Tedder and Harris and Generals Spaatz and Doolittle shared it amongst others.

SECRET.

THE CAPTURE OF CAEN. OPERATION CHARNWOOD.

7TH - 9TH JULY 1944.

LEGEND.



BOMBER COMMAND TARGET AREA.



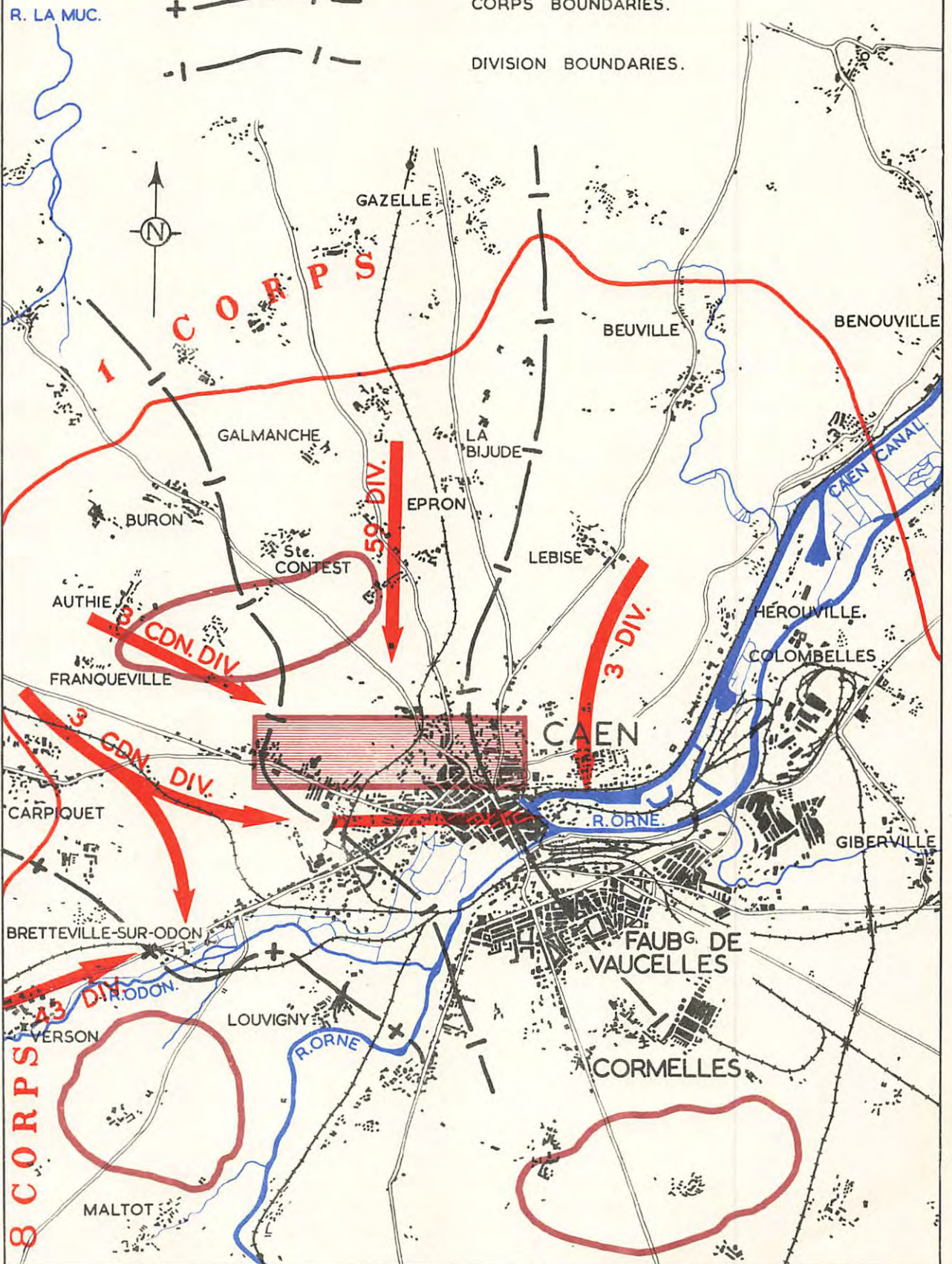
2nd T.A.F. FIGHTER-BOMBER ATTACKS. 8th JULY.



CORPS BOUNDARIES.



DIVISION BOUNDARIES.



Ibid

But an influential group among the Overlord joint Army/Air planning staff was anxious to experiment with the plan of using heavy bombers to put down a great weight of bombs in a short time in areas which were out of range of field artillery. Air Chief Marshal Leigh-Mallory supported the view held by these planners because he thought that any air plan which offered a reasonable hope of accelerating the advance of the ground forces should be given a trial and, with his support, the scheme was prepared whereby the heavy bombers played a part in Operation Charnwood. Other important roles were also played by the medium and fighter bombers and the fighters.

See Map No.5

The troops were to advance on the city from three directions at first light on 8 July the Canadian Division approaching through Carpiquet on the west while two British Divisions attacked from the north and north-east. The bombers of No.2 Group were given the task of harassing movement to the south of Caen during the night of the 7/8 July and on subsequent nights. The tasks of the other tactical air forces were also ones to which they were well accustomed such as attacks on strongpoints, gun positions, road and rail targets, troop concentrations, dumps etc. The main bombing operation was to be undertaken by the heavy night-bombers.

File D/SAC/TS.
100, Part 5,
Encl.59A

The task accepted by Bomber Command was that of putting down a heavy load of bombs on a rectangle measuring 4,000 yards by 1,500 yards situated in the northern outskirts of the city about 6,000 yards from the nearest of our troops. This area was stated by the Second Army to contain prepared defences, artillery and troop H.Q.'s. It was hoped that the heavy bombing would destroy these, shatter the morale of the enemy forces and cut them off from their rear.

Adv. A.E.A.F.
O.R.B.
7 July 1944

The air plan as learned at Advanced Headquarters A.E.A.F. on the morning of 7 July was that the heavy bombing should take place that evening. During the afternoon Twenty-First Army Group confirmed that the Second Army would follow up this attack in the early hours of the following morning. On the late evening of 7 July 467 bombers attacked in such excellent conditions that the Master Bomber had little correction to make. To reduce the concrete works, road blocks, mortar positions and six batteries which were supposed to be in the target area, bombs of 1,000 lb and 500 lb weight were used, two thirds of which were of 1,000 lb and 15% of the whole load fused six hours delay so as to explode when the attack on the ground was commencing. Cratering was accepted by the Army.

File D/SAC/TS.
100, Part 5,
Encl.59A

Before last light⁽¹⁾ large tracts of an area of about $2\frac{1}{2}$ square miles had been devastated by the concentrated bombing. In open ground the craters were practically contiguous, no crater being less than 20 ft in diameter. With one exception, all roads to Caen through the bombed area were completely blocked by the time the 2,300 tons of bombs had been dropped.

2nd T.A.F.
Daily Log,
Sheet 1011

While the heavy bombers were returning home the light bombers and intruders of No.2 Group were on their way to harass and attack enemy movement south of Caen. Road and rail traffic was much in evidence and the 140 aircrews reported very satisfactory results of their night's work. One outstanding feature of these operations was that 26 trains were attacked.

Ibid
Sheets 1012
to 1015

From 0455 hours until 2255 hours on 8 July, No.83 Group aircraft were operating almost continuously in support of the

(1) About 2300 hours D.B.S. Time

operation, 766 sorties being flown from French bases. Weather in England was bad so that only 116 sorties were flown from U.K. airfields by 2nd Tactical Air Force. These were mainly on such duties as spotting, reconnaissance or anti-submarine work. No.83 Group worked in close co-operation with the Army attacking certain targets indicated by red smoke as well as such guns, mortars, tanks, vehicles, dumps and troops as were spotted from the air.

The creeping artillery barrage began at 0420 hours on 8 July and behind it the troops moved forward. The British 3rd Division advanced through Benille from the north-east, the 3rd Canadian Division through Carpiquet from the west, while the 59th Division converged on the town from due north. Demolitions and craters made the going so difficult that only four tanks and a few troops penetrated into the city before nightfall.

2nd T.A.F.
Daily Log
Sheet 1017

During the night the weather was bad for flying but in spite of this No.2 Group sent out 100 aircraft on missions to interfere with enemy railway movement over a wide area in France. A number of aircraft were also detailed to Caen. Many trains, bridges and moving targets were attacked.

2nd T.A.F.
Daily Log,
Sheet 1018 to
1022

On the second day of the operation bad weather limited air activity and many attacks in support of the troops were rendered abortive. Only 170 aircraft were despatched by 2nd Tactical Air Force from U.K. airfields and 490 from the landing strips in Normandy.

The ground forces brought up bulldozers and employed them with tanks to clear lanes through the rubble. By the evening the whole of the city on the north-west bank of the river had fallen into our hands. Few prisoners were taken but opposition from some defended localities was extremely fierce until they were reduced. It seems clear that the bulk of the enemy troops had in fact withdrawn to the south-east bank of the Orne.

In view of the importance of the air operation as a test case an investigation into the effectiveness of the bombing was carried out immediately afterwards by a party representing the Stanmore Bombing Committee.⁽¹⁾ The conclusion they reached was that the heavy attack had an important stimulating effect on the morale of our own troops and a corresponding depressing effect on that of the enemy but that few dead Germans had been found. It had probably interrupted enemy reinforcements and supplies but it had equally impeded our own advance. Many divisional officers expressed puzzlement as to the object of the bombing as they had seen no signs of road blocks or any other defences in that area. The French inhabitants also said that there had been no Germans or German prepared positions in the area destroyed. Thus, on the whole, the conclusion was reached that a great deal of French property was devastated without sufficient justification and some scepticism was felt about the existence of the batteries and other targets listed by the Second British Army.

File D/SAC/TS
100 Pt.5 Encl.
59A

Ibid, para.9

Ibid,
para.21

It was also felt that it would have been more profitable to have bombed targets nearer to our own troops or else on the flanks of the projected advance. For the future, more careful planning was advised before laying on such an operation.

(1) The party arrived at Caen on 12 July. Its member were:-
A/V/M Oxland, Bomber Command G/C Lucas, A.E.A.F.
A/Cdre Kingston McCloughry, A.E.A.F. Maj. Bennett, S.H.A.E.F.
Prof. Zuckerman, A.E.A.F. Col. Hobbs, 21 Army Grp.

CHAPTER 2

PREPARATIONS FOR A BREAK-OUT

A lull in the fighting on the ground before the commencement of Operation Charnwood on 8 July was necessarily reflected in a similar lower level of activity in Army support and tactical air operations generally. This was the more marked because the exceptional spell of bad weather which had made June one of the worst months in living memory, prolonged itself into most of July. Weather in England was, on the whole, worse than that in Normandy, with the result that the operations of home-based aircraft, particularly the U.S. heavy bombers, suffered more than those of such tactical air forces as it had been found possible to base in the slowly expanding lodgement area.

File AEAF AAF/TS.
13165/Air

On 29 June, directives were sent from H.Q., A.E.A.F. to USSTAF and Bomber Command setting out priorities for future operations so far as heavy bomber effort would be allocated by the Deputy Supreme Commander to the support of Overlord. Details were, as before, supplied on a day to day basis direct to Commands by the representative committees working at Stanmore. Apart from major operations in support of the Armies which were always given an over-riding priority, the following priorities were assigned to the strategic bombers:-

U.S. VIIIth Air Force (a) Crossbow targets.
(b) Bridges.
(c) Fuel and Oil dumps.
(d) Airfields.
(e) 'Cover' targets.

R.A.F. Bomber Command (a) Crossbow targets.
(b) Railway Communications.
(c) Fuel and Oil dumps.

Much has already been said about the diversion of effort from the Overlord battle and from the combined bomber offensive against the German homeland that was occasioned by the attempt to eliminate flying-bomb installations by bombing. The Commanders responsible for strategic air operations were exasperated by this necessity not only because of their firm conviction that it was only by bombing Germany that the war could be won, but also because they regarded the targets offered them as quite unsatisfactory for the Air Forces which they commanded.⁽¹⁾ Most of the Allied Air Commanders found it difficult to believe that the bombing of launching sites was having any effect and even if sites were completely destroyed it was believed that other 'modified' sites could be constructed faster than they could be eliminated.⁽²⁾ They were usually so well concealed that it was doubtful whether a large proportion of active sites were being discovered.

On 30 June, General Spaatz expressed the opinion of the majority of those present at the Stanmore morning conference when he thought that the scale of flying bomb effort was limited not so much by the number of launching sites as by the

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- (1) Air Chief Marshal Harris also criticized the prolonging of the campaign against marshalling yards (see para. 16) [Minutes 41 Air Commanders Conference on 11 July (TIM/F/S.34)].
- (2) Air Chief Marshal Hill has stated in his Despatch that this belief was erroneous: in fact 'modified' sites took considerable time to build.

Minutes,
Air Cndrs.
30th Mtg,
para.10

Ibid. 31st Mtg,
para. 4.

number of bombs available. In view of this, Air Chief Marshal Leigh-Mallory suspended attacks on launching sites and gave supply sites and storage depots as alternative targets to the strategic bombers. But feeling on Cabinet and Defence Committee level was so strong that the Chief of Air Staff requested the Deputy Supreme Commander to continue attacks on launching sites. Despite the opposition of the Commanders, therefore, attacks continued on launching sites as well as other sites connected with flying bomb activity.

During the period 1-18 July Bomber Command operated eighteen times against launching sites, storage depots, supply sites, transport facilities and certain constructions works whose exact purpose was not fully understood. Considerable risks were taken by sending heavy night bombers over enemy occupied territory during any hour of the day when breaks in the weather offered less unfavourable chances of bombing. Lancasters and Halifaxes, for example, attacked in daylight on eight out of the first 12 days of the month. Generally speaking, however, bombing conditions were bad and it was not expected that flying bomb activity was being greatly reduced by these efforts. A total of 18,000 tons of bombs were dropped during these operations from 1-18 July, of which total less than 6,000 tons were dropped at night.

Despite its great strength in aircraft and men, the VIIIth Air Force was only able to attack Crossbow targets with less than one-fifth of the weight of bombs dropped by the night bombers and, owing to the weather, there was a similar uncertainty about results.⁽¹⁾ As the Fortresses and Liberators were not individually so well equipped for blind bombing and as their best operational height was so great, the bad weather proved an even greater handicap to them than it was to the heavy night bombers. Less than 14,000 sorties were flown by the day heavies on operations of all kinds: of these only 1,500 aircraft (3,600 short tons of bombs) attacked first priority Crossbow targets. About 5,600 aircraft attacked strategic targets in Germany and about 2,200 aircraft attacked airfields, bridges, and army support targets in France.

It would seem from Luftflotte 3 records that some of the Crossbow operations - even against launching sites - were more successful than was thought at the time, although information is fragmentary and lacking in detail. The Luftwaffe⁽²⁾ reported that V.1 launching sites near Bonnières and Amiens had been damaged in daylight attacks on 2 July. On the same day damage was also reported to Domleger, Rinoq, St. Martin and Ganchin villages where storage depots were situated. On 5 July an installation was hit at L'Isle Adam (near Paris) and that V.1 storage dump at St. Leu d' Esserent, situated in well protected caves was damaged in attacks by Bomber Command on the night of 7/8 July and again on 12 July. Extensive damage was also reported after 50 American bombers attacked L'Isle Adam on 5 July. A launching site was reported damaged on 8 July and the approaches to the great storage depot of Neucourt were hit on 10 July. Bombing was also reported by the enemy on V.1

- (1) The unwillingness of the U.S. Air Commanding Generals to be diverted from operations against Germany itself was also an important factor in their failure to attack Crossbow targets. (See Minutes 47th Air Commanders Meeting 17 July 1944.
- (2) "A calendar of operations in North West Europe, July 1944," was prepared by the German Air Historical Branch from Luftflotte 3 records (available as A.H.B.6. Translation VII/84).

VIIIth Air Force
Monthly Summary
of Ops,
July 1944.

A.H.B.6.
Transl.
No. VII/84,
pp. 29-35.

launching sites at St. Pol and in the Aumale - Doullens area on the night of 12/13 July and two nights later on launching sites near Hazebrouck, Audricq and Neufchatel. These are some of the damage reports recorded by the enemy but no suggestion is made that they are or are not a complete record.

Nearly 5,500 tons of bombs were dropped by Bomber Command in night operations against enemy railway communications within the battle area. During the fortnight under review major attacks were made on railway centres situated on the lines converging upon Paris from a southerly or easterly direction.⁽¹⁾ It was known that the railway system of the Region Nord was practically at a standstill but that considerable supply and re-inforcement traffic was passing through Paris from the south and east despite attacks by the VIIIth Fighter Command.

Attention was focused on delaying the arrival in the battle of the 271st and 272nd Infantry Divisions which the enemy had begun to move from the south of France. The Tactical Air Forces had recently been made responsible for all air operations within an extended area bounded by the Rivers Seine and Loire as far inland as the Orleans 'Gap' but the Strategic Air Force were still required for attacks on transportation targets outside that area. This commitment chiefly concerned the heavy bombers of R.A.F. Bomber Command and the long range fighter bombers of the U.S. VIIIth Air Force, although the Fortresses and Liberators sometimes participated. It was particularly desirable to block the north-south and east-west lines leading through Paris to Normandy. Thus the main objectives in the plan included railway centres south and east of Paris extending as far as Strasbourg and Saarbrucken as well as all the railway bridges over the lower Loire.

A.H.B.6.
Transl. VII/84,
p.28.
Ibid p.30.

So far as the Bomber Command attacks were concerned, the Luftflotte 3 records already cited state that 100 trucks were destroyed and 500 damaged in the raid on Vierzon. The Tours-Orleans line was blocked for three days. On the night of 4/5 July widespread destruction to railways was reported. Eighty per cent of the northern part of the Dijon marshalling yard and 36% of the southern part was destroyed on the night of 5/6 July. Lines between Lyons and Paris were blocked. Vaires railway centre was badly hit on 7/8 July, engine sheds, trains and track being destroyed. Heavy damage was again reported after the Bomber Command daylight raid on 18 July. Ample evidence is also available in the same enemy records of considerable damage to several railway targets attacked by Bomber Command between 13 and 16 July.

Other reports have come to light which corroborate these records. For example, an officer was sent by the 8th Abteilung (Air Historical Branch) on a visit to the Luftflotte 3 area from

(1) These were:-

| | | | | | | | | | |
|-----------------------------------|-----|------|----|-----|----------|----|----|--------|------|
| Vierzon (40 miles S. of Orleans); | 630 | tons | by | 118 | aircraft | on | 30 | June/1 | July |
| Orleans | 575 | " | " | 156 | " | " | " | 4/5 | July |
| Villeneuve (S. of Paris) | 556 | " | " | 131 | " | " | " | 4/5 | July |
| Dijon | 434 | " | " | 154 | " | " | " | 5/6 | July |
| Vaires (E. of Paris) | 560 | " | " | 128 | " | " | " | 7/8 | July |
| Culmout Chalindrey | 620 | " | " | 161 | " | " | " | 12/13 | July |
| Tours | 608 | " | " | 117 | " | " | " | 12/13 | July |
| Villeneuve | 432 | " | " | 128 | " | " | " | 14/15 | July |
| Nevers | 445 | " | " | 108 | " | " | " | 15/16 | July |
| Chalons sur Marne | 404 | " | " | 121 | " | " | " | 15/16 | July |
| Vaires | 364 | " | " | 110 | " | " | " | 18 | July |

A daylight attack on Vaires by 159 aircraft (12 July) and a night attack on Revigny (14/15 July) both failed.

15 to 30 July, 1944, and the following statements are quoted from his report:-

'On the railway track from Metz through Chalons to Paris, most of the railway stations had been attacked and some were heavily damaged. The attacks on Bar-le-Duc and Chalons were the most effective. The through traffic on this line was held up for 10 days and a large part of the rolling stock which had been standing at the stations was destroyed There were fuel carrying trains, munition trains and goods trains lying overturned and gutted beside the track

The position on 8 July shows that there is only one east to west line intact as far as Paris and from Paris to the west and south west all rail communications are broken A heavy raid by 350 American⁽¹⁾ four-engined aircraft during the night of 7/8 July once again cut rail communications from Paris to Chalons where traffic had been resumed on 6 July."

Not until 17 July did the VIIIth Air Force operate in any great strength against the French railways but on that day several attacks on railways and bridges produced reports of widespread damage. The American heavy bombers operated with great success against German occupied airfields during this period and although the scale of effort was not great as compared with other operations, the degree of success was most satisfactory. The airfield offensive was so successful that Luftflotte 3 was forced to withdraw stocks and supplies from the airfields in the coastal region as a safety measure during the month of July and aircraft had to be continually moved from one airfield to another owing to the destruction caused by the American bombing.

The forces of A.E.A.F. continued to perform the various assignments which devolved upon them in their partnership with the ground forces but theirs were contributions more difficult to describe than were those of the Strategic Air Force because the tasks allotted to the Tactical Air Forces were individually small and always varied. During this period A.E.A.F. aircraft were made responsible for all air operations as far inland in France as the line of the river Seine from its mouth up to Paris, thence across the Orleans 'Gap', to the Loire and back to the sea. Unsatisfactory aspects of these operations were due mainly to the abnormally bad weather and to the restricted area of the beach-head which allowed the construction of too few Continental bases for the Tactical Air Forces.

Enemy Air Operations

Nevertheless, although our own operations had not developed exactly in the manner and on the scale foreseen by the Allied Air Commanders, neither had those of the enemy. Even in the middle of July the German Air Force had not built up in North-west Europe the air power that was anticipated, nor did they attain, at any time, a situation which warranted a challenge to the ascendancy already established by the Allied Air Forces. This appears to have been recognised by Luftflotte 3 whose "Invasion - Kalendar Normandie" included the following comment on operations in July:-

(1) R.A.F. heavy bombers were constantly being described as American by German officers who should have known the difference.

Ibid. p.34.

A.H.B.6.
Transl.
No. VII/84,
p.38.

A.H.B.6.
Transl.
No.VII/84
p.38.

'The air supremacy of the enemy as well as a crushing superiority in material and technical resources continued. Enemy air activity over the battlefield did not diminish until we had brought up strong flak forces. Our own battle operations were limited by the incontrovertible air and ground artillery superiority of the enemy, and opportunities for organised operations were considerably restricted.'

Most of the evidence available from other German sources appears to confirm this statement.

German Seventh
Army Log,
U.S. Transl.,
Vol.2, p.89.

On the other hand, the enemy was making a more determined attempt to re-group his air forces and employ them to better advantage than he had succeeded in doing during June. At the beginning of July, certain organisational changes were made within Luftflotte 3 with the object of making it easy to co-ordinate air operations with operations on the ground. Fliegerfuehrer (Air Command) West was replaced by an Air Liaison Command headed by an Air Force General Staff Officer to work with Von Kluge at St. Germain. Rommel (Army Group "B"), in co-operation with Sperrle (Luftflotte 3), was responsible for determining where the main air effort would be made in the battle at any given time.

Rise and Fall
of the G.A.F.
p.332.

At the same time as Fliegerfuehrer West was disbanded, Fliegerfuehrer II was also dissolved and Jagdkorps II was made responsible for all support which was to be given to the troops whenever required as well as for all fighter patrols of every kind. This new commitment involved new training for many of the fighter formations which thus took on fighter/bomber duties.

German Seventh
Army Log,
U.S. Transl.
Vol.2, p.89.

On 2 July General Bulowius, the newly appointed A.O.C. of Jagdkorps II in succession to Junck, was at General Dollman's funeral⁽¹⁾ and discussed with Headquarters Seventh Army the employment of the German fighters. The object of the discussions was to arrange more support for Seventh Army troops who, up to that time, had not been favoured with the protection of the Luftwaffe as had been the Panzer Group West. The main task of the fighter force was agreed to be the protection of supplies and reinforcements flowing along the roads to the Army but, as far as possible, fighters would also be employed on close support operations to assist front line troops and on attacks directed against Allied landing strips.

A.H.B.6.
Transl.
No. VII/84
p.37.

The Luftwaffe was also required to extend minelaying activities with the additional object of relieving German troops of the destructive bombardment they suffered from Allied Naval Forces. It was hoped that the mines would force the warships further off shore so that German positions would then be out of range of their heavy guns. Our own records show that between 5 and 8 July⁽²⁾ a certain measure of success was achieved by the enemy in destroying shipping, partly by mines and partly by human torpedoes, but not, apparently, by aerial torpedoes, glider bombs or radio bombs. However, the German Air Force lacked the resources and the trained crews to sustain the attacks for a sufficiently long period to have any real effect.

- (1) Jagdkorps II provided a fighter umbrella of 42 aircraft for the funeral.
- (2) Seven Allied vessels were sunk off the beachhead, most of them by mines, but some by human torpedoes.

Their success was greater against supply ships, light naval vessels and landing craft than against heavy bombardment vessels. The newly designed Dosen mine gave the Allies much trouble until its secrets were mastered but the scale of the mining offensive was too small to achieve decisive success. The aerial torpedo (L.T.350) was also employed with some little success against Allied shipping at long intervals, but it was generally used in small numbers and thus was also relatively ineffective. Fliegerkorps IX operated an average of about 80 aircraft per night, many of which were manned by inexperienced crews. Most of these were engaged in minelaying but, on a few nights, F.X. radio bombs, H.S.293 glider bombs and L.T.350 aerial torpedoes were used in attacks on shipping.⁽¹⁾ The only anti-shipping attack on an appreciable scale during the first half of July was made by 67 aircraft of Fliegerkorps IX, Fliegerkorps X and Flieger Division II on the night of 4/5 July but no sinkings were reported by the Navy as a result of those attacks.

A.H.B.6.
Transl.
No. VII/31
p.7.

Bombing operations by the enemy never reached damaging proportions owing to the fact that, over and over again, German Air Force formations, fighters as well as bombers, encountered Allied aircraft soon after they had left the ground and thus often failed to reach their designated area of operations. No one who has read the German documents referred to in this narrative can fail to be struck by the effectiveness of the Allied fighter screen which so often succeeded in holding the ring against the intervention of the enemy air forces.

A.H.B.6.
Transl.
No. VII/84
Entries dated
8 and 12 July

It may be added that there was, of course, no attempt by the enemy to use his long range bombers by day after the beginning of the campaign, but, in normal circumstances, his use of fighter-bombers was also on a modest scale. During daylight and especially during periods of lower Allied Air activity, offensive sweeps were made against road targets, landing strips or troop concentrations by enemy formations of 25 to 40 fighter/bombers. More usually the bulk of the enemy aircraft were engaged on defensive patrols to protect their own ground forces.

2nd T.A.F.
O.R.B.
Int. App.8
20 July 1944

The R.A.F. Regiment⁽²⁾ reported ten attacks by enemy aircraft on beachhead landing grounds between 1320 hours on 4 July and 0135 hours on the morning following. A total of about 50 enemy aircraft were concerned of which four Messerschmidt 109s were destroyed. There were few repetitions of these tactics during the next two days but during the afternoon, night and early morning of 7/8 July there were eleven attacks. The most active day was 14 July when 34 attacks were made on landing grounds, 19 of them by single aircraft. A total of 17 enemy aircraft were shot down. On 16 July some 15 to 20 enemy aircraft carried out an elaborate attack on Carpiquet airfield just before midnight but except for three daylight attacks on 4 July, the other operations were carried out by very small numbers of aircraft and the damage done was negligible.

Ibid.
23 July 1944

Ibid.
17 July 1944

To counter the Allied advantage in numbers of aircraft, the Germans evolved tactics which they hoped would do something

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- (1) Information about German anti-shipping aircraft, weapons and organization may be found in the 'Rise and Fall of the German Air Force', Part Four Chapter 13, paras. 37-49.
 - (2) R.A.F. Regiment reports of attacks on R.A.F. airstrips were quoted by 2nd T.A.F. Intelligence Summaries of G.A.F. Activity on 20 July and 23 July 1944.

A.H.B.6
Transl. No.
VII/31 p.7

Ibid

Ibid p.7

to redress the balance. Fighters were not sent up in good weather nor when it was known that Allied aircraft were approaching in large numbers. The most important operational aim was not the shooting down of four-engined bombers, seeing that Allied bombing attacks would not be stopped by the destruction of a few aircraft. In the view of the enemy it was more vital to fight the Allied fighter bomber and artillery spotting aircraft as these brought the greatest danger to Army reinforcements and supplies and signals communications. This explains why the Allied heavy bombers were allowed to bomb targets in daylight without molestation while the Typhoons and Thunderbolts, which were better able to protect themselves against attack, were more often engaged in combat by the Messerschmidt 109s and the Focke Wulf 190s. In bad weather, when Allied sorties were on a lower scale and formations were usually small enough to be engaged by German fighters, Jagdkorps II made determined efforts to intervene. A good example of this was seen on 14 July when the effort of the Allied Tactical Air Forces was below fifty per cent and Luftwaffe units took advantage of the opportunity to make unusually sustained attacks on beachhead airfields. Nevertheless, on an average, Jagdkorps II lost three aircraft for every one Allied aircraft shot down in air combat. Losses during attacks on ground targets such as Allied airfields were also considerable.

The following table presents, for purposes of comparison, the air effort made by the enemy air forces and the Allied air forces in connection with this campaign during the first 18 days of July. The operations of Coastal Command, important as they were to the cross-channel supply line, and those of the Strategic Air Forces into Germany, are not included in this table even though aircraft sometimes passed through Luftflotte 3 zones of responsibility.

Air Activity in the Battle of Normandy, 1 - 18 July

| July 1944 | G.A.F. Aircraft | | | Allied Aircraft | | |
|-----------|-----------------|---------------|-------------------------|--------------------------------|---------------|---------------------------|
| | Sorties | Actual Losses | Claimed Dest. by Allies | Sorties (in Luftflotte 3 area) | Actual Losses | Claimed dest. by G. A. F. |
| 1 | 572 | 14 | 23 | 1,967 | 23 | 20 |
| 2 | 396 | 25 | 14 | 1,636 | 8 | 9 |
| 3 | 129 | 5 | 10 | 1,185 | 4 | 1 |
| 4 | 617 | 34 | 26 | 4,205 | 20 | 15 |
| 5 | 795 | 58 | 45 | 3,397 | 45 | 58 |
| 6 | 491 | 39 | 32 | 5,037 | 29 | 13 |
| 7 | 491 | 27 | 11 | 2,636 | 17 | 16 |
| 8 | 497 | 35 | 26 | 4,426 | 23 | 68 |
| 9 | 281 | 16 | 10 | 3,062 | 11 | 5 |
| 10 | 331 | 4 | 1 | 2,393 | 8 | 1 |
| 11 | 509 | 9 | 3 | 2,049 | 11 | 2(1) |
| 12 | 618 | 28 | 12 | 4,653 | 8 | 16 |
| 13 | 585 | 7 | 7 | 1,270 | 9 | 16 |
| 14 | 428 | 12 | 35 | 2,918 | 14 | 23 |
| 15 | 578 | 7 | 9 | 2,341 | 20 | 10 |
| 16 | 536 | 8 | 9 | 2,083 | 6 | 9 |
| 17 | 546 | 7 | 15 | 3,772 | 18 | 10 |
| 18 | 440 | 20 | 41 | 6,717 | 38 | 22 |
| 1-18 | 8,840 | 355 | 329 | 55,747 | 312 | 314 |

(1) German Flakkorps III also claimed to have destroyed 17 Allied aircraft from 1 - 11 July.

A.H.B.6
Transl. No
VII/84

This table, part of which is compiled from a statistical annex to the 'Kalendar Normandie', shows that while the G.A.F. flew 8,850 sorties in the French battle area, the Allies flew nearly 56,000 sorties without counting several thousand others which had important direct effects upon the battle. The daily averages work out at 490 sorties by the enemy and about 3,100 by the Allies. The most active day by the enemy air force was on 5 July when nearly 800 sorties were flown in 24 hours, 240 of these being on night operations. On 11 July began a week of unusually great exertions by the enemy during a phase when Allied air effort was well below the average because of the English weather. A good deal of the German activity was on the part of the Bongart Geschwader which was operating energetically against guerillas in France though, as always, about two thirds of all sorties flown by Luftflotte 3 consisted of the fighter and fighter/bomber operations of Jagdkorps II.

One of the most interesting facts clearly brought out by this table is that both the Germans and the Allies were calculating enemy losses remarkably accurately when viewed over a period of several days. The difference between the actual losses of Allied aircraft and the claims made by the Germans (when flak claims were added) was very small. The percentage of error was just under seven in each case.

With regard to losses it should be noted that despite the large numbers of aircraft which operated and the distance many of them had to fly to their operational area, Allied aircraft losses were lower than those of the G.A.F. It was inevitable that aircrew losses would be higher because most of the Allied aircraft shot down were flying over enemy occupied territory. Losses averaged one aircraft to every 179 sorties by the Allied air forces as contrasted with one G.A.F. aircraft lost to every 22 sorties. It should perhaps be observed that about one third of the sorties flown by Allied aircraft were hardly in zones where opposition was to be expected, in which case a more just statement would put the ratio of Allied losses to sorties in active combat zones as one aircraft lost out of every 120 sorties. In actual combat the Germans themselves calculated that Jagdkorps II lost on an average three aircraft for every one lost in combat by the Allies.

A.H.B.6 Transl.
No.VII/31 p.7

Operations on the American Front, 1-20 July.

In accordance with General Montgomery's directive of 30 June, the Americans began to prepare for operations against the German Seventh Army in the sectors south-east and south-west of Carentan. Their object was to gain a line from St. Lo to Periers where the ground was more suitable to serve as a spring board from which to begin the push towards Coutances and Avranches.

The main obstacle to any advance in this area was the unsuitable terrain. A large swamp (Prairies Marecageuses de Gorges) and the flood plain of the River Taute, split the American Front into several sectors and the country on either side of the marsh lands was either intersected by drainage canals or closely wooded or else it consisted of a dense network of small fields enclosed by thick hedges usually growing out of banks and admirably adapted for defensive fighting. Not only were the highly mechanised American ground forces at a disadvantage in such country, but the same was also true of the Allied Air Forces. The full weight of the offensive could not be developed until troops had fought their way forward yard by yard, field by field and village by village,

to more open country where faster movement was possible and where the IX Tactical Air Command could operate more effectively.

File: Adv.
A.E.A.F/T.S.
24228, E.3.

Ibid., E.4
dated 3 July.

As General Montgomery's directive envisaged a decisive break-through on this flank, the attention of the other Air Forces was also directed to this quarter. On 2 July the Air Commander-in-Chief ordered the 'maximum possible effort of the two Tactical Air Forces directed towards assisting the forward movement of the First U.S. Army.' The Strategic Air Forces were directed to make an attempt to delay the north-west move of two German Infantry Divisions moving through Bordeaux towards the Loire. The VIIIth Air Force were given the Loire bridges as their targets, while Bomber Command were requested to attack railway communications to this area. The Commander, Advanced A.E.A.F., confirmed that No. 83 Group had been instructed to render maximum assistance to the IX Tactical Air Command during the forward move of the First U.S. Army and that the night operations of No. 2 Group had been adjusted to include armed reconnaissance of rail movement from the Loire, north-west towards the American Front. Despite their readiness to assist, however, Air Marshal Coningham informed the Air Commander-in-Chief that on the first day of operations, demands on the two Tactical Air Forces in direct support of the American ground offensive had not absorbed the total effort available.

On 3 July the first main ground attack began in the heavy bocage country on the extreme west of the front towards La Haye du Puits. There was stubborn resistance behind the thick hedgerows, in accordance with Hitler's latest order to 'hold fast' which had just been communicated to the troops by Rommel.⁽¹⁾

The Americans celebrated the Fourth of July by launching a second major attack astride the road from Carentan, south-west towards St. Eny and Periers, but here progress was also very slow because the enemy controlled the flood gates and defended the areas not inundated with great skill. It was only after the dams in the Prairies Marecageuses had been reached by the Americans on 5 July that the water table gradually fell and the marshes were no longer an impassable obstacle to the movement of troops.

Seventh Army
Diary,
U.S. Transl.,
Vol. 1, P. 113

The Germans quickly appreciated that a major effort was being made on this front and on 4 July, Rommel ordered the 2nd SS Panzer Division to the Periers area.

When weather permitted aircraft to operate at all, the IX Tactical Air Command rendered assistance to the ground forces as a matter of regular routine. During the following two or three weeks, the scheme of air-ground co-operation that had been gradually built up towards the latter part of June was perfected into a smoothly working system. Assistance to the American Army was also regularly given by the light bombers of No. 2 Group at night, and by the medium bombers of the IXth Air Force during the day. There was little demand for fighter bombers of the 2nd Tactical Air Force to support the American ground forces in the early stages.

(1) In an order dated 1 July, 1944, which said 'the present positions are to be held. Every further break-through by the enemy is to be obstructed by tenacious defence, or by local counter attacks.'
A.H.B.6 Translation Number VII/67, P.8.

Ibid., p.115.

There is much evidence from German sources of the effectiveness of air attacks. The Seventh Army diarist recorded on 4 - 5 July that 'during the entire night the enemy, by means of his air force and artillery, covered traffic centres and main roads deep into rear areas with heaviest harassing fire and bombing.' On 6 July he noted that 'under heavy enemy artillery fire and massed air power, a break-through was effected..... in the left wing.....'. Later that day he referred to 'devastating effect of enemy air action, which seriously hindered our artillery fire and brought the attack of the combat group of the 2nd SS Armoured Division to a virtual halt.'

Seventh Army
Diary, U.S.
Transl. Vol. 1,
p.115.

Ibid., p.120

The Corps Commander of the 84th Army Corps, in asking for A.A protection said that 'the effect of the hostile air force has become so unbearable that the enemy artillery, guided by air observers and supported by the enemy air force, is not only silencing our batteries, but even destroying our infantry in their dug-outs'. As a result of this and of other applications Luftflotte 3 agreed to move certain flak units to the west. The Seventh Army also proposed to Rommel that the main effort of the Luftwaffe be shifted to the left of the front, and Rommel supported the proposal. However, General Bulowius (Jagdkorps II) stated that no change could be made immediately because replacements for fighters had not yet arrived from Germany.

Ibid., p.121

Ibid., p.129

As the pause in the fighting round Caen had also enabled the Germans to withdraw the Panzer Lehr Division into reserve on 28 June, Rommel sent this division to the St. Lo area to strengthen the front held by the 17th SS Panzer Grenadier Division. They began their movement westward on the night of 2 - 3 July, having had little time to reorganise after the rough handling they had received in three weeks of fighting against the Second British Army. The movement lasted for several days and was subjected to considerable air attacks even though some of the movement took place after dark. They sustained the heaviest losses on crossing the Vire River.

A.P.W.I.U.
(IX Air Force)
63/1945, para.
25.

Ibid., para.29.

Elements of the Panzer Lehr Division together with formations of the 2nd SS Panzer and 17th SS Panzer Grenadier Divisions and the various infantry and parachute divisions in the western zone of the battle fought bitterly to hold back the American pressure during the second week of July. On 8 July and again on 11 July, counter attacks had some success, but the superiority of the First U.S. Army in men and material was slowly wearing down the resistance.

A.H.B. 6 Transl.
No. VII/67,
p.9, paras.3(a)
and 3(b).

This resistance was the stiffer on account of a new directive from Hitler on the conduct of the war in the west that was transmitted to subordinate commands by C. in C. West on 8 July 1944. The present front at the bridgehead must be held The mobile units must be released by infantry to act as reserves for counter-attack After the mobile forces had been relieved they were to re-group and re-equip and Panzer Group West was to make preparations to launch an armoured thrust which would drive a wedge into the Allied bridgehead and create conditions which could then be exploited by the Panzer Army.

Ibid, paras.
3(c) and 3(e)

The order also included instructions to the Fifteenth and Nineteenth Army Commands. The powerful reserves held behind the coast of the Pas de Calais by the Fifteenth Army were to remain there until the intentions of the Allies were clear. This was a reference to the continuing threat of a second landing in that area which General Eisenhower rightly

calculated was one of his main trump cards. Measures were also to be taken in the Pas de Calais area to guard the V.1 sites against parachutists and saboteurs. The south of France which had been partly denuded of its garrisons by calls for reinforcements to Normandy, was to be reinforced.

Ibid, paras.
3(i) and 3(1)

To the British and American Air Forces, not the least interesting paragraphs of the order were those enjoining the most vigorous measures to be taken to maintain traffic along the main railway lines, especially over its bridges, and along the River Seine. These traffic routes were also to be provided with fighter defence. The comparative eclipse of the German Air Force is tacitly acknowledged by the general nature and extreme brevity of their orders from Hitler.

Ibid, para.5

Seventh Army
Diary, U.S.
Transl. Vol.1
p. 134

According to German documents, the Allied dominance in artillery and in air power were the two factors which were most difficult to bear. On 7 July when General Hausser (Seventh Army) discussed the use of the Panzer Lehr Division with Rommel, the former said 'the superiority of the German infantry will never come into play so long as the enemy air power and artillery continue to be so overwhelming.' Rommel agreed. In fact, the situation in the air remained so unfavourable to the Germans that on 16 July the High Command of Army Group B announced that 'with the exception of 6 July when 152 aircraft were employed over the entire region from Caen to the west coast of the Cotentin, no daily missions of our air force were executed in the (Seventh) Army zone west of the Vire since 29 June. The Army directs attention to the fact that the lack of air support is all the more serious because there is relatively little flak strength available.'

Ibid, p. 163

Normandy to
the Baltic,
p. 79.

German Seventh
Army War Diary,
U.S. Transl.
Vol.1. pp 170-175

Eisenhower,
Crusade in
Europe, p.294

Two other divisions from Brittany⁽¹⁾ and two more from the south of France⁽²⁾ were ordered to proceed to Normandy but these were unable to stop the slow forward movement of the Americans except in some sectors. St. Emy and La Haye du Puits were taken during the second week of July and thus the Americans got within striking distance of the lateral road running westwards from Caumont through St. Lo and Periers to Lessay on the west of the Cotentin. The dominating position on the American front was the route centre of St. Lo where the River Vire was bridged by main roads and railways. This position became the focus of American pressure during the third week of July. Two divisions supported by almost the whole effort of the IX Tactical Air Command attacked on 16 and 17 July, closing in on the town from three sides. The 29th Division occupied the town on 18 July after the Germans had made a voluntary withdrawal⁽³⁾ owing to the failure of the railways and the consequent shortage of ammunition. Thus on 18 July the First U.S. Army was in possession of the ground west of the River Vire which was required for mounting the major operation of breaking out of the beachhead and which they had been seeking to capture for almost one and a half months. General Bradley and his officers felt that they stood on the threshold of a great opportunity. It had originally been intended to commence the great push from positions further south where the ground was more favourable.

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- (1) The 275th Infantry Division and the 5th Parachute Division
 - (2) The 271st and 272nd Infantry Division
 - (3) There was in fact heavy house to house fighting in St. Lo before the Germans succeeded in extricating their forces (P.171, Seventh Army Diary).

But the Americans with characteristic resourcefulness adapted their equipment to the new plans and set about the necessary preparations in order to be ready to commence the preliminary offensive as soon as weather permitted.

Air C. in C.
A.E.A.F.,
O.R.B. entries
15 July.

A tentative date around 18 - 19 July when there would also be an offensive on the British front was fixed as the target date for the commencement of the break-through operation. This timetable could not be kept because the troops were not established on suitable ground west of St. Lo until that date and all the necessary men and material could therefore not be brought forward soon enough. The opening of this offensive (Operation Cobra) like the one east of Caen (Operation Goodwood) was also dependent upon a great preliminary air bombardment and this in its turn depended upon the weather. The new date for Operation Cobra was fixed for 21 July if weather permitted but after 19 July the weather deteriorated to such an extent that it was not found possible to commence the attack until the 25th.

Operation Goodwood - The British Offensive
South of Caen

Situation in the West on 18 July

It is now generally recognised that the situation existing at that stage of the campaign was critical though at the time the feeling that affairs had reached a definite turning point does not seem to have been shared by all the military leaders. Many German officers were convinced that the war was lost and while a few of them were making their own peace with their captors in Russia, others were hatching a plot to remove Hitler. (1)

On the Eastern Front the Russians had liberated Roumania and the Nazi hold on the Balkans was rapidly weakening. The same was true of Finland and the Baltic States. A campaign in Poland begun about three weeks after Overlord was achieving great results. German power in the Mediterranean was clearly on the wane with the Allies moving into North Italy and Jugo-Slavia in open revolt. Kesselring was aware that a new offensive was impending but could not tell when or where the blow would fall.








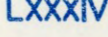

In France, Rundstedt's dismissal and the substitution of Von Kluge had not brought any easement as the Germans had insufficient resources to guard against a seaborne assault in the Pas de Calais and in the south of France and at the same time to hold an effective defence line in Normandy. As for throwing back the Armies of the Western Allies into the sea in accordance with the repeated orders of Hitler - that was an absurdity.

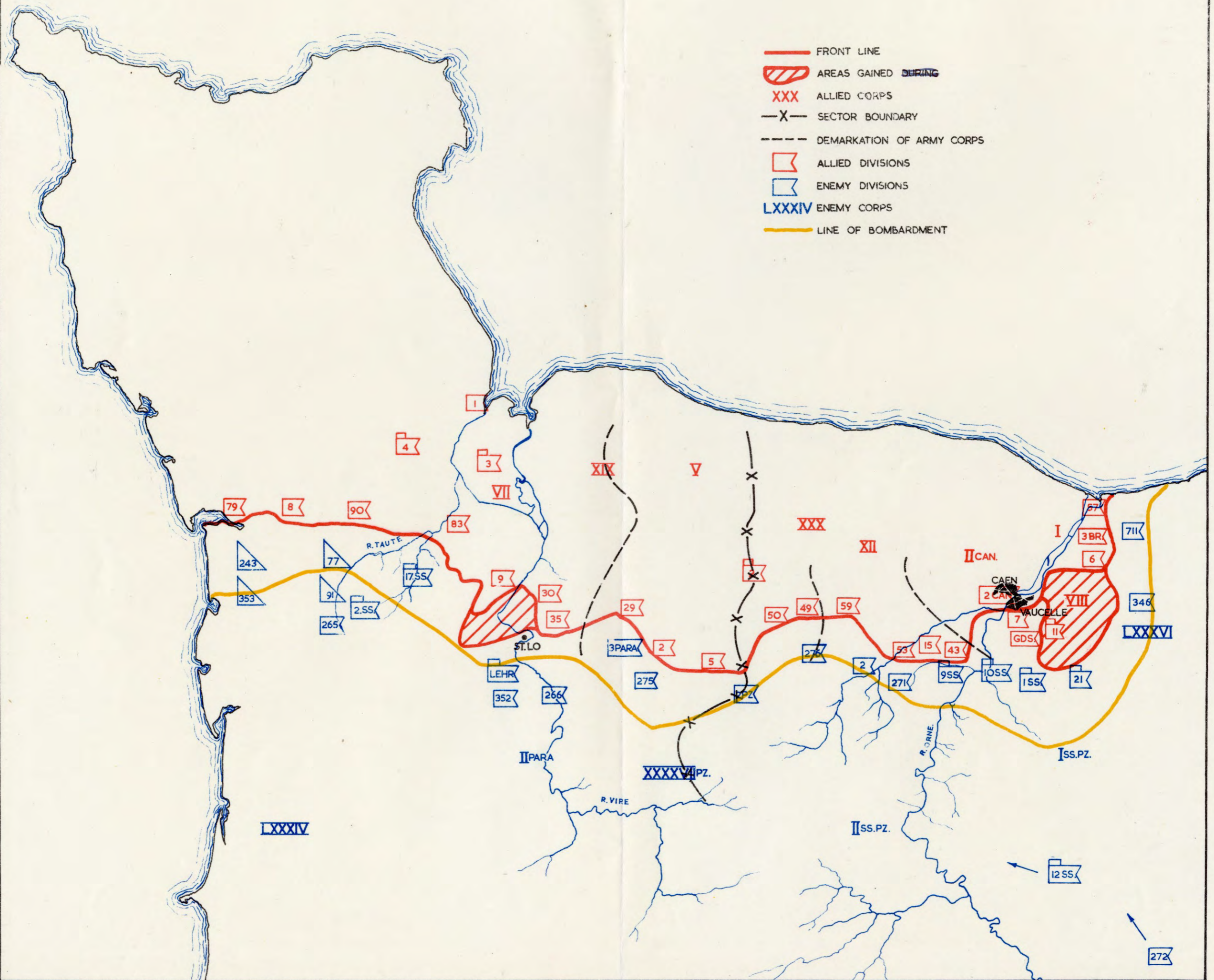
Rommel's summing up of the situation on 15 July together with reports from lower levels and a covering letter addressed to the Fuehrer by Von Kluge, have fortunately survived from the wreckage of the German collapse in Normandy. Rommel began: 'The situation at the front in Normandy is daily becoming more difficult and is rapidly approaching a crisis.' 'Fighting strength was quickly being worn away and reinforcements were inadequate and slow in arriving, he continued.

(1) The Army plot to assassinate Hitler came to a head on 20 July when a bomb exploded at his H.Q. without, however, killing the Fuehrer.

GROUND OPERATIONS AT CAEN AND ST LO.

18TH TO 20TH JULY 1944.

-  FRONT LINE
-  AREAS GAINED DURING
-  ALLIED CORPS
-  SECTOR BOUNDARY
-  DEMARKATION OF ARMY CORPS
-  ALLIED DIVISIONS
-  ENEMY DIVISIONS
-  ENEMY CORPS
-  LINE OF BOMBARDMENT



The disruption of the railway system and the continued attacks on all road transport by Allied aircraft had paralysed the supply organisation. This was becoming worse as more airfields were constructed in the beachhead. The strength of the Allies was steadily growing; in these circumstances it was inevitable that the Allies would break through the German line - probably on the Seventh Army front - and thrust deep into France. No mobile reserve was available to the Seventh Army to prevent this. 'The unequal combat is nearing its end I feel it my duty to express this clearly'.

Subsequent events were a sufficient commentary upon the accuracy of this prediction. Von Kluge was quickly convinced that Rommel was right and a few days after the latter's 'accident' the report was sent to the Fuehrer with a covering letter from Von Kluge (21 July) stating his concurrence. There was no way in which the Germans could combat the all-powerful Allied Air Force without giving up territory. German armoured formations sent to counter-attack were bombed so heavily by massed aircraft that tanks only emerged from the cratered ground with the greatest difficulty. Sometimes tractors had to be used to extricate them.(1)

The psychological effect of such heavy bombing on combat troops needs careful consideration: their fighting spirit is destroyed, their powers of resistance weaken, they feel that they are struggling against an irresistible force. In addition their material is also destroyed.

Von Kluge had come to the west with the fixed intention of making effective the order to hold fast at any price. So far, the line had been held unbroken by the bravery of the troops but the time was fast approaching when it was bound to collapse. When the Allies once reached the open country, co-ordinated defence would be almost impossible because the German troops lacked mobility.

Von Kluge concluded that he, like Rommel, considered it his duty to bring the facts to the notice of the Fuehrer but his last words on 20 July to his staff conference south of Caen were in the best traditions of the heroic German legend. 'We must hold our ground and if nothing happens to save the situation then we must die an honourable death on the battlefield'.

While enemy resources were stretched to the limit the Allied build-up had gone well in recent weeks. Over a million and a quarter men with about three hundred thousand vehicles and a million tons of stores had been landed since D-Day. A major port had been captured and was being cleared. Furthermore, in pleasing contrast to so many campaigns where less had been achieved, Allied casualties had been comparatively light. Their total was less than 100,000 of whom only about 15% were killed.(2)

File D/
SAC/H12,
Encl.31A

General Eisenhower himself pointed out in a letter to General Montgomery written three days after the launching of Goodwood that we were at that moment relatively stronger than we could probably hope to be at any time in the near future and that consequently it was vital that we moved quickly. The summer days were beginning to shorten. But the German line hinged on Caen, stretched as it was, still held. After

(1) of B.A.U. Report No. 22.
(2) Not counting aircrew and naval personnel.

the restoration of the situation at the Odon bridgehead and at Caen, the Germans had succeeded in transferring the Panzer Lehr and 2nd Panzer Divisions to the American front and had withdrawn the 1st S.S. Panzer and the 12th S.S. Panzer Divisions into reserve (10 July). These moves constituted a serious menace to Allied plans for a break-through. Vigorous action in the Caen sector was therefore essential.

General Montgomery's Directive for Operation Goodwood

File
D/SAC/H.12
Encl. 27A

With Caen in his hands at small cost and with operations on the American front developing slowly, the C-in-C. Twenty First Army Group issued a new directive⁽¹⁾ on the conduct of the battle enlarging the scope of the plan outlined on 30 June. His broad policy of engaging the main enemy forces on the eastern flank in order to keep them away from the American front where the outbreak was to be attempted, remained unchanged. But as the Germans had re-inforced their western sector it was important that action be taken to prevent the acceleration of this process.

He saw three main aims to be achieved by the Allies, viz:-

- (a) early possession of Brittany which was essential for administrative development
- (b) further depth and space in the beachhead for manoeuvre, administrative purposes and for airfields.
- (c) unceasing attrition of enemy strength.

The Second British Army was ordered to secure a bridgehead across the Orne at Vaucelles (Caen) if this could be done without undue losses. The British were also to press southward toward the general area Thury Harcourt - Mont Pincon - Le Beny Bocage but were to form a powerful reserve of three armoured divisions to operate east of the Orne in the direction of Falaise.

The First U.S. Army, pivoting on its left, was instructed to swing southwards and eastwards on to the line Le Beny Bocage - Vire - Mortain - Fougères. On reaching the base of the peninsula at Avranches the Army was to split with one Corps turning west into Brittany and the remainder of the force making a wide sweep south of the bocage country towards the neighbourhood of Laval and Mayenne and forward to Le Mans - Alençon. A newly constituted Third U.S. Army was to stand ready to take over the extreme westward flank and airborne troops were to stand by for the possible seizure of Vannes and Quiberon Bay or Lorient.

After the success of Operation Charnwood and the quick capture of Caen, there was considerable disappointment at S.H.A.E.F. and at H.Q., A.E.A.F. over General Montgomery's intentions in the eastern sector. In R.A.F. circles, reaction to the prospect of static conditions in the British area of the beachhead was particularly unfavourable because airfields were urgently needed for the deployment of No. 84 Group, R.A.F. Airfield construction and deployment on the Continent was far behind schedule owing to lack of space in the lodgement area. The advance at Caen had raised hopes that the Army was fully alive to the needs of the R.A.F. so that the abandonment of the plan for an early advance across the Orne mainly because it might involve the risk of casualties came in for sharp criticism.

(1) Under reference Tac H.Q. 21 Army Group, M510.

Minutes,
Air Cmdrs.
30 Mtg.
para. 14

Air Chief Marshal Harris had already pointed out at an Air Commanders Conference on 30 June that it was not generally realised that his Command alone had lost - mainly on Overlord operations - about 4,000 men in two months, a total which was approximately twice the total killed up to that date in the Second British Army. He made a similar statement on 11 July at the 41st Stanmore conference.⁽¹⁾ Apart from the tendency to think that casualties only happened in war on the ground there appeared to be an inadequate understanding of the value of the contribution that the Air Forces were making to the campaign generally on the part of the Commander-in-Chief, Twenty-first Army Group.

File
D/SAC/H.12
Encl. 28A
dated 10 July

Senior R.A.F. officers felt more concerned perhaps than their American colleagues because they were more affected by the policy of stabilisation in the eastern sector of the front. Furthermore, the proposed advance into Brittany, the south and the west appeared to R.A.F. officers to ignore that such terrain was unfavourable for the construction of air-fields and in any case was not in the direction of the ultimate general advance. In addition, the new directive lacked an appreciation of the fact that only a few weeks of the summer were left or that the enemy was suffering from a critical shortage of fuel, transport and ammunition.

However, urged by General Eisenhower, Air Chief Marshals Tedder and Leigh-Mallory and by Air Marshal Coningham, General Montgomery produced a plan for an early offensive east of the Orne, known as operation Goodwood⁽²⁾ which for the time being allayed all doubts. This was to include a heavy bombardment from the air and a strong thrust on a narrow front east of Caen in which three armoured divisions were to play the leading part. The target date was 18 July.

Ibid,
Encl. 29A
dated 13 July

Response to this plan was generous. The Supreme Commander said 'We are enthusiastic about your plan. I think that Coningham has already given you the assurance you desire concerning air. All senior airmen are in full accord because this operation will be a brilliant stroke which will knock loose our present shackles. Every plane available will be ready for such a purpose'. Air Chief Marshal Tedder endorsed the Supreme Commander's message and assured General Montgomery that all the air forces would be 'full out to support your far-reaching and decisive plan.'

Ibid
Encl. 30B
dated 13 July

In reply to the Deputy Supreme Commander, General Montgomery asked for three things from the Air Forces:-

Ibid
Encl. 30A
dated 14 July

- (a) Delay moves of enemy reinforcements towards the lodgement area
- (b) The study of the problem so that air could play fullest part whatever the weather
- (c) The full weight of air forces when called for.

Planning for this operation⁽³⁾ and for a simultaneous thrust by the Americans began immediately at H.Q., A.E.A.F.

(1) Para. 16 of minutes of 41st Conference on File TLM/F/S.34
(2) Or the 'Goodwood Meeting'.
(3) Planning for Operation Goodwood began some days earlier in Second British Army. Second Army Instruction No. 2 was issued on 13 July.

Air C.-in-C.
A.E.A.F.
O.R.B.
pp.10 & 11

until on 16 July it became known that the American offensive had been postponed for some days. As the launching of both attacks depended upon the weather, the heavy rain on St. Swithin's Day and a deep depression reported over the Atlantic Ocean were watched with some apprehension. In view of General Montgomery's third requirement, namely, the participation of all the Air Forces, plans were made on the assumption that the whole of the U.S. VIIIth Air Force and R.A.F. Bomber Command would be employed in addition to the full weight of A.E.A.F. and study was at once commenced on the problems of the best use of the strategic bombers in the operation. Meanwhile action was taken to delay enemy moves towards the lodgement area.

Something has already been said about Bomber Command's attacks on railway communications during this period. On the night of 15/16 July the heavy night bombers attacked railway centres at Nevers at Chalons-sur-Marne after having attacked Villeneuve St. Georges and Revigny the night before and four railway targets on the night of 12/13 July. Unfortunately the weather prevented further attacks by the heavy bombers until 18 July, the day of the great offensive, when in addition to bombing tactical positions in support of the troops, Bomber Command also did severe damage in an attack on the railway centre at Vaires.

A.H.B.6
Transl. No.
VII/84,
p.35.

The VIIIth Air Force was also severely handicapped by the weather and apparently were not able to operate strong forces against transportation targets in France even if its Commanding Generals had wished to do so. There was, however, more than a little unwillingness on the part of the latter to co-operate in operations against tactical targets such as railway centres or Crossbow sites and it was sometimes in doubt whether they were seriously trying to carry out the directions given by the Deputy Supreme Commander. At the 47th Allied Air Commander's Conference on 17 July there was a sharp dispute between Air Chief Marshal Tedder and General Doolittle which was occasioned by the failure of the VIIIth Air Force to carry out their obligations regarding Crossbow targets. Air Chief Marshal Tedder said that the excuse of bad weather would not hold since other targets in Crossbow areas were being attacked⁽¹⁾ and the Deputy Supreme Commander reiterated that Crossbow must come first. However, no objection was offered to supporting Operation Goodwood by making a series of small but widespread attacks on communications in France on 17 July and by concentrated attacks on battlefield positions before the armour pushed forward on 18 July.⁽²⁾ About 600 heavy bombers were employed against tactical targets on 17 July but all the valuable fighters of the VIIIth Air Force were withdrawn from armed reconnaissance

Air C.-in-C.
A.E.A.F., O.R.B.
July 1944 p.11

Minutes
para. 12

VIIIth Air
Force
Monthly Sum:
of Ops.
July 1944

-
- (1) This was a reference to airfields and bridges which had been frequently attacked during July.
 - (2) Despite the attitude adopted by the Deputy Supreme Commander on the overriding priority of support to major land offensives, the VIIIth Air Force sent only six or seven hundred Liberators to assist Goodwood on 18 July while some 700 Fortresses were despatched to Peenemunde. The force of Liberators was deemed by General Spaatz to be sufficient to carry out the tasks required. (See Air Cmdrs. 47th Mtg. Minutes para 14). The Air C. in C. only agreed with this proposed diversion of effort. At a critical moment provided General Spaatz was satisfied that half his force could accomplish the Goodwood tasks allotted to the VIIIth Air Force.

duties deep inside France and sent out to north Germany with 700 bombers.

Air Operations on 17 July

Weather on 16 July had been bad for flying in England and north west France with the result that the Allied Air Forces were not able to operate at a high rate of effort. On 17 July conditions were better but the weather was still unstable. There was much thunder cloud down to about 1,000 feet with coastal fog and patches of low cloud persisting until noon but the fine intervals were such that a heavy programme of air attacks was completed by nightfall.

All the Allied Air Forces operated during the day most of them against targets such as railway bridges and open lines, road traffic, fuel dumps, transport parks and similar tactical targets designed to assist the new offensive on both flanks. The chief exception was R.A.F. Bomber Command which operated only three small forces against Flying Bomb constructions. The main strength was being husbanded for a major attack to take place soon after dawn on 18 July.

About 850 bombers escorted by 700 fighters were despatched by the U.S. VIIIth Air Force during the day to make widespread attacks on targets in France which were nearly all connected with the enemy's transportation system. Amongst these objectives, 17 bridges⁽¹⁾ (nearly all of them railway bridges along the second Line of Interdiction), four other railway targets, and three airfields were allotted to 660 bombers. Bombing conditions varied according to time and place but so far as is known from German reports at least a quarter of the attacks were effective. A railway bridge near Auxerre was destroyed and another one near St. Quentin was closed to traffic. Main lines at Belfort, Mulhouse and Besancon were also reported out of action after these operations.

A. H. B. 6.
Transl. No.
VII/84, p. 34.

Operation Orders from H. Q. 2nd Tactical Air Force to Nos. 2, 83 and 84 Groups also emphasised the need for Air Forces to concentrate upon hindering enemy movement across the bridges and ferries of the Seine as well as along the railways from the east and south-east towards Normandy. A programme of attacks against key points on the chief railways serving these routes had been issued to the IXth Air Force and 2nd Tactical Air Force in a directive from the Commander, Advanced A.E.A.F. dated 12 July but weather had prevented it from being put into execution.

Adv. H. Q.,
A. E. A. F.
Folder No. 30
12 July 1944.

On the night of 16/17 July, No. 2 Group had been ordered to attack railway movement along nine railway routes⁽²⁾ the

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- (1) For bridges along the Second Line of Interdiction see Appendix 'A' to Enclosure 5 dated 6 July 1944 on File Advanced AEAFF/TS. 24, 228.
 - (2) The railway routes were listed in the following order of priority:-
 - (i) Moulins - Nevers - Gien - Montargis - Melun
 - (ii) Dijon - Laroche - Melun
 - (iii) Nevers - Bourges - Vierzon - Tours - Le Mans
 - (iv) Chateauroux - Vierzon - Orleans - Etampes
 - (v) Vitry - Chalons - Epenay - Chateau Thierry - Meaux
 - (vi) La Rochells - LaRoche - Nantes - Angers - Saumur - Tours
 - (vii) Poitiers - Tours - Orleans - Montereau
 - (viii) Niort - Parthenay - Saumur - Tours
 - (ix) Vitry - Sezanne - Gretz - Armainvillers.

2nd T.A.F. Op.
Order No. 270.

highest priority being given to traffic from Paris to Moulins and from Paris to Dijon. Both of these routes lead into the Rhone Valley and south-eastern France. Other railways were cross-country lines in the Loire valley and trunk routes to the east and the south of France. As the Mitchells and Bostons were by this time reverting to day operations and the Mitchells had been operating in the evening against a Petrol Oil and Lubricants (P.O.L.) dump at Chartres, this duty of disrupting railway traffic by night devolved upon the Mosquito squadrons. Unfortunately the weather forecast for the night of 16/17 July caused No. 2 Group operations to be cancelled but the plan for cutting these routes was not abandoned.

Seventh Army
Diary U.S.
Trans. Doc. No. 1
p. 172.

During the daytime on the 17th the Mitchells and Bostons attacked two P.O.L. dumps at Alencon (80 bombers) and one at St. Malo (60 bombers). Eight squadrons of Spitfires were apparently too much to be challenged by the German Air Force although the raid on St. Malo definitely hurt the enemy. The diary maintained at the Headquarters of the German Seventh Army recorded that several direct hits had been scored on the railway station and harbour; the telephone system was put out of action and a patrol boat was hit.

2nd T.A.F. Op.
Order No. 258.

No. 83 Group, reinforced by aircraft from No. 84 Group, was ordered to carry out intensive and systematic armed reconnaissance over the area inside the line Beny Bocage-Domfront-Alencon-Dreux-Mantes Gassicourt-Quillebuef on 17 July. The above area represented a rough quadrilateral extending to a depth of 60 miles on a frontage of 100 miles with the river Seine as its eastern boundary. Particular attention had to be paid to the Seine crossings and their approaches. At the same time, the principal railway lines⁽¹⁾ inside the area had to be cut in several places along the following routes:

- (a) Mantes Gassicourt-Evreux-Conches-Bernay-Lisieux
- (b) Dreux-Laigle
- (c) Evreux-Montfort (single track).

This task was carried out by about 400 Spitfires, Typhoons and Mustangs, which amounted to about a half of the total effort for the day by 2nd Tactical Air Force. Claims by pilots were much as usual. Traffic did not seem to be very heavy but squadrons claimed to have successfully attacked armoured fighting vehicles, railway rolling stock, cars and lorries on the roads and a variety of miscellaneous targets.

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







Day reconnaissance aircraft of 2nd Tactical Air Force were also playing an important role in the preparations for the ground offensive. Their main activity had been to search the areas south and east of Caen but judging from Squadron records these appear on the whole to have revealed very little enemy movement. On the evening of 16 July No. 430 Squadron performed an important task for the Army. This was the making of a photographic reconnaissance of some twelve bridges crossing the River Dives (east of Caen) and its tributaries. Visibility was not altogether satisfactory but all the bridges were reported to be intact. It may be

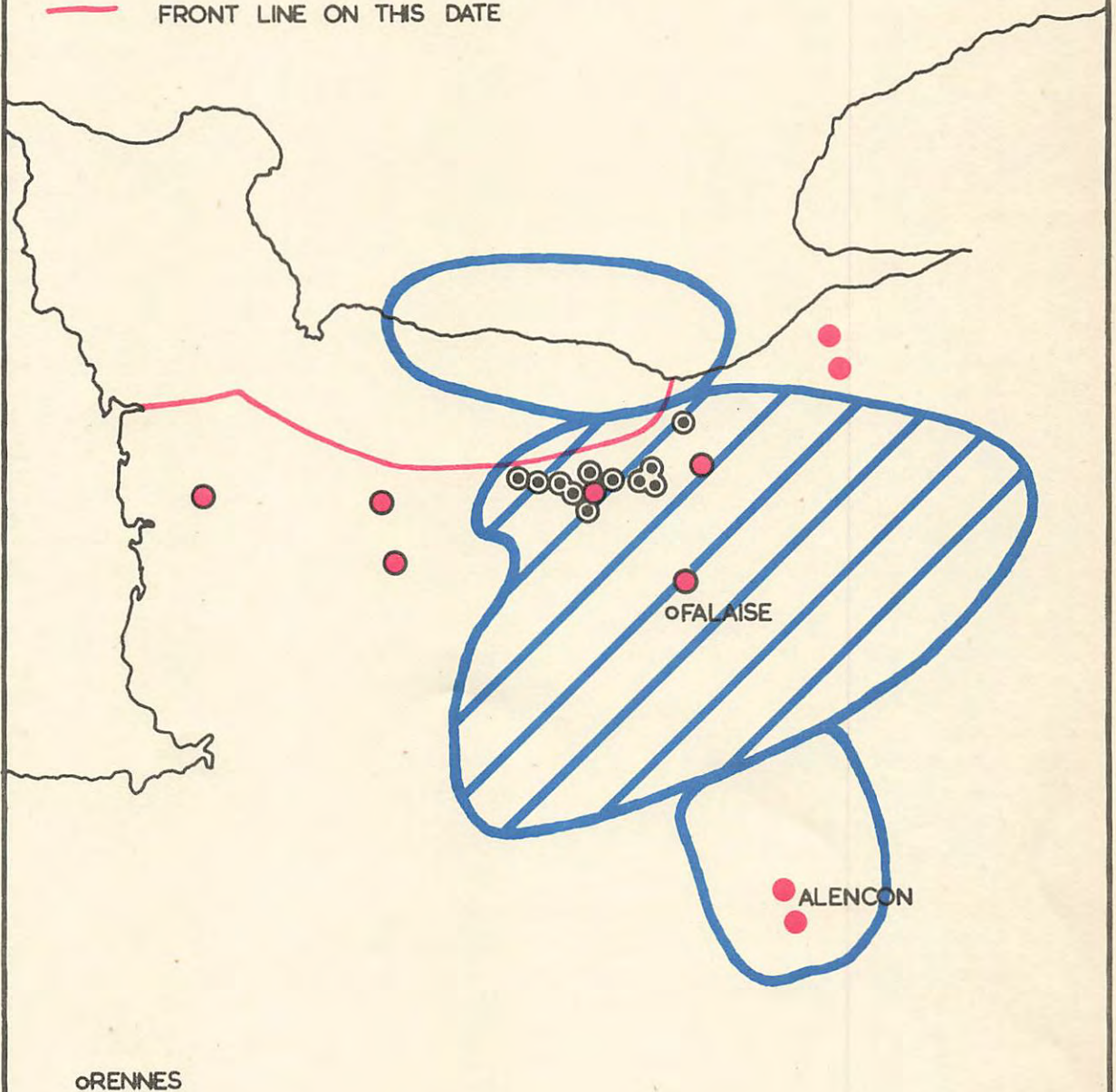
No. 430 Sqn.
O.R.B.
July 1944.

(1) Operations ordered on 17 July were according to a programme drawn up for 12 July but not executed because of bad weather.

OPERATION OF TAF ON 17-7-44

— : L E G E N D : —

-  ARMORED RECCE.
-  ARMORED RECCE. IN CONCENTRATION
-  BOMBING BY DAY
-  BOMBING BY NIGHT 17/18
-  F/BOMBER TARGETS IN BATTLE AREA
-  FRONT LINE ON THIS DATE



mentioned here that on the next day the Mustangs reconnoitred the bridges across the River Orne from Thury-Harcourt to Caen. Four of these were believed to be impassable, one was damaged and only two were found to be intact.

No. 34 Wing
O.R.B.
July 1944

The Spitfires and Mosquitoes of No. 34 Wing which performed tasks of a strategic nature were very active on the 17th and took full advantage of the periods of good visibility. The work performed by the Wing that day should give the reader a good idea of the varied tasks on which it was employed. The Spitfires photographed dumps and railway yards at Briouze and Ecouche in the neighbourhood of Argentan and larger railway centres around Paris; likely concentration areas in woods in the battle area were investigated; mapping was carried out between Fougères and Alençon; a photographic mosaic was made of the Vannes district in Brittany and seven Luftwaffe airfields near Paris were photographed. During the evening and night of the 17/18 August photographic reconnaissances were made by Mosquitoes over roads and gun positions south of Caen and west of Lisieux.

But what distinguished 17 July from all other days was that the Commander-in-Chief of the German Army Group B happened to be travelling in a staff car that was attacked in the 2nd Tactical Air Force area on that day. Field Marshal Rommel had apparently been visiting the Command post of the Panzer Gruppe West between Livarot and Vimoutiers in the Argentan area and was returning by car along a road through the woods near Ste Foy de Montgomerie (Vimoutiers) when a fighter aircraft attacked. The car was ditched and the Field Marshal was seriously wounded about the face with a skull fracture and other serious complications. He was sent to hospital and to all intents and purposes passed off the scene so far as his part in the war was concerned. His death occurred later in the autumn. The official announcement ascribed it to his wounds whereas other reports say that he was implicated in the Hitler plot of 20 July and was forced to commit suicide when details were uncovered. The pilot responsible for the attack on his car has never been identified; many 2nd T.A.F. aircraft were busy carrying out individual attacks over the whole area so that it is unlikely that the identity of the pilot will be discovered.

On 17 July the U.S. IXth Air Force flew over 1,400 sorties mainly over and in front of the First U.S. Army. Much of the effort was devoted to rail cutting in the area due south of the U.S. line i.e. between the beachhead and the River Loire. Many cuts were made in the areas around Rennes, Chateaubriant, Angers, Le Mans and as far east as Orleans. Where possible, railway lines were attacked at bridging points and on 17 July about 40 bridges in and behind the battle area were attacked by the Thunderbolt fighter bombers of the IXth Air Force. Amongst these targets were bridges over the Rivers Vire and Sienne.

A.E.A.F.
Int/Ops
Summary
Nos. 180 and
181

Night Operations, 17/18 July

The task of harassing enemy forces in the battle zone and of bombing any movement observed to be taking place on the ground behind the enemy lines by night was entrusted to the Mosquitoes of No. 2 Group. The zone to be covered was bounded on the north by a line from Troarn - Mezidon - Falaise - Vire to the sea at Granville but special attention was to be paid to a small area about 20 miles square between Amaye - Sur - Orne, Conde, Vire, and the front line. The latter area was regarded as vital because of Operation Goodwood which was to commence on the morning of the 18th.

2nd T.A.F.,
O.R.B.
July 1944.
p.40.

Unfortunately, the weather forecasts had predicted fog closing down on home bases so that only 50 Mosquitoes were detailed for operations rather than 70 or 80. Some of the aircraft were sent to attack movement over the Seine crossings. Weather turned out well; it was clear but dark. Traffic was seen at Coutances and at Conches where it was attacked with bombs and guns but on the whole very little movement could be seen.

Dispositions for Operation Goodwood

The disposition of divisions on the British front prior to the launching of Operation Goodwood is shown on Map No.8. The Second British Army was organised in five corps of which XXXth, XIIth, IInd Canadian and Ist Corps were in the line from west to east while VIIIth Armoured Corps was in reserve. The static sector of the front between the Orne and the Dives N.E. of Caen was held by Ist Corps but immediately behind them was poised the reserve VIIIth Corps consisting of three armoured divisions. Occupying Caen and its suburbs north-west of the Orne was IInd Canadian Corps with XIIth Corps in and around the Odon bridgehead on its right. The remainder of the line up to the junction with the Americans near Caumont was held by XXXth Corps. The VIIIth Armoured Corps which was to do most of the ground fighting consisted of three armoured divisions, the Guards, the 7th and the 11th.

Plans for the operation

General Montgomery's Directive of 10 July was generally interpreted to mean that the Second British Army was to concentrate its best armour on an attempt to thrust through the region north-east of Caen in which the 6th Airborne Division had been fighting and break-out into the more open terrain south of Caen exploiting in strength in the direction of Falaise. The main thrust into the area Bourguebus - Vimont and Bretteville-sur-Laize was to be supported by subsidiary attacks on the flanks carried out against Colombelles and Vaucelles by the Canadians and against Troarn by Ist Corps.

Preliminary attacks had been launched to the south-west and west of Caen in order to secure Evrecy, Maizet, Bougy and Noyers in the Odon valley. These operations were undertaken by strong forces from XIIth Corps (Operation Greenline) and XXXth Corps (Operation Pomegranate) beginning on 15 July but by the time Goodwood had started no progress had been made in either operation. In the main operation, the outline tasks given to the armoured divisions⁽¹⁾ were to:-

- (a) dominate the area Bourguebus - Vimont - Bretteville-sur-Laize.
- (b) destroy enemy forces in this area.
- (c) exploit towards Falaise.

The tactical object of the plan was thus to attempt a breakout into country suitable for armoured operations and thereafter to exploit any favourable developments. At the same time the main strategical object was to force the enemy to commit his reserves in that sector and to attract as much attention as possible so as to assist the decisive blow which was about to be launched on the American front. A misunderstanding over these objects led to much criticism due very

(1) Second Army Op. Instruction No.2 dated 13 July copy at Encl. 3A on File ABAF Adv./T.S.24275/Ops.

possibly to disappointment when the operation seemed to have failed to achieve all that had been hoped. (1)

Normandy to
the Baltic
p.80.

In his book General Montgomery said that the operation 'gave rise to a number of misunderstandings at the time. It was a battle for position which was designed first to bring into play the full effect on the enemy of a direct and powerful threat to Falaise and the open country to the east of the town, and secondly to secure ground on which major forces could be poised ready to strike out to the south and south east, when the American break-out forces thrust eastwards to meet them. I now believe that the misconception concerning this operation arose primarily because the forthcoming battle for position was in fact the prelude to operations of wider scope, which, when the time came, were to form part of the Allied drive to the Seine. Added to this, the break-out operation by First U.S. Army was, for obvious reasons, being kept a close secret, and, since it was clearly time we broke the enemy cordon surrounding us, it was understandable that a major operation of this kind should suggest wider implications than in fact it had'.

The only possible comment on this explanation is that the misconception was apparently shared by the Supreme Commander, by his Deputy, and by most of the Allied Air and Ground Commanders. If the scope of the plan was limited to making a dent in the enemy front it is difficult to understand why General Eisenhower was enthusiastic or how it would 'knock loose our present shackles'.

Air Support

The Deputy Supreme Commander issued instructions that all the Allied Air Forces were to be made available to the Second British Army if required for the operation. The view held by the Army was that having regard to the strength of the enemy positions on the flanks and in front together with the long distances to be covered in a short time by the ground forces if they were to have any chance of breaking through, the maximum support that could be brought to bear by the air forces would be essential. This view was accepted by the Air C.-in-C. and the other Air Commanders.

Planning began at H.Q. Second Army No.83 Group in the normal manner on 13 July. The Air Officer Commanding No.83 Group passing to A.E.A.F. all the requirements that could not be met by the aircraft under his immediate control. In the case of this operation the major air effort was provided by R.A.F. Bomber Command, the U.S. VIIIth Air Force and the U.S. IXth Air Force. The planning was done at H.Q. A.E.A.F. and at individual commands, but the co-ordination of all air operations with the Army was done by A.V.M. Broadhurst.

File
A.E.A.F./
T.S.13165/
Part iv Encl.29.

See Map No.9

The requirements of the Army which could not be executed by No.83 Group were made known to the Air C.-in-C. on 15 July and the latter's directive to Bomber Command, VIIIth Air Force and Advanced A.E.A.F. was issued on 16 July. The leading armoured division, starting at 0815 hours from positions along an east-west line through Herouville (five miles north-east of Caen), would advance southwards on a front of 3,000-4,000 yards along the axis Escoville - Cagny.

(1) On 17 July Second Army Commander, acting on order from General Montgomery, ordered VIII Corps to form a base in the areas Vimont-Garrelles-Secqueville, Hubert-Folie-Verreres and that a major advance to the south should not be made without reference to him.
2nd Army Order 17 July.

This was in open country east of the River Orne and Caen. In broad terms it was requested that gun positions in and along the sides of the long corridor forming the axis of advance be neutralised by bombing. Heavy bombing was required on the flanks and cratering was not only acceptable but even desirable as an obstacle to enemy counter attacks when the advance was under way. Areas within the corridor over which our own troops had to pass were to be neutralised by carpet bombing but craters here could not be accepted.

Thus the main features of the air support to Operation Goodwood comprised the following:-

- (a) Heavy bombing of enemy position on flanks of VIIIth Corps advance.
- (b) Fragmentation bombing in path of advance.
- (c) Attacks on certain enemy gun positions out of artillery range. (1)

With the experience of Operation Charnwood (7 July) in mind, the areas designated A, H and M, where cratering was acceptable were allocated to Bomber Command. Area A amounting to about 1,000 acres included the strongly-held factories by the Orne at Colombelles and the terrain south as far as the industrial area of Mondeville. Area H of about the same extent was three miles to the east across the corridor and enclosed the agricultural villages of Touffreville, Sannerville, Manneville and Cuillerville, all well built and well fortified. Area M centred on Cagny was smaller in size and, as it lay almost directly in the path of the projected advance, cratering was to be held to a minimum. Most of the bomb load carried was in 1,000 lb. bombs.

Areas I (region of Troarn), P (Grentheville, Soliers and Bourguebus) and Q (open country east of I) all containing artillery positions were allotted to the VIIIth Air Force heavy day bombers. Except in the Troarn area cratering could not be accepted. Five areas C, D, E, F and G inside the corridor were given to the IXth Air Force with instructions that cratering could not be permitted except in area on the western edge of the corridor of advance. Thus 20 lb. fragmentation and 100 lb. general purpose bombs were carried by the VIIIth Air Force, 260 lb. fragmentation with 250 lb. and 500 lb. G.P. by the IXth Air Force rather than the heavier bombs carried by the R.A.F. bombers. It was clearly understood that the air plan was to demolish and disorganise defences on the flanks preventing enemy reaction until positions were over-run and preventing movement across these target areas. Inside the corridor enemy defence positions were to be swept by fragmentation bombing. Fighter-bombers were to engage individual gun positions, troop concentrations, etc, while other squadrons of No. 83 Group were on patrol at call for impromptu action as the situation developed.

The normal tactical support in the battle was undertaken by aircraft of No. 83 Group assisted by squadrons of No. 84 Group based in Normandy. In addition to providing fighter-bomber squadrons on the 'cab-rank' waiting for Army calls for immediate (direct) support, No. 83 Group was responsible for making a number of pre-arranged attacks. These targets included defended localities at Le Mesnil Frementel, Frenouville, Grentheville and Garcelles, three enemy gun

2nd T.A.F. L
Daily Log,
Sheets 1070-
1072

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- (1) The VIIIth Corps Commander had asked for a second heavy bomber attack to be made at about 1500 hours when he hoped his armour would be ready to move to its final objectives. This request never reached the appropriate authority. Mins. VIII Corps Conference 1800 hours, 16 July 1944.

positions and three areas where there were known to be enemy reserves, viz Fleury-St Andre, Clinchamps and Vimont-Argences.

A Sherman tank equipped with radio telephone as a Visual Control Post (V.C.P.) and manned by an Air Force Controller with an Army colleague as liaison officer was sent into the attack with 29th Armoured Brigade, (1) This was an experiment designed to enable the ground forces to call upon Rocket Projectile Typhoon patrols for assistance but the experiment was not a complete success because the Controller was wounded in the early stages of the battle. The Liaison Officer carried on but owing to lack of experience in the work was unable to do so as effectively as might have been the case.

Ibid, Sheets
1072 to 1074

In addition, constant patrols of fighters were maintained to block any attempt by the enemy to withdraw from the battle or to move in reserves. Cover was also provided against interference by the German Air Force.

Progress of the operation - air operations

File Bomber
Cmd. S.30717/6,
Encl. 77A.

A good weather forecast on the evening of 17 July allowed A.E.A.F. to confirm with the Army and with all Air Forces that the operation would take place as planned. (2) Had the Air Forces been unable to participate at full strength the operation would have been postponed as it was entirely dependent upon the execution of the bombing programme. But 18 July was unusually bright and clear when at 0535 hours, 1056 Lancasters and Halifaxes began dropping over 5,520 short tons (3) of bombs on Pathfinder Target Indicators. Oboe technique was used by No. 8 Pathfinder Group Mosquitoes and Lancasters. Two aiming points in Area H (Colombelles and Mondeville) and two in Area I (Sannerville and Manneville) were attacked first, each aiming point being bombed by about 230 aircraft at short intervals to allow dust and smoke to blow away. At 0615 hours a smaller force of about 100 bombers began a ten minute attack on Cagny (Area II). Several aircraft were damaged by flak which was active in the early stages of the bombing but soon died away. Six heavy bombers were lost.

A.E.A.F. Int/
Ops Summary
No. 181,
Section B

At 0700 hours, boxes of Marauders and Bostons of the U.S. IXth Air Force began a series of attacks on Areas C, D, E, F and G, situated for the most part in the corridor around the villages of Demouville, Cuverville and Giberville. Eleven boxes each with about 36 aircraft took

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- (1) 11th Armoured Division
 - (2) Confirmation was sent from H.Q. A.E.A.F. at 2130 hrs. on 17 July but Gen. O'Connor, Commander VIIIth Corps said 'It was not known until 0140 hours on 18 July that the operation would in fact take place on that day'.
 - (3) There is some discrepancy between the tonnages reported dropped in this operation as between accounts given by Bomber Command Intelligence Narrative No. 854 and the Analysis of Air Operation Goodwood produced on 4 August 1944 by the Scientific Adviser, A.E.A.F. (File TIM/S.136/60/3). The former figure being lower (as compared with 5,938 short tons) is quoted here as it is presumably an official Bomber Command estimate without suggesting that it is the more accurate of the two.

See Map No.9.

part and it was calculated that 318 out of the 415 medium bombers dispatched, dropped their loads of fragmentation and General Purpose bombs in the vicinity of the main operations although in some cases results were not observed. About 621 tons were dropped but it subsequently transpired that a very large proportion of the total load fell in areas east and south east of the designated targets. The bombing finished at 0745 hours which was the signal for the commencement of the artillery barrage and H Hour for the leading brigade (29th Armoured) of the 11th Armoured Division.

See Map No.9.

Meanwhile, the wider bombardment by the VIIIth U.S. Air Force on the left flank of the ground attack around Troarn (Area I) and further south of the other targets in the neighbourhood of Soliers and Frenouville (Areas P and Q) began at 0730 hours. Boxes of 18 Liberators continued to come over until nearly 0930 hours by which time 571 aircraft out of the 643 dispatched, reported that 1412 short tons of 20 lb. fragmentation and 100 lb. G.P. had been dropped in the target areas. In fact, reference to Map No.9 will show that crews frequently erred on the side of over-caution in the effort to avoid bombing friendly troops. The result was that many bombs fell too far away from the battle to have the desired effects.

A.E.A.F. Int./
Ops. Summary
No. 181,
Section B.

There was still no opposition from the German Air Force and as flak had died down by this stage in the proceedings only two Liberators and one Marauder were lost from this cause. The absence of enemy fighters may be attributed to another aspect of the air plan for the battle. A large number of Mustangs and Thunderbolts from the IXth Air Force and a Group of fighters from the VIIIth Air Force carried on intensive operations against enemy airfields outside the battle area. The IXth Air Force accepted responsibility for these duties in areas normally assigned to 2nd Tactical Air Force in order that the latter could concentrate its effort on army support and patrols over the battle area generally. As an extra insurance, however, the heavy bombers both British and American, together with the medium bombers, were all furnished with large escorts. About 800 aircraft - nearly all Spitfires, provided the bulk of this protection. This was on a scale with which the German Air Force could not hope to compete.

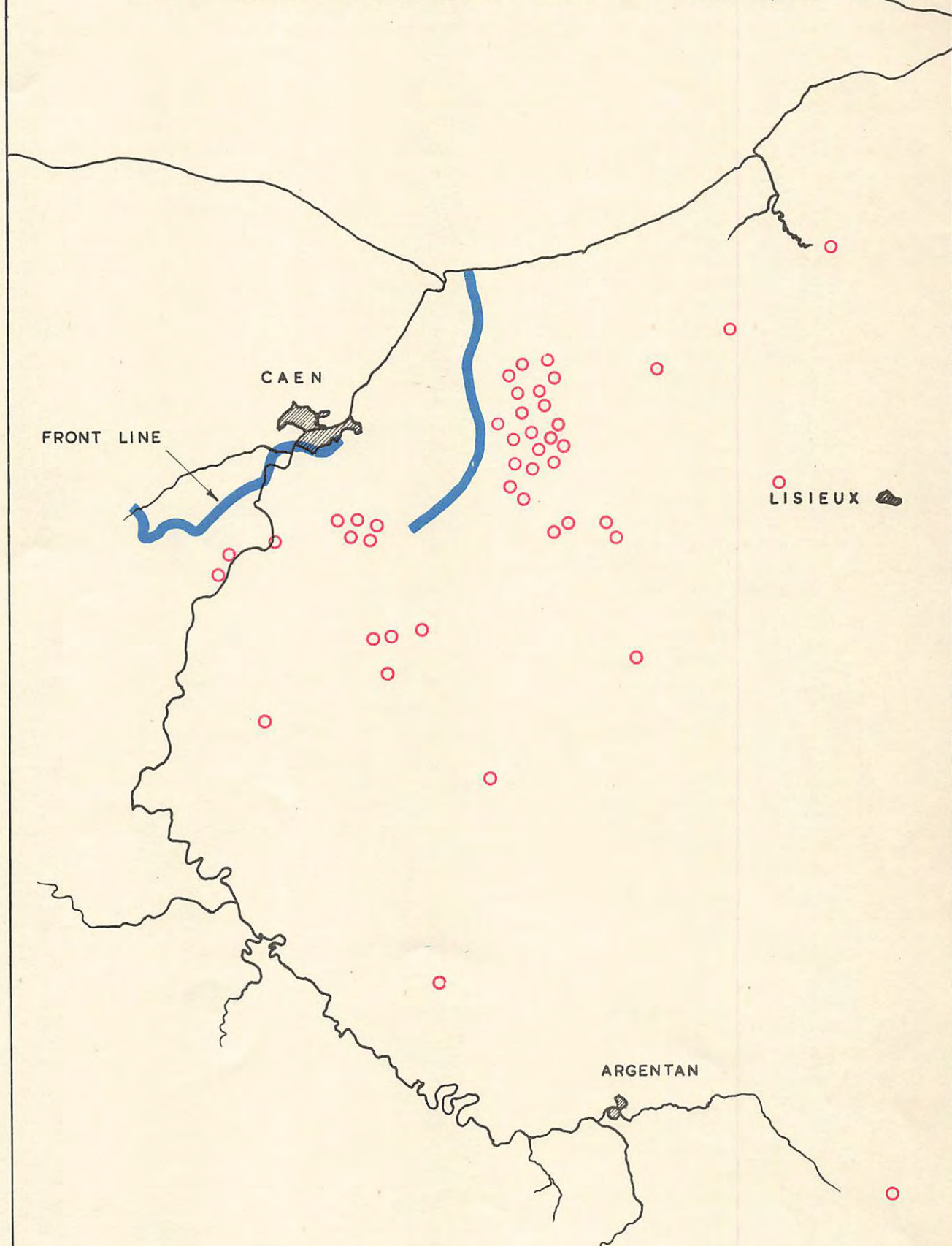
2nd T.A.F.
Daily Log
Sheets 1070
and 1071.

Ibid
Sheet 1072.

But perhaps the most important contribution of 2nd Tactical Air Force to Goodwood was the work of the Typhoons which flew 468 sorties on pre-arranged and impromptu missions in support of VIIIth Corps. Pre-arranged missions were flown by 306 aircraft in formations usually of eight to twelve aircraft against gun positions, strongpoints or bridges. The majority were flown soon after the troops had begun to move forward down the corridor. Only two calls came from the Army to the Typhoons for immediate support before 1030 hours but after that time calls were frequent and 162 aircraft had answered calls (in small formations of six or even three aircraft) up to about 1900 hours. Most of these calls were for attacks to be made on enemy tanks⁽¹⁾ and Typhoon pilots claimed to have destroyed six and damaged a further six apart from destruction and damage to other objectives such as troops and vehicles. On three separate occasions during the middle period of the day and once during the evening,⁽²⁾ formations

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- (1) Formation of three Typhoons rather than six.
(2) Nine attacks were recorded by Typhoons on enemy tanks.

BOMBING OPERATIONS OF 2 T.A.F. ON 18.7.1944



LEGEND

○ = OPERATIONAL SORTIE

Ibid.

of six Typhoons were airborne to operate under the Visual Control Post as already described. No targets were given to any of these Typhoons during those times.

Ibid
Sheet 1073

Six squadrons of Typhoons (74 aircraft) four squadrons of Mustangs (51 aircraft) and one of Spitfires (12 aircraft) were sent out over the general neighbourhood of Falaise, Argentan, Caen, Lisieux, Bernay, Mezidon, Laigle and Evreux on armed reconnaissance, most of the flying time being spent in the Caen - Falaise - Lisieux triangle searching roads and railways for enemy traffic. A few small claims were made but on the whole pilots saw very little of the considerable ground activity by the enemy.

Weather began to close down in the afternoon and the outlook for the next day was distinctly unpromising. However, it had been a day of considerable achievement for the R.A.F. particularly for squadrons at French bases which had flown 1,168 sorties practically all of which were in support of the ground fighting. The weather was the controlling factor for on the two days (17 and 18 July) 2nd Tactical Air Force flew 833 and 1943 sorties while Air Defence, Great Britain flew 448 and 914 sorties. The R.A.F. thus had produced an effort of the order of 4,000 sorties mainly in connection with the battle while the U.S.A.A.F. flew over 3,000 sorties of which over 1,000 were flown by heavy and medium bombers in direct support of the Second British Army.⁽¹⁾

The following table provides a statistical summary of the air effort in Operation Goodwood.

| Air Force/Command | Target Area | No. of Aircraft | | Bomb Tonnage Short |
|---|-------------------------------|-----------------|-----------|--------------------|
| | | Despatched | Attacking | |
| R.A.F. Bomber Command | A(Colombelles Mondeville) | 235 | 233 | 1306 |
| | | 232 | 230 | 1228 |
| | H(Sannerville Manneville) | 242 | 234 | 1217 |
| | | 241 | 229 | 1261 |
| | M(Cagny) | 106 | 102 | 608 |
| " " " Total | 5 targets | 1056 | 1028 | 5620 |
| VIIIth U.S.A.A.F. | P Soliers | 265 | 262 | 640.2 |
| | Q Frenouville | 172 | 122 | 333 |
| | I Troarn | 206 | 151 | 353.6 |
| | Alternatives | - | 36 | 98.8 |
| " " Total | all targets | 643 | 571 | 1425.6 |
| IXth U.S.A.A.F. | C,D,E,F, and G | 415 | 318 | 621 |
| R.A.F. No.83 Group | Pre-arranged small targets | 306 | 290 | 200 |
| Grand Total Bombers | | 2,420 | 2,207 | 7,867 |
| R.A.F. 2nd T.A.F. - other effort in support of battle | | 1,637 | | |
| R.A.F. A.D.G.B. - other effort in support of battle | | 500 | | |
| IXth U.S.A.A.F. Fighter and Fighter Bomber effort in support of Goodwood | | 134 | | |
| Grand Total Aircraft in Support of Goodwood | | 4,691 | | |

(1) The IXth Air Force provided their own escorts for the Marauders (74 Lightnings) and in addition sent three squadrons of Thunderbolt bombers in the early morning and two more squadrons in the afternoon to cut crossings north of Thury Harcourt (60 aircraft).

Results of the Air Bombardment

Many of the effects of the air bombardment upon the enemy and upon our own men were seen and appreciated by the advancing troops in the course of the day though some of the less tangible effects in the way of bomb-shock had in many cases worn off owing to the time that had elapsed between the bombing attacks and the arrival of ground forces at the target areas. A few instances were recorded where bombing was seen to be effective or vice versa: these will be indicated where appropriate when the advance of the ground troops is being described.

As conditions were good, except sometimes when the Marauders and Bostons were troubled by dust and smoke, the strike photographs were generally excellent. Bomb falls as shown by these, provide some interesting data. Bombing by the heavy night bombers on Areas A, H and M was excellent and uncomparably better than that by the Liberators or the medium bombers. It should of course be remembered that Bomber Command had the advantage of operating at the best period of a remarkably clear morning. There was little trouble from dust and smoke except during the last few moments of the attack on Cagny. However, there was not much dust and smoke at any time in some of the areas bombed by the Liberators,⁽¹⁾ many of whose strike photos show their bombs hitting areas miles to the south of their targets.

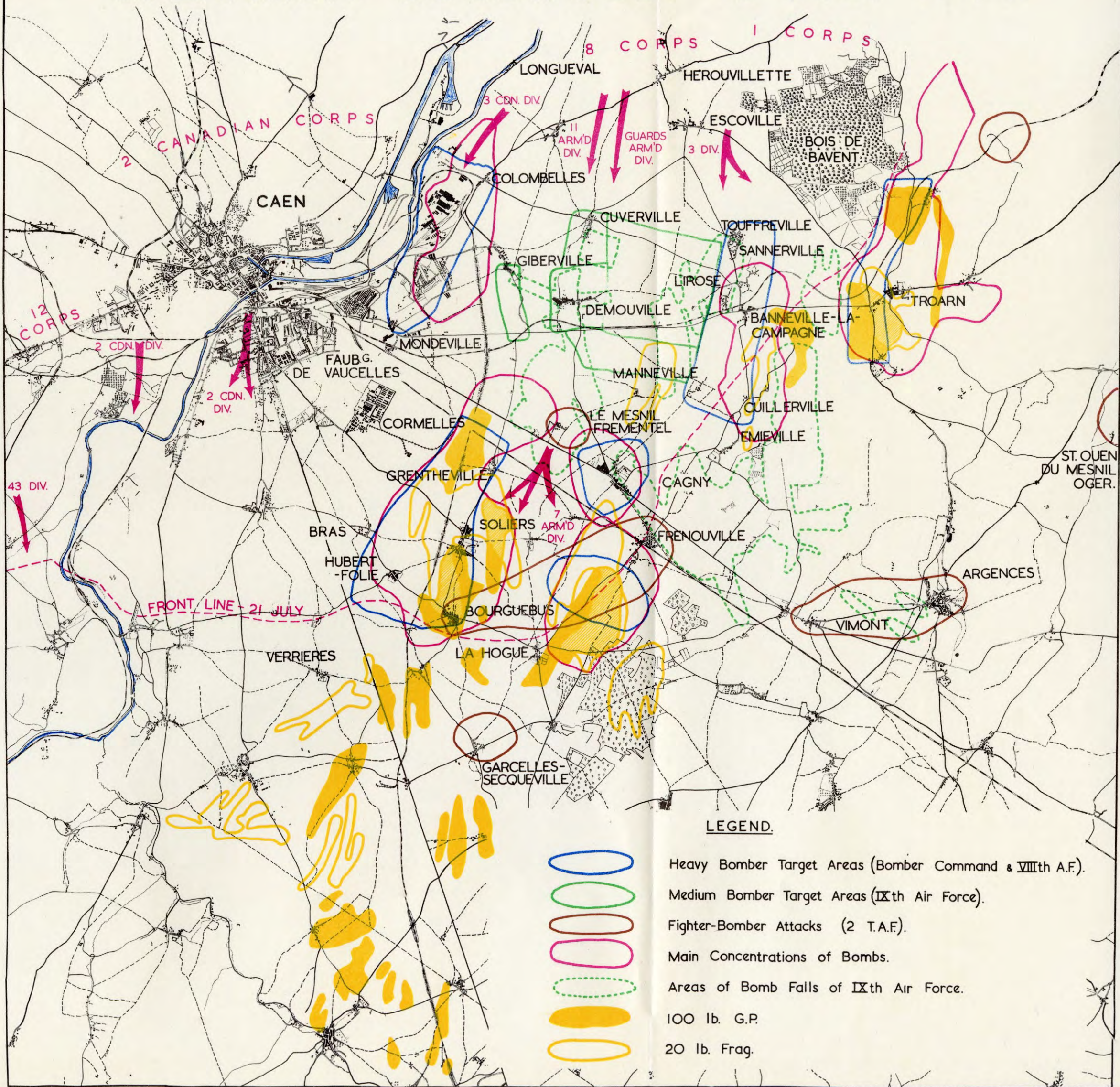
Colombelles and Mondeville (except for the extreme south-eastern corner of the latter) were completely neutralised as defensive positions⁽²⁾ by the 1,200 tons of bombs which demolished the factory buildings and cratered the surface of the ground for a distance of about three miles over a breadth of about a mile. The same thing happened at Area H except that in this case Touffreville, which was the nearest point to our starting line on the ground, was almost completely missed. Very heavy bombing occurred at Sannerville, Banneville and Guillerville. In both areas A and H there was a marked tendency for bombs to fall slightly to the east of the aiming points but the accuracy of the attack was nevertheless admirable. In spite of the fact that the target had become obscured by smoke and dust most of Area M appeared from the strike photos to have been well covered by the 600 short tons of bombs aimed at it. However the north-east outskirts of the village of Cagny appear to have been missed. This had considerable significance as will be described later.

Reference to Map No.9 will show that the Liberators covered most parts of their target areas around Troarn, Soliers and Frenouville but only with a small proportion of their fragmentation bombs. Grentheville appears to have escaped the bombardment. Much of the bomb load of the VIIIth Air Force seems to have been scattered over the country as far south as Bretteville-sur-Laize. An American investigating committee attributed this to mistakes in identification: they added that a comparison of results with R.A.F. Bomber

U.S.A.A.F.
Evaluation
Board Report
IIL/26 p. 81.

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- (1) As on D Day, bomb-aimers were quite rightly anxious not to hit friendly troops.
 - (2) These areas gave no trouble until the effects of the bombing had begun to wear off: unfortunately they were not occupied by the Canadians during the early stages of the operation.

"OPERATION GOODWOOD." 18 JULY 1944.



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- Heavy Bomber Target Areas (Bomber Command & VIIIth A.F.).
- Medium Bomber Target Areas (IXth Air Force).
- Fighter-Bomber Attacks (2 T.A.F.).
- Main Concentrations of Bombs.
- Areas of Bomb Falls of IXth Air Force.
- 100 lb. G.P.
- 20 lb. Frag.

Command was 'surprising' because the R.A.F. achieved a higher degree of accuracy.⁽¹⁾

Though there were good concentrations of bombs around the hamlet of Lirose west of Sannerville, and around Demouville in the 'corridor', large areas of G, C, D and E were untouched by the attacks of the medium bombers. Many bombs fell at Le Mesnil Frementel, and in the country east of Frénouville, Emieville and Banneville which were not given as target areas though they might well have been accommodating enemy forces.

In the circumstances, it is difficult to assess the achievement of the U.S. Air Forces but their contribution to the battle should not on that account be unduly minimised. A very wide area both to the south and east of the German front was scarified by fragmentation and other light bombs. As it was the enemy practice to hold the front thinly with reserves spread over terrain to the rear there was a good chance that considerable damage and disorganisation was inflicted by bombs dropped well behind the target areas allotted. The type of bomb used made only shallow craters so that little could be learned by ground survey parties who examined the battlefield after it had passed into our hands.

B. A. U. Report
No. 22. para. 2.

The appalling ruin of the factories at Colombelles and Mondeville, testified to the effectiveness of the work of the Lancasters and Halifaxes. A ground survey party sent out by the R.A.F. Bombing Analysis Unit to Cuillerville (Area H) in November, 1944, produced further evidence. A complete company of 21 Panzer Division⁽²⁾ together with its complement of 15 tanks, 12 half-track vehicles and an assortment of motor and horse-drawn transport had laagered in fields and orchards around farm buildings at Cuillerville and Le Quai. The centre of an orchard in which eight of the tanks were located was about 800 yards south-east of the Manneville aiming point (Area H). Reference to Map No. 8 will show that Cuillerville was, in fact, almost in the centre of the bomb pattern on which nearly 2,500 short tons of bombs had fallen.

Ibid,
Para. 8.

Ibid,
Para. 17.

The R.A.F. party arriving four months after the attack found that the area still 'resembled the surface of the moon'. In the orchard mentioned there were over 100 craters with diameters greater than 26 feet and 16 craters over 45 feet in diameter. Movement by any tank into or out of the area was quite impossible as the density of strikes there was 13.4 per acre. All 15 tanks were still rusting in the desolation when visited by the survey officers; crews of six tanks had burned to death with their vehicles. No tanks had been hit by shells or mortars. In connection with the number of tanks and other vehicles found to have been burned out it is of interest to note that Bomber Command aircrews reported a large fire raging in the centre of the Manneville target. Remains of all kinds of burned out transport and charred bodies were still scattered in and around the ruined vehicles and buildings but at the period the party examined

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- (1) Army Air Forces Evaluation Board report on Effectiveness of Tactical Air Operations in the European Theatre. (A.H.B. Records ILL/26).
 - (2) Abteilung 503 of 21 Panzer Division was not identified in any subsequent fighting.

the area it was impossible to say how many casualties in men and vehicles had been inflicted. (1)

Progress on the ground (18 July)

During the noise of the air bombardment the leading formations of 11th Armoured Division moved into position on the start line south of Escoville. The advance began into a gap in the enemy's defences little more than half a mile wide between the villages of Lirose and Demouville both of which had received concentrations of bombs from the IXth Air Force Marauders whose programme ended at H Hour (0745 hours). As the medium bombers flew away, the artillery commenced a rolling barrage moving at the rate of 150 yards per minute on a front over a mile wide. The essence of the whole operation was its speed and it was hoped that speed, momentum and surprise would enable VIII Corps to make a clean break in the enemy's lines. Nevertheless it was not expected that the speed of one mile in every 12 minutes could be maintained once the front had passed out of range of our guns, mounted, for the most part, west of the River Orne.

Slight opposition at Cuverville could not stop the armour so that the railway from Caen to Troarn over three miles from the starting line was crossed by leading tanks before 0830 hours. Demouville, which had been bombed by the Marauders, offered resistance but, like Cuverville, was by-passed. The Caen - Mezidon railway about two miles further south, was a difficult obstacle for tanks to negotiate as it is built on a considerable embankment. In addition guns were firing at Grentheville, a target of the Liberators, and at Cagny, a target of Bomber Command. As the time was nearly 1000 hours there had been a lapse of over three and a half hours since the end of the bombing attacks on Cagny but barely an hour since the VIIIth Air Force had left Grentheville.

Leading tank squadrons by-passed Grentheville and were at the railway running south from Caen to Falaise near the village of Soliers at 1010 hours. At this stage they were operating in target Area P (VIIIth Air Force) but they experienced very strong opposition at Soliers which had been an aiming point less than an hour earlier. Panthers and self-propelled 88 mm guns were then seen at Hubert Folie and Bourguebus (VIIIth Air Force targets) and Frenouville (83 Group target). In this area resistance increased sharply along the ridge Hubert Folie - Bourguebus - La Hogue where more tanks and self propelled guns were sited in compact, stone-built villages, screened by thick hedgerows, orchards and substantial trees. The open country between the villages offered good fields of fire in every direction so that it was difficult to approach enemy positions without risking heavy losses.

Meanwhile, fire from enemy guns and tanks coming into action on the eastern flank was also inflicting heavy losses on British tank formations pushing forward from the rear. Infantry was required to engage all these new enemy forces as

(1) Readers interested in this subject should on no account miss B.A.U. Report No.22 (in A.H.B. Records) which is well illustrated with photographs of all the tanks and of other vehicles. It also contains some illuminating observations on the effects of blast, bomb-shock and fire on tanks and their crews.

well as to contain and reduce centres of resistance all along the corridor. Cuverville weak though it was, did not give up until 1200 hours and Demouville was not cleared until some three and a half hours later. Acute congestion of traffic over the bridges leading to the east bank of the Orne delayed the arrival of units which were to have mopped up in the wake of the advancing armour.

At about 1300 hours a request came from VIIIth Corps to No. 83 Group for assistance against the tanks at Bourguebus but the Army Air Liaison officer endeavouring to function as Controller (after the South African Air Force officer Controller had been wounded) was not able to brief the pilots who arrived overhead. However a successful attack was made by Typhoons at 1330 hours and shortly afterwards a further rocket attack stopped nine Panzer tanks between La Hogue and Bourguebus.

During the afternoon from 1500 hours onwards, the Typhoons again did valuable work at Bourguebus, Hubert Folie and Bras but enemy tank formations were very aggressive. Reconnaissance units reported that Rocket Projectile attacks at Bourguebus had caused the enemy to withdraw but attacks from the south-east towards Soliers continued into the evening. On the whole there were few important gains or losses in terrain during the remainder of the day, most of the Allied effort being devoted to holding counter-attacks, mopping up in the rear and consolidating.

In the second half of the day counter-attacks by units of the 1st S.S. and 12th S.S. Panzer Divisions arriving at La Hogue, Frenouville, Verrieres and Bourguebus gained in strength. Elements of the 21st Panzer Division also held on stubbornly. General Sepp Dietrich (1st S.S. Panzer Corps) told his Canadian interrogation officer about a year later that in his opinion the British armour was too slow in following up their initial advantage. A wide gap had been torn in the German defensive system but during the late morning and afternoon he was able to rush up the 1st S.S. Panzer Division to the ridge in the area of La Hogue and Frenouville from which positions heavy losses were inflicted on British tanks. General Wisch (1st S.S. Panzer Division) said that when he went out on reconnaissance on the evening of 18 July he spotted about 100 British tanks in a laager on an exposed part of the countryside. He ordered an attack to be made on them and saw 40 go up in flames. At dawn the engagement was renewed and a further 40 British tanks were destroyed. Wisch said that his Division lost only 13 tanks.

Canadian Army
Special
Interrog.
Reports Vol. 2
p. 23.

Ibid pp. 12
and 13.

Ibid p. 104.

This engagement is not recorded by any of the British armoured divisions but the 11th Armoured Division lost 126 tanks on 18 July while the Guards Armoured Division lost 60. Unfortunately, Wisch did not say exactly where this encounter took place. Strangely enough, General Eberbach who had replaced Von Schweppenburg (Panzer Gruppe West), gave a good deal of the credit for stopping the British tanks that day to Pickert's (3 Flak Korps) 88 mm guns which knocked out tanks at a range of three kilometres. Eberbach was surprised that his forces remaining in Colombelles and Vaucelles were not eliminated but he withdrew them safely on the night of 18 July and re-established a new line from Herouville-Troarn-Cagny-Bourguebus-St Andre. He considered that his defence in depth prevented General Montgomery from exploiting the gap at Cagny and reckoned our tank losses at 150 while his own were 50.

Operations on 19 and 20 July

During the night of 18/19 July, more especially after midnight, both air forces were very active. Fliegerkorps IX and No.2 Group flew over 100 sorties each, largely on the same kind of mission. The 103 aircraft - nearly all of them Mosquitoes - of No.2 Group harassed enemy movement by illuminating the roads and railways with flares and then attacking with bombs, cannon and machine guns all traffic observed by their light. Effort was allocated to the following areas:-

- (a) Along the bomblines
- (b) River Orne - Falaise area
- (c) River Dives - Falaise area
- (d) Railways in Tours - Orleans area
- (e) Terrain N. of River Seine to coast
- (f) Roads Rouen - Amiens.

About 60 Mosquitoes operated near the battle in the area bounded by the bomblines, Falaise, the River Orne and the Dives.

A. H. B. 6 Transl.
No. VII/84, p. 43

The German Air Force reported that 106 aircraft mainly from Fliegerkorps IX, attacked occupied villages. H.Q. troops, vehicles, dumps, crews of tanks in assembly camps near the bridges across the Orne suffered heavily⁽¹⁾ from the German bombing though fortunately the bridges themselves were undamaged. Several of the raiders were shot down.

A fortunate circumstance during the night was the seizure of one of the Orne railway bridges - the one east of Vaucelles - intact and hardly damaged, by the Canadians. The Black Watch of Canada were able to hold the bridge and troops were quickly passed over to join those who had already reached Vaucelles after having occupied the Colombelles and Mondeville factory areas. In this way the suburbs of Caen on the south bank of the River Orne (Faubourg de Vaucelles), were soon mopped up by the Canadians. Bridges were thereupon thrown across the river at top speed, four bridges being in position in the Canadian Corps area by 1100 hours on 19 July.

On the eastern flank the 3rd British Division found the enemy strongly reinforced when the attack in the direction of Troarn was resumed on the morning of the 19th. After severe fighting it had penetrated into the outskirts of the town as far as the railway station but here the advance was held. The enemy further south in the neighbourhood of Emieville (21st Panzer Division) also fought well and yielded no ground.

In the centre, the Armoured Divisions were unable to resume the offensive until they had thoroughly reorganised after their heavy losses on the previous day. Their first task was to assault the ring of half-a-dozen villages where the enemy was strongly posted across their front but this they did not begin until 1600 hours. With the exception of Bourguebus on the ridge in the centre which at last light was almost surrounded, they succeeded in taking all their

(1) H.Q. 11th Armoured Division was heavily bombed just before midnight. Casualties and damage were caused.

limited objectives but only at the cost of further crippling losses in tanks. (1)

A.H.B.6 Transl.
No.VII/84, p.43

IIS1/15 p. 13

2nd T.A.F.
Daily Log,
Sheet 1080

Ibid 1083

During the second day's fighting, support was given in the normal way by the aircraft of No.83 Group but there were no opportunities for calling upon other air forces for their assistance. The weather was not as good as it had been on 18 July. Thunder had developed and there was considerable haze and low cloud in France. In the circumstances the level of activity by the Allied Air Forces was lower than it had been on the 18th while by contrast that of the enemy appeared to be much higher. (2) Jagdkorps II sent out 284 aircraft on 'concentrated attacks' which seem to have annoyed VIIIth Armoured Corps though they did little damage. The enemy aircraft appeared to be operating as a 'circus' of about 30 fighter/bombers or sometimes as fighters. The headquarters of 159th Brigade was machine-gunned by 18 Me.109's during the late afternoon but there were no casualties. A formation of about 25 Messerschmidt 109's 'bounced' eight Typhoons in the Pont L'Eveque area at about this time but none of our aircraft was lost though one enemy aircraft was claimed. Two Reconnaissance Mustangs also met six Focke Wulf 190's at this period of the day and one Mustang was lost as a result.

Ibid, Sheets
1081 and 1084.

About 50 Typhoon sorties were flown on Army Support missions, all of them at about 2100 hours. Rockets and a few bombs were directed at tanks, troops, buildings, cross-roads, and flak guns. It was noticeable that the Visual Control Post arrangements were still not working well as pilots complained that they could not establish contact with the Visual Control Post.

After nightfall on 19 July No.2 Group despatched 95 Mosquitoes to attack or harass enemy movement according to the same scheme as was put into execution the previous night. A small formation of Mitchells (9 aircraft) also bombed a petrol dump in the Foret de Gouffern near Argentan. Fliegerkorps IX were rather more active, flying 134 sorties but not achieving a great deal of material damage in the beachhead.

IIS1/15
para.13

Ibid, para.14.

On the morning of 20 July it appeared from the intentions announced by General O'Connor that VIIIth Corps had given up the idea of a break-out. Orders were issued to complete the capture of Bourguebus but to hold the remainder of the front with infantry. At 1000 hours Second Army directed that the advance was not to be continued for the time being; in effect this meant that Operation Goodwood was over. In the afternoon of the 20th a heavy downpour turned the whole area into a sea of mud and temporarily stopped all traffic except that on the metalled roadways. The weather then broke up completely and for some days all offensive operations were out of the question.

As the weather was bad the air forces were considerably handicapped in their attempts to support ground operations. There was a short break in the weather during the afternoon

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- (1) About 65 tanks. They had thus lost well over 250 tanks in this one area in two days fighting without achieving a break-out.
 - (2) Total operational sorties of Luftflotte III were 520 on July 19 as compared with 440 on the 18th so that there was in fact not much increase in activity; however, the enemy were more aggressive.

2nd T. A. F.
Daily Log.
Sheet No. 1089.

during which there was considerable activity but a high proportion of the sorties flown were rendered abortive by the heavy cloud. The German Air Force also operated at a lower level of effort but were sighted over the beachhead more than usual. About 50 Focke Wulf 190's were engaged by Spitfires in the vicinity of Bayeux. Another formation of 30 Messerschmidt 109's was encountered by Spitfires near St. Julien and Focke Wulf 190's were also met near Argentan.

Conclusion

The situation existing when bad weather brought active operations to a halt was that the Forward Defended Localities (F.D.L's) of the Second British Army were firmly established about six miles in advance of their previous positions in the area of deepest penetration. The front lines were in a more favourable position for the development of offensive operations in a southerly direction though they were still overlooked by the enemy posts stationed on the higher ground to the south. The new line crossed the Orne east of Maltot and ran through St. Andre to La Hogue before turning north-east to Frenouville and the Bois de Bavent.

In addition to winning valuable ground and inflicting a severe setback on the enemy at the vital hinge of his defensive line, one of the main strategical objects of the operation had been achieved. This was to occupy the attention of the enemy and to draw his armoured reserves into battle on the eastern flank while the Americans were preparing to strike the decisive blow in the west. Unfortunately the effects of this heavy and spectacular blow were somewhat nullified by the inability of the British to follow it up quickly and by the onset of bad weather which gave the Germans a timely respite.

Thus at the end of two critical days the enemy had again won a breathing space. He proceeded to use it with characteristic energy and resource so that when the Allies went over to the offensive in that area a fortnight later they were confronted with a formidable new series of defences and other great onslaughts had to be made in order to breach them.

Meanwhile the Second British Army had not achieved a break-out nor had they gained as much ground as might have been expected in view of the progress made during the first three or four hours after the massive air bombardments. In fact, one can hardly escape an impression of great possibilities unrealised. The front line at D + 46 was roughly that planned for D + 5. Very keen disappointment was felt and expressed in Allied circles much of which reflected in contemporary press messages and in popular war histories. Many of the views and opinions expressed were perhaps ill-founded but most of those who held them were agreed that the Armoured Corps had not been handled to make the most of the opportunities created by the overwhelming air support.

So far as official reactions were concerned General Eisenhower was disillusioned and visited General Montgomery on 20 July in order to impress upon the British Army Command the importance of remaining on the offensive. On his return to S.H.A.E.F. he wrote to the C.-in-C. Twenty First Army Group in the following terms:

File D/SAC/H. 12,
Encl. 31A,
p. 2.

"..... When the Armoured Divisions of Second Army, assisted by tremendous air attacks, broke through enemy's forward lines, I was extremely hopeful and optimistic. I thought that at last we had him and were going to roll him up. That did not come about.

"..... The recent advances near Caen have eliminated the necessity for a defensive attitude, so I feel that you should insist that Dempsey keep up the strength of his attack. Right now we have the ground and air strength and the stores to support major assaults by both armies simultaneously Eventually the American ground strength will necessarily be much greater than the British. But while we have equality in size we must go forward shoulder to shoulder, with honours and sacrifices equally shared"

Ibid,
Encl. 32A,
dated 23 July.

The Deputy Supreme Commander was even more critical. He wrote to his Chief expressing the hope that the latter's message to General Montgomery would spur the C.-in-C. Twenty First Army Group to bold offensive action though he saw no indication of it in the latter's most recent directive (21 July). There were no grounds for the satisfaction with the situation in the Eastern sector expressed in that directive. One of the original objects governing the selection of the point of attack was the seizure of land suitable for airfield development south-east of Caen. The airfield programme which should have been completed by D + 40 (16 July) was only half finished and many airfields were still under shell fire.

"..... It is clear that in the recent operation to the south of Caen there was no intention to make that operation the decisive one which you so clearly indicated as necessary in your letters and signals to General Montgomery. An overwhelming air bombardment opened the door, but there was no immediate determined deep penetration while the door remained open and we are now little beyond the furthest bomb craters"....."

File TCM/S. 136/
60/3,
Encl. 9.

A few days after the battle Air Marshal Commanding 2nd T.A.F. sent Air Commodore A.J.W. Geddes his Deputy Senior Air Staff officer to find out what the operation had to teach for the future. (1) The latter visited officers responsible both for the planning and the execution of the battle and reported the gist of these unofficial discussions without suggesting that they were final pronouncements. Everyone he spoke to was impressed with the effects, particularly the morale effects, of the heavy bombing done by Bomber Command on the flanks of the advance. He was told that apart from the heartening sight of the attack to our own troops, the use of high explosive was most effective

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- (1) The intention was that the Deputy Senior Staff officer should examine air aspects of the operation rather than the 'lessons' of Goodwood in general. In so doing, he soon found it difficult to dissociate the air from the general military aspects and thus his report discussed some military matters with which the Tactical Air Forces were not directly concerned. Nevertheless his notes of informal discussions at H.Q. Second Army, No. 83 Group and 11th Armoured Division while not representing considered official views hold no little interest for the historian. See E. 9 on File TIM/S. 136/60/3.

against entrenched positions, village strongpoints, etc., as well as in its shocking and stunning effects on personnel. (1) No mention was made in any of his talks of the effectiveness of H.E. bombs against tank concentrations such as the one at Guillerville described in B.A.U. Report No. 22.

Another interesting point in view of the great success of fragmentation bombing by the Americans in Operation Cobra a week later (St. Lo, 25 July) was that British officers agreed that this type of bomb was not effective against protected positions nor were its moral effects apparently very great or very lasting. More complete information has subsequently done much to modify such conclusions. The Scientific Adviser, A.E.A.F. pointed out at a later date that the IXth Air Force achieved a mean density of only 0.07 tons of bombs per acre or about one-eighth of that planned, while the VIIIth Air Force achieved mean densities of only 0.09, 0.23 and 0.08 tons per acre on its three target areas. This represented little more than one-fifth of the planned weight of attack. Bomber Command by contrast achieved about a half of the planned density per acre.

II/69/120
p. 2.

Comparing high explosive bombing with that by fragmentation bombs, the latter certainly created no obstacles to the passage of armour whereas the use of high explosive bombs pre-supposed that there was room for the army to by-pass the disrupted terrain.

One of the chief criticisms of the use of the Air Forces in support of Goodwood was that all the effort was expended in one blow on the outer crust of the defences while the Bourguebus feature with a screen of anti-tank guns escaped almost scot-free. It was the defences on the Bourguebus feature which stopped the advance of the Armoured Corps. There was a general feeling on the part of the Army officers that fewer bombs per acre might have sufficed to produce the effects required in target areas near the start line and the effort thus saved could then have been employed in a number of successive barrages against such targets as the screen of guns on the Bourguebus ridge.

The impression appears to have prevailed at H.Q. Second Army/No. 83 Group level that there was insufficient air effort available for all the targets and this was the reason advanced by A.V.M. Broadhurst for the omission of Bourguebus as a main target for heavy bombers. The fact was that there were several hundred heavy day bombers and about three hundred heavy night bombers still available had General Dempsey asked for them. The Fortresses were sent to Germany and Bomber Command used its surplus effort in an attack on Vaires railway centre but the Deputy Supreme Commander could have required them to assist in Overlord if their help had been

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- (1) Officers interviewed by A/Cdre Geddes made one important exception to the general approval of Bomber Command's attacks viz; in the case of the one at Cagny. There the defences were not completely disorganised by the bombing; they 'came to life' and proved difficult to overcome. However the time lag of some hours between the air and ground attacks should not be forgotten.

strongly urged. (1) Other points noted about the co-operation of air and ground forces were:-

- (a) The enemy appeared to be clever at withdrawing men out of danger when bombing attacks portended.
- (b) Speed on the part of friendly troops in following up bombing attacks was essential if the full benefit was to be reaped.
- (c) There seemed to be a strong case for narrowing the safety zone between our own troops and the bomblines in order that our leading elements could over-run the enemy positions before they had recovered from the bombardment.

In brief the Allies still had much to learn about co-operation between air and ground forces. But insofar as Operation Goodwood failed to achieve all that had been hoped, it would appear that the chances of success were less than had been realised at the time.

The bridgehead on the east of the Orne was, for example, physically too small to serve as an adequate base for such a large operation. The capacity of the bridges and the roads was also found to be too small to nourish such a large offensive. In consequence of these factors, and apart from the pockets of resistance, the initial momentum of the advance was soon slowed down. There was so much congestion on roads and bridges that the time-table laid down could not be maintained.

An important requirement if success was to be achieved was surprise and disorganisation on the part of the enemy. The Commander of the VIIIth Armoured Corps considered that a very material measure of surprise had been gained but this was denied by General Sepp Dietrich. To move the armour into the extreme east flank of the lodgement area without the knowledge of the enemy was a matter of extreme difficulty. The final moves were made under cover of the noise of guns; it was hoped that this was done successfully. But General Dietrich (1st S.S. Panzer Corps) contended that by putting his ear to the ground he heard the rumble of the tracked vehicles and was thus forewarned. In any case there is ample evidence from German sources to show that the enemy appreciated that an attack was bound to come in this area because it was the most suitable tank country.

IIS1/15,
Appendix 1D,
para. 9.

Can. Interrog.
Repts, Vol. 2,
p. 23.

(1) 'Referring to Operation Goodwood, General Spaatz said that he proposed using only 700 B. 24's in support of the Army, and sending the remaining force (800 B. 17's) to attack Peenemunde. The Air C.-in-C. agreed provided General Spaatz was satisfied that the tasks allotted could be accomplished with only half the force'. Para. 14. of minutes of Air Commanders 47th Conference, 17 July. File TIM/F/S. 34.

CHAPTER 3

THE BREAK-OUT FROM ST. LO

Situation on 25 July

It was the essence of General Montgomery's strategy that as soon as the enemy was fully committed in the eastern sector of the front, the Americans should launch their drive to break through the attenuated lines of the German Seventh Army and thus commence the third main phase of the campaign after the initial assault and the build-up in the bridgehead. It was hoped that conditions of mobile warfare could be produced for here the advantages were clearly on the side of the Allies who were far better equipped for rapid movement than were the Germans. So far, operations on the ground had proceeded not unfavourably though they had fallen far behind the planned schedule. The situation existing during the second half of July was therefore more favourable to the Allies than it had been before or perhaps was likely to be in the near future. (1)

General Montgomery's Directive for Operation Cobra

File
D/SAC/TS. 100/
12,
Encl. 9A.

The directive dated 21 July issued after a conference between the Supreme Commander and the C-in-C. Twenty-First Army Group, shows clearly the design already outlined on 30 June and 10 July. The tasks given to the Second British Army and the newly constituted First Canadian Army (2) were the negative ones of keeping the enemy fully engaged by undertaking vigorous offensive operations of limited scope. The Canadians were ordered to assume responsibility for the left flank east of the Orne River while the Second British Army took over a sector of the American front near Caumont to release U.S. troops (3) for the all-important drive further west. The new inter-army boundary was the River Drome near Vidouville a few miles west of Caumont.

The immediate task allotted to the First U.S. Army was to secure all the terrain up to the base of the Cotentin peninsula as far as Avranches. (4) This was to be done by a pivotal operation during which the whole American Army was to swing its right flank southwards and eastwards on to the general line Vire to Mortain and south to Fougères. On reaching the Avranches area the right hand Army Corps (VIII U.S. Corps) was to be turned towards Rennes and St. Malo while the remainder of the Army was to swing east and south of the bocage country towards the successive areas first of Laval-Mayenne and secondly of Le Mans - Alençon.

Arrangements had been made to re-organise the command of the U.S. ground forces once the operation got under way. At a time to be decided by the Supreme Commander, Lieutenant General Omar Bradley would take command of the U.S. Twelfth Army Group, handing over command of the First Army to General Hodges. A new Third Army with the renowned General Patton in charge was also held in reserve ready to

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- (1) See letter expressing this opinion written by Gen. Eisenhower to Gen. Montgomery on 21 July (on File D/SAC/H.12/Encl. 32A.)
 - (2) Became active on 23 July under Gen. Crerar with 4 British and Canadian divisions under command.
 - (3) The 5th U.S. Infantry Division.
 - (4) This was about 40 miles from St. Lo.

take over operations on the western flank of the U.S. Forces.

The Air Plan

General Bradley planned on receiving the assistance of all the available effort of the U.S. Air Forces for the initial assault in Operation Cobra but did not call for the help of the R.A.F. He would have liked the support of Bomber Command had the heavy night bombers been capable of carrying economic bomb loads of small bombs but this was technically impossible. Cratering and demolition of buildings were not acceptable to the First U.S. Army because of the obstacles to speedy movement that would be created.⁽¹⁾ The Air C.-in-C. was extremely anxious that the R.A.F. heavy bombers should be associated with the U.S. offensive in the same way as the U.S.A.A.F. heavy bombers had been with the British attacks around Caen but this could not be arranged.

The launching of the initial attempt to break through the enemy lines was dependent upon the successful execution of the bombing plan and this in turn depended primarily upon the weather. The most difficult condition was that the Fortresses and Liberators required visual conditions for their high-level bombing whereas, it will be recalled, the weather prevailing from 20 - 24 July was thundery, cloudy and often rainy. Accordingly, Operation Cobra had to be postponed from day to day although the ground forces were all ready to move.

It was arranged that a suitable H-hour having regard to the 'capabilities of the forces concerned and the forecasted weather' would be furnished to all commands by 2200 hours on the preceding night. As the VIII Air Force required at least 3 hours notice before their scheduled time over target to prevent aircraft from taking off, it was arranged that in the event of an acceptable forecast being followed by unfavourable developments aircraft would be given the usual recall signal but that this would be initiated from General Bradley's Headquarters in France.

A further practical difficulty about air/ground operations of this kind was that the best time for air attacks by heavy bombers was about 1100 or 1200 hours. Earlier times might be found impossible at the last moment because morning fog had not lifted from airfields in England early enough.

With the two possibilities of morning fog at bases or of targets obscured by clouds both in mind, H-hour for Operation Cobra was fixed at 1200 hours on the first suitable day. During the night of 23 July the operation was ordered for 24 July. The Air C.-in-C. flew to France arriving at First U.S. Army Headquarters at about 1120 hours on 24 July. Unfortunately Air Chief Marshal Leigh-Mallory was compelled to advise General Bradley that the weather in Normandy was quite unsuitable for high level bombing with the result that General Bradley postponed the attack until the next day. While the Allied Air Commanders were in conference at Stanmore during the morning General Quesada (IX Tactical Air Command) telephoned Air Commodore Kingston McCloughry (Deputy Chief of Operations A.E.A.F.) to say that he had just passed on an order from the Air C.-in-C. that the VIII Air Force bombers should be recalled. Apparently, this could not be done when

(1) General Bradley's objections to cratering and 'torn-down buildings' are stated emphatically to Air Chief Marshal Leigh-Mallory in a letter dated 23 July (reference given).

File TLM/
S.136/60/3,
Encl.7

File A.E.A.F./
TS.13165/
Part IV,
Encl.56,
para.4

Minutes
Air Cmdrs.
47th Mtg.,
para.14

Minutes,
Air Cmdrs.
53rd Mtg.,
para.10

ST. LO OPERATIONS - 25 JULY 1944.

LEGEND.

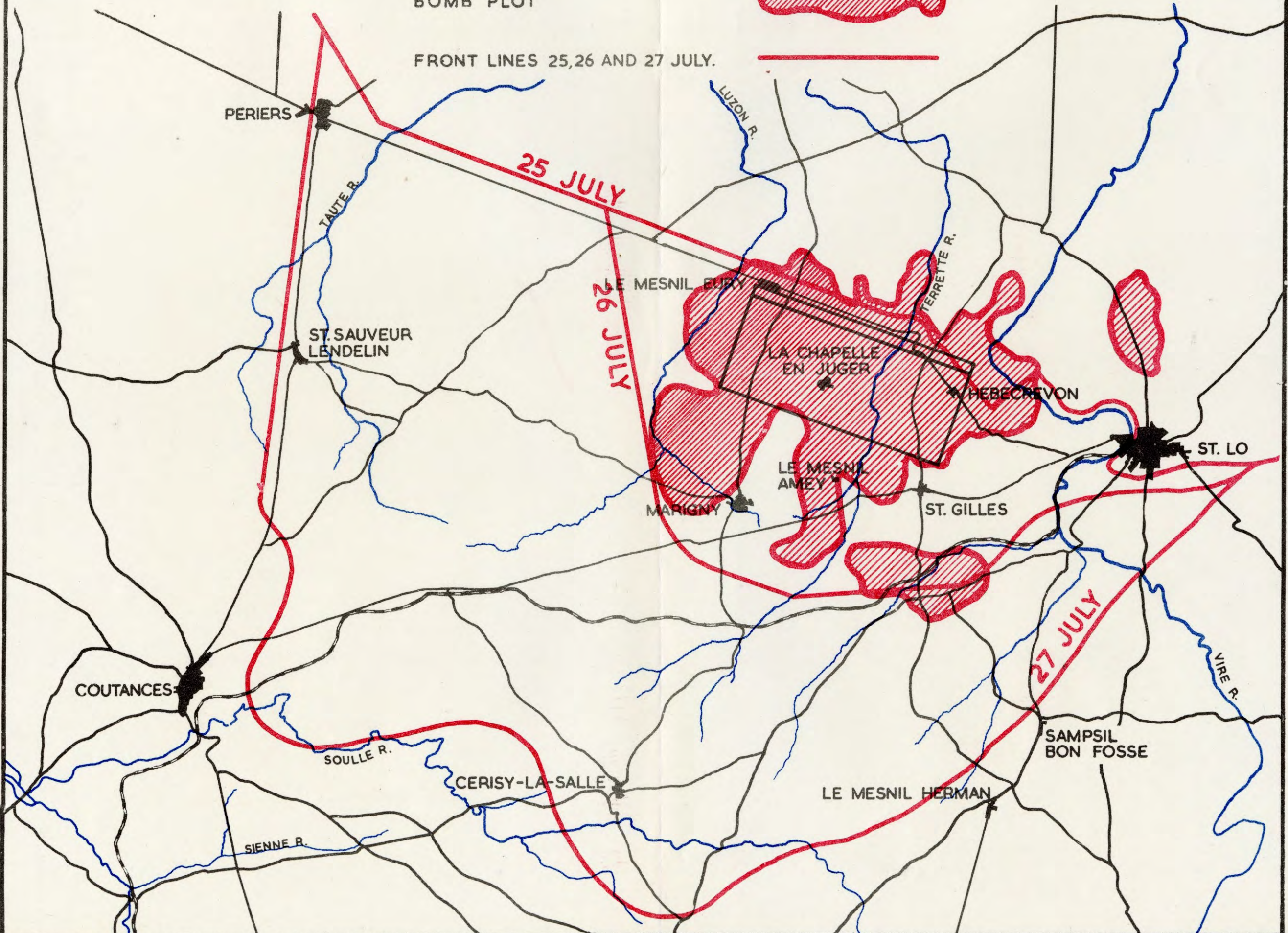
TARGET AREA



BOMB PLOT



FRONT LINES 25, 26 AND 27 JULY.



VIII Air Force,
Monthly sum.
of Ops., Jul.
1944

they were so near their target and 352 out of the 1,586 aircraft dispatched dropped their bombs in the St. Lo area. (1) Another 130 aircraft bombed targets in the areas further behind the enemy lines.

Minutes,
Air Cmdrs.
53rd Mtg.
para.10

General Spaatz who was at the Air Commanders' Conference wanted to know who had been responsible for making the decision for the heavies to bomb at 1200 hours as there had been a forecast by VIII Air Force meteorologists that the target area would be obscured at 1200 hours but might be clear at 1400 hours. He had understood that General Bradley would accept any H-hour before 1500 hours. The answer to his question was not known at Stanmore and has not appeared in any known official records.

In point of fact the weather did improve gradually though it is more than doubtful whether visual bombing would have been possible before the evening on 24 July which would have been too late in the day to suit the ground forces. This was a matter which had supreme importance in view of the danger that the strategical plan on which so much depended might be compromised. The Allied commanders experienced several hours of acute anxiety on this score. They could do nothing at that stage to counter any emergency steps that the enemy might have made had he appreciated that the false start presaged the Allies' decisive stroke. All that could be done was to order the immediate commencement of a minor offensive on the Canadian sector of the front. This began at 0330 hours on 25 July along the Falaise road and immediately drew upon itself opposition from four Panzer divisions.

At 2200 hours on 24 July it was confirmed that the operation would begin on the 25th. The plan for the operation avoided all complications. The ground plan aimed at making a breach in the enemy lines on a narrow front of about 7,000 yards using VII Corps consisting of three infantry divisions for the initial attack and XIX Corps of two armoured divisions and one of infantry to exploit the break-through. Nearer to the British front, the U.S. V Corps was to push towards Torigny while on the extreme west the four infantry and one armoured divisions of the U.S. VIII Corps were to pause for one day before striking a heavy blow in the coastal sector. It was this Corps which was to press on past Coutances and Granville to Avranches and Brittany.

Execution of Operation Cobra

The operation began by the withdrawal of the U.S. front line troops for a distance of 1,500 yards along a frontage of about 8,000 yards along the St. Lo-Periers road from the big bend in the Vire river north-west of St. Lo to beyond the village of Le Mesnil Eury. This frontage was then bombed and shelled almost continuously for the next one and a half hours. An artillery programme no less ambitious than the air programme was put into execution at the same time and must always be borne in mind when the overall results of the bombardment are being assessed. First of all, a narrow frontage along the road was bombed by Thunderbolt and Lightning fighter-bombers attacking parallel to the St. Lo-Periers road to a depth of

Map No.9

(1) General Doolittle said at the Conference that aircrews would not bomb without seeing their targets. Nevertheless friendly troops were bombed and some casualties resulted.

only about 250 yards behind the German front lines. Fighter-bomber attacks began at H⁽¹⁾ minus 80 minutes and lasted for 20 minutes. A total of about 700 aircraft (15 groups) operated but a half of this force went into action after the heavy and medium bombers had concluded their part in the operation.

Exactly one hour before the ground forces began to move forward (i.e. H minus 60 minutes), three divisions of Fortresses and Liberators of the VIIIth Air Force began to bomb aiming points in a rectangle of 7,000 yards by 2,500 yards on the south side of the St. Lo-Periers highway. This long, straight section of the road was considered to form an excellent marker for bombing. The whole force passed over the target in about 40 minutes flying in 12 successive waves across the front. As the aiming points selected consisted of about 40 strong points and troop concentration areas, the general effect of the attack was that of a carpet of bombs well spread over the whole area rather than that of dense concentrations such as usually resulted from the attacks by R.A.F. Bomber Command. Nine important targets were marked with red smoke shells by the artillery.

Area A on
Map No. 10

III/26,
p.90

Minutes, Air
Comdrs. 55th
Mtg., para.10

A.E.A.F. Int/Ops.
Summary No.188, p.12

The Fortresses and Liberators flew in squadrons of 12 - 14 aircraft at right angles⁽²⁾ to the St. Lo-Periers road releasing bombs at heights ranging from 11,000 to 14,000 feet in good conditions. The only exception to the good conditions for the visual identification of targets was that there was some haze and low cloud while in addition a southerly wind caused dust and smoke to obscure the road which was the most important identification feature in very difficult country. The red smoke was not a success because of wind and dust. There was negligible enemy air opposition but some of the 480 escorting fighters reported combats with enemy aircraft. Flak reported as 'meagre to moderate' was responsible for the loss of six heavy bombers and two fighters.

About 3,430 short tons of bombs were dropped. Bomb loads were made up of about 40 per cent fragmentation bombs (1,346 short tons) and 60 per cent H.E. (2,084 short tons). A study of bomb plots showed that over 50 per cent of the bombs accounted for fell in the target area, 30 per cent beyond the area and about 2 per cent behind the Allied lines.

VIII A.F.
Monthly Sum. of
Ops., July 1944

III/26, p.89

The medium bombers attacked ten aiming points to the south of the same area beginning at H-hour (1100 hours) and ending at H plus 30 minutes.⁽³⁾ The force consisted of ten

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- (1) H-hour was at 1100 hours on 25 July.
 - (2) The Army asked for bomb runs to be made parallel with the St. Lo-Periers road but though this was done by the fighter-bombers, the heavy bombers flew at right angles to the road because they believed that this involved less danger to friendly troops from gross error.
 - (3) The reader should be made aware of the fact that in an account of the operation appearing in a study prepared by the Army Air Forces Evaluation Board (E.T.O.) in August 1945, dealing with the effectiveness of Tactical Air Operations in the E.T.O. it was stated that medium bombers did not operate at St. Lo on 25 July. An exhaustive search of all original authorities available in Air Ministry Records finds nothing to substantiate this statement though records exist telling of the recall of these bombers after they were airborne on 24 July to bomb the same targets.

A.E.A.F.Int/Ops.
Summary No.188,
Section B,
para.1

groups, seven of which were Marauders and three Bostons. Some 342 aircraft out of the 360 aircraft despatched dropped their bombs reporting good to excellent conditions. Boston groups carried 500 pound General Purpose bombs which were employed against an important cross road in the village of St. Gilles (on the main road from St. Lo to Coutances) while the Marauders employed 260 pound fragmentation bombs against defended localities and troop concentrations.

Map No.9

While the medium bombers were carrying out these missions the second phase of fighter-bomber attacks began upon troop concentrations, strong points and similar targets in the southern half of the same rectangular target area and in certain areas still further to the south. Other fighter-bombers continued with support missions throughout the day and there were in addition the normal fighter activities associated with a major land offensive. Just under 800 sorties were flown by fighter-bombers and fighters during the day. Of these, 209 Thunderbolt fighter-bomber sorties were flown in the bombing of the special target area(1) before H minus 60 while 208 Thunderbolts and 128 Lightnings bombed during the phase immediately following H-hour.

Results of the bombing attacks

German Seventh
Army War Diary
U.S. Transl.
Vol.I p.191

It has been universally agreed that apart from the bombing errors the results of the air bombardment were most satisfactory and the whole operation with all its faults has long been regarded as a model of its kind. Enemy troops who were not casualties in the usual sense of the word were too shocked and dazed to offer serious resistance within the area bombed. Weapons and defence positions had been rendered useless - at least for the time being. All signals equipment was put out of action. In fact, communications between Seventh Army Headquarters and the Panzer Lehr Division - which was holding that sector of the front - had still not been re-established on the following afternoon.

III/26, p.92

Seventh Army
War Diary
U.S. Transl.
Vol.I, p.190

Almost the whole of the target area was devastated by bombs but not to the extent that movement was impossible. The actual numbers of those killed is not known but something of the order of 3 per cent has been suggested. Few of the survivors were capable of fighting. The Seventh Army Diary says that heavy losses were sustained by troops between the Rivers Vire and Luzon in the areas of Hebrecrevon and La Chapelle en Juger. 'These casualties were caused by the tremendous commitment of the enemy's air forces and the artillery barrages which lasted for hoursOur heavy losses in personnel and material resulted mainly from the pattern bombing'.

Though the operation has come to be regarded as a model of its kind in a number of ways, the first reports were not altogether favourable. Several instances of short bombing by formations of heavy bombers and some by medium bombers caused appreciable casualties and damage to American troops. Although the Air Force representatives on the planning committee had not been in favour of reducing the safety zone from the customary 3,000 yards to 1,500 yards, the airmen were

(1) The modus operandi employed by the Thunderbolts before H-hour was rather interesting. They arrived in wings of about 36 aircraft over St. Lo and then swooped down from east to west attacking targets near the Periers - St. Lo road from a low level.

III/26, p.91,
para.(b)

First U.S. Army Report
of Ops., Vol.1, p.99

blamed for all the errors which were made. About 560 casualties resulted directly from the bombing errors, General MacNair (30th Division) being among the hundred deaths. The mistakes cast a gloom over the 30th Division and affected its attitude towards air support throughout the campaign.

Apart from these consequences, the bombing attacks undoubtedly had much to do with the ease with which the first forward movement was made. As the weather remained generally good the Air Forces were able to retain this moral advantage gained at the outset.

The advance of the Ground Forces

Following the general bombardment and supported by fighter-bombers working closely in touch with leading elements, the troops slowly infiltrated into the shattered area. The advance was rather less speedy than it might have been owing to the disorganisation that resulted from bombs falling among the 30th and 9th Divisions but after a late start troops had penetrated to a depth of about 3 kilometres between Hebecrevon and Le Mesnil Eury by nightfall with the deepest penetration around La Chapelle en Juger. German troops appeared to have withdrawn a good deal of their equipment on 24 July but what was left on 25 July did not survive the bombardment. Men who were encountered in the bombed area were so badly shocked that resistance was out of the question.

General Bayerlein, whose Panzer Lehr Division held the line from the bend in the Vire river, had an advanced Command Post at Le Mesnil Amey which lay a few hundred yards to the south of the bombed zone. After the heavy bomber attack he was out of touch with his front and went forward to his Command Post to investigate. After his capture he told an interrogation officer from the IXth Air Force that at least 70 per cent of the personnel holding the line were out of action, either dead, wounded or dazed. Some 30 to 40 tanks were knocked out, a few being overturned, others unable to climb through the craters.

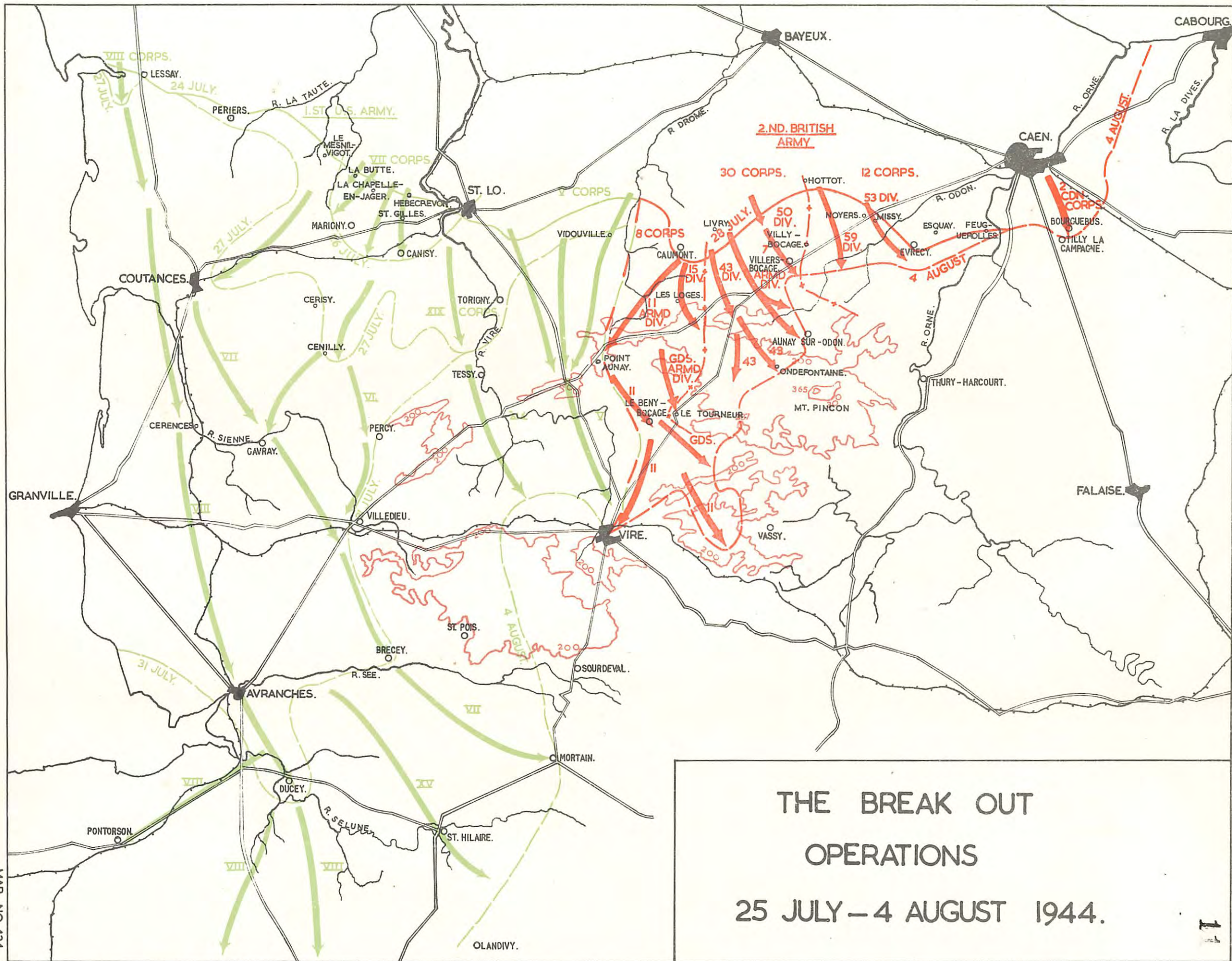
On 24 July Bayerlein had claimed a definite victory over the big attack which he thought had come. The events of 25 July brought disillusion and from that time onwards his division was virtually a spent force. During the night 25/26 July a few remnants were collected and with some reserve heavy tanks the line was to some extent re-established. Fortunately for the enemy, the cloudy conditions during the night saved them from the attention of the Mosquitoes of No.2 Group which it had been intended to use - up to 60 per cent of total effort - harassing and bombing any movement seen between the bomblines and the lateral Granville - Vire - Flers. Nearly all of the Mosquitoes (54 aircraft) were assigned to areas with better weather.

There was little movement forward by the Americans west of St. Lo on the morning of 26 July and this, combined with the absence of exact information, the false start made on 24 July and the apparently limited scale and success of operations on 25 July, all appears to have lulled the enemy into an unreal sense of security. So many penetrations had been successfully sealed off before. In the first stages of the advance, the forces employed by the First U.S. Army did not seem to be very large nor did armoured divisions come into action as they had in Operation Goodwood. Moreover though activity was greatest in the sector west of St. Lo, there were other

A.P.W.I.U.
63/1945, p.7

German Seventh Army
War Diary I U.S.
Trans. Vol.1, p.187

A.P.W.I.U.
63/1945
pp.7 and 8



**THE BREAK OUT
 OPERATIONS**
25 JULY - 4 AUGUST 1944.

German Seventh
Army War Diary,
U.S. Transl.
Vol.1, p.192

offensives taking place and the enemy recorded seven distinct zones of penetration by 1600 hours on 26 July. In the history of the campaign in north west Europe, two of those penetrations were of permanent significance, namely, the gap torn near St. Lo on 25 July and a second thrust begun at dawn on the following day on the extreme west coast.

The Seventh Army Command discussed the situation with Von Kluge and with subordinate corps and divisional staffs before coming to the conclusion that the

Ibid
p.190

'combat actions of 25 July cannot yet be considered as the enemy's actual large scale attack the present attacks will probably develop into a major offensive if and when they are extended towards the west and east. In the overall picture the enemy was repulsed on all fronts and he succeeded in penetrating only where our troops were handicapped in defence or completely eliminated by enemy artillery and pattern bombing.' (1)

Weather on the morning of 26 July was disappointing to the Allies, the low cloud only lifting to from 6/10ths to 9/10ths at 2,000 feet by midday. The result was that a heavy programme of attacks by medium and fighter-bombers in support of the First U.S. Army was rendered largely abortive.

From noon onwards the ground forces again moved forward with full air support mainly from fighter-bombers. The German defences still appeared weak and disorganised though reports from the other parts of the front showed that opposition was as stubborn as usual. Infantry and tanks moved forward facing outward and widening the breach in the enemy lines. Solid rather than spectacular progress was made until late in the day one column had occupied Marigny and another had passed through St. Gilles, crossed the St. Lo - Coutances main road and reached the St. Lo - Coutances railway near Canisy. The deepest penetration was about five miles from the starting line but it was the direction rather than the depth of the thrust that gave it such significance. Forward elements at Marigny were only about 10 miles from Coutances: if they drove through to that town a force of about three German divisions would be encircled. (2) In addition, the new offensive inaugurated by the U.S. VIIIth Corps from Lessay had already begun to make rapid progress west of the Cherbourg - Coutances road and thus the two American thrusts promised to effect an early junction at Coutances.

Until 0100 hours in the morning (27 July) aircraft of the IXth Air Force under the control of the IXth Tactical Air Command - First U.S. Army operations staff, were active in support of the ground forces. Lightnings operated during the first hours of darkness in the area around Avranches, giving way to Mosquitoes of No.2 Group at 0100 hours. The latter were ordered to direct 70 per cent of their effort to the roads leading north towards the First U.S. Army front from Avranches.

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- (1) To correct the impression that he was ascribing equal importance to artillery and pattern bombing in the latter part of that statement, the German writer hastened to add the remark, quoted on a previous page, that 'our heavy losses in personnel and material resulted mainly from the pattern bombing'.
 - (2) One of these German divisions was the crack 2nd S.S. Panzer Division.

Although only 27 R.A.F. Mosquitoes took part in these operations they reported that visibility conditions were ideal for harassing traffic.

It was on 27 July that the first real signs of a crack in enemy resistance were visible. To avoid being cut off in the north-west by the prongs of the VIIIth and VIIth U.S. Corps, enemy forces withdrew on a wide front from Lessay to Perriers leaving behind only a weak screen on their old main line of resistance. Both Lessay and Perriers were occupied by U.S. troops. Mobile columns of the VIIth Corps had meanwhile pushed forward through Marigny and were not far from Coutances by the onset of darkness. It was hoped that they had trapped a large part of the 2nd S.S. Panzer Division to the north of their drive but it was afterwards found that the bulk of that famous unit had skilfully extricated itself.

Without being ideal, weather in Normandy was better with good visibility between the occasional showers and cloud mainly 5/10ths to 8/10ths at from 1,500 to 2,500 feet. This was good for fighter-bombers though layers of cloud were too thick and too widespread to be suitable for high level bombing. By the end of 27 July the IXth Tactical Air Command had probably had their best day on record⁽¹⁾ on close support operations. They had given full support to the mobile columns and claimed a most impressive list of successes against vehicles and tanks. The Intelligence/Operational Summaries for this date show that aircraft attacked a wide variety of ground targets throughout the day most of these operations being carried out as usual by the Thunderbolts.

Enemy aircraft put in an appearance in some force in the Avranches - Villedieu area but their intervention could have little effect owing to limited strength. Nevertheless, Jagdkorps II put up 506 fighter sorties during the day, the highest total since 5 July and the third highest in the month. There were many combats on a small scale and the IXth Tactical Air Command claimed to have destroyed 23 enemy aircraft without loss to themselves. Unfortunately, it would appear that pilots were being optimistic in their claims of victories over enemy aircraft as Luftwaffe (Luftflotte 3) records show losses of only 19 aircraft in Western Europe during the 24 hours: 10 of those losses were during night operations by Fliegerkorps IX and Fliegerdivision 2. Losses to German flak during these support operations in which pilots had to risk flying low in the face of light flak weapons were high. The price paid on 27 July was 18 fighter-bombers shot down.

The Daily Directive issued by Air Marshal Coningham from Advanced H.Q., A.E.A.F. to govern tactical operations during the night of 27/28 July and the daytime on the 28th clearly shows how the forward elements of the U.S. forces were advancing. No.2 Group were ordered to devote 70 per cent of their harassing enemy movements behind the line and to obstructing the flow of reinforcements from the British to the U.S. sector. The latter referred to the transfer of the 2nd Panzer Division which was being switched to the western flank. The line Granville - Villedieu - Vire was the definite northern limit of harassing action by the Mosquitoes. About 180 aircraft operated during the night, some 120 of them behind the American front.

On 28 July the extent of the defeat of the Panzer Lehr and

(1) i.e. up to that time.

A.E.A.F.
Int/Ops.
Summary
Nos.190 and 191

A.H.B.6
Transl.VII/84,
Table p.47

A.E.A.F.Int/Ops.
Summary No.190

A.H.B.6
Transl.VII/84,
Table p.46

Adv.A.E.A.F.
O.R.B., July
1944, p.57

Ibid
para.1(a)

5th Parachute Divisions was evident as the U.S. Armoured Divisions (4th and 6th) pushed forward in two columns one into Coutances and another towards the crossings of the Sienne river at Gavray. At the same time the U.S. VIIIth Corps made rapid progress from the north and effected their junction with the VIIth Corps at Coutances. The VIIth Corps was thereupon ordered to direct its advance upon Villedieu while the VIIIth Corps was ordered to drive for Granville and Avranches. The whole U.S. front was in motion though the XIXth and Vth Corps were not so successful as the two corps west of St. Lo. Starting from that town the XIXth pushed forward towards Tessy while the Vth Corps struck for Torigny. Both corps had some initial success but as the enemy regarded the high land running north-west and north-east of Vire towards Mont Pincon as of the highest tactical importance and in consequence great efforts were made to hold the positions covering the road from Villedieu to Villers Bocage.

This part of the front, and the British and Canadian sectors, were so active that it was next to impossible for the enemy to withdraw substantial forces from any part of the line to plug the hole on their left. Not that this could have been effectively done in any case because most of the German divisions lacked the mobility to compete in speed with the Americans. But whereas a complete break-through was becoming apparent on the extreme west, a semblance of ordered withdrawal was taking place north of Vire.

In that sector the Germans began to execute a slow wheeling movement so that the Seventh Army continued to present an unbroken front but facing the west as well as the north. The pivot of the movement was the ridge of high land running in a line north of Vire. Fighting was exceptionally stubborn and, despite the numerical superiority of the U.S. forces, progress was very slow. A substantial force of the 2nd S.S. Panzer Division had succeeded in avoiding encirclement in the Periers sector and this, together with newly arrived elements of the 116th Panzer and 363 Infantry Divisions, made a series of powerful counter attacks. Percy and Tessy were taken and lost several times in the course of the next few days, before the Americans finally pressed the Seventh Army back against the British and Canadian Armies into the pocket formed between that area and Argentan.

On 29 July the R.A.F. made an important contribution to the American successes when No.83 Group attacked enemy aircraft and motor transport going to the western sector. A column of about 60 transports was caught on the road between Flers and Argentan and heavily attacked. During the afternoon and evening there took place the 'greatest tank slaughter' the Group had known up to that time, after the Americans had called for help in the Gavray area (T.34). They had discovered and attacked about 50 tanks harbouring in the trees but needed assistance from the experienced rocket projectile Typhoon pilots of the R.A.F. No.121 Wing took up the attack for the remainder of the afternoon and evening, flying about 100 sorties before the target was left in a shambles. After the first rocket projectile attack, no sign of life was seen and pilots brought their aircraft down low to complete the destruction. The Typhoon squadrons claimed 17 tanks destroyed and 27 damaged, while the IXth Air Force (mainly Thunderbolts) claimed 80 tanks destroyed during the day there and elsewhere. At the Air Commanders-in-Chief conference (Stanmore) on 31 July, General Stearley of the IXth Air Force said that he did not think the claims were exaggerated.

No.83 Group
O.R.B. Entry
29 Jul. 1944

A.E.A.F.Int/Ops.
Sum. No.192,
Sect.B, p.6

Mins. Air
Commanders' 59th
Mtg. para.8

Armoured spearheads of the VIIIth Corps crossed the River Sienne at a point between Coutances and the sea on 29 July. They drove towards Cerences where they were held up by a line of defences stretching to Brehal and manned by the German 91st Division. On the following day they broke through those defences and that action, in the opinion of the German Seventh Army, was decisive.

Seventh Army
Telephone Log,
(A.H.B.6)
July, p.6

As a result of the break through by tanks near Cerences the whole west front was split open, the way to Avranches was left clear and Villedieu was in danger. Avranches is the pivot of routes to Brittany and if the German front was to be re-established it had to be held. If the American tanks turned to the left at Cerences they would threaten Villedieu and the rear of most of the Seventh Army.

By 31 July it was clear that the VIIIth and VIIth U.S. Corps had scored a brilliant success in the west and the enemy proved unable to cope with the swift exploitation of this success. The Germans were confused and disorganised. On 30 July orders had been issued for the defence of Villedieu, Avranches and Pontaubault but apparently the German forces had not been quick enough to respond. Both road bridges and the important railway bridge over the River See at Avranches fell to the spearheads of the VIIIth U.S. Corps on the evening of the 30th before they could be destroyed. At 0920 hours on 31 July it was recorded at German Seventh Army H.Q. that the Americans had captured Avranches. The situation was desperate and the Germans knew it. No reserves were immediately available and all they could hope for was that they could block the roads to the south and east until an opportunity arose to retake Avranches. This remained their policy for the next few days. Von Kluge assumed personal direction of the battle with forward battle headquarters at Mortain, not 20 miles away from Avranches.

German Seventh Army
Telephone Log, AHB.6
version, July,
pp. 5 and 6

Ibid, p.6,
entry 0920

Von Kluge's plan was to concentrate all possible forces on Villedieu which he saw as the critical point. It was not known whether Villedieu had fallen but orders were given that the 2nd S.S. Panzer Division and a battle group from the 116th Panzer Division were to take over the line in this area. The C. in C. West discussed the situation with General Warlimont (O.K.W.) pointing out in particular the effects of the Allied overwhelming air superiority upon the morale of the German troops. It was 'impossible to rebuild the front with the forces available. Fresh troops must be sent in as quickly as possible from the 15th Army and from anywhere else possible'. He recalled to General Warlimont the example of the French in the first world war when they commandeered all the transports of Paris to rush troops to the front.

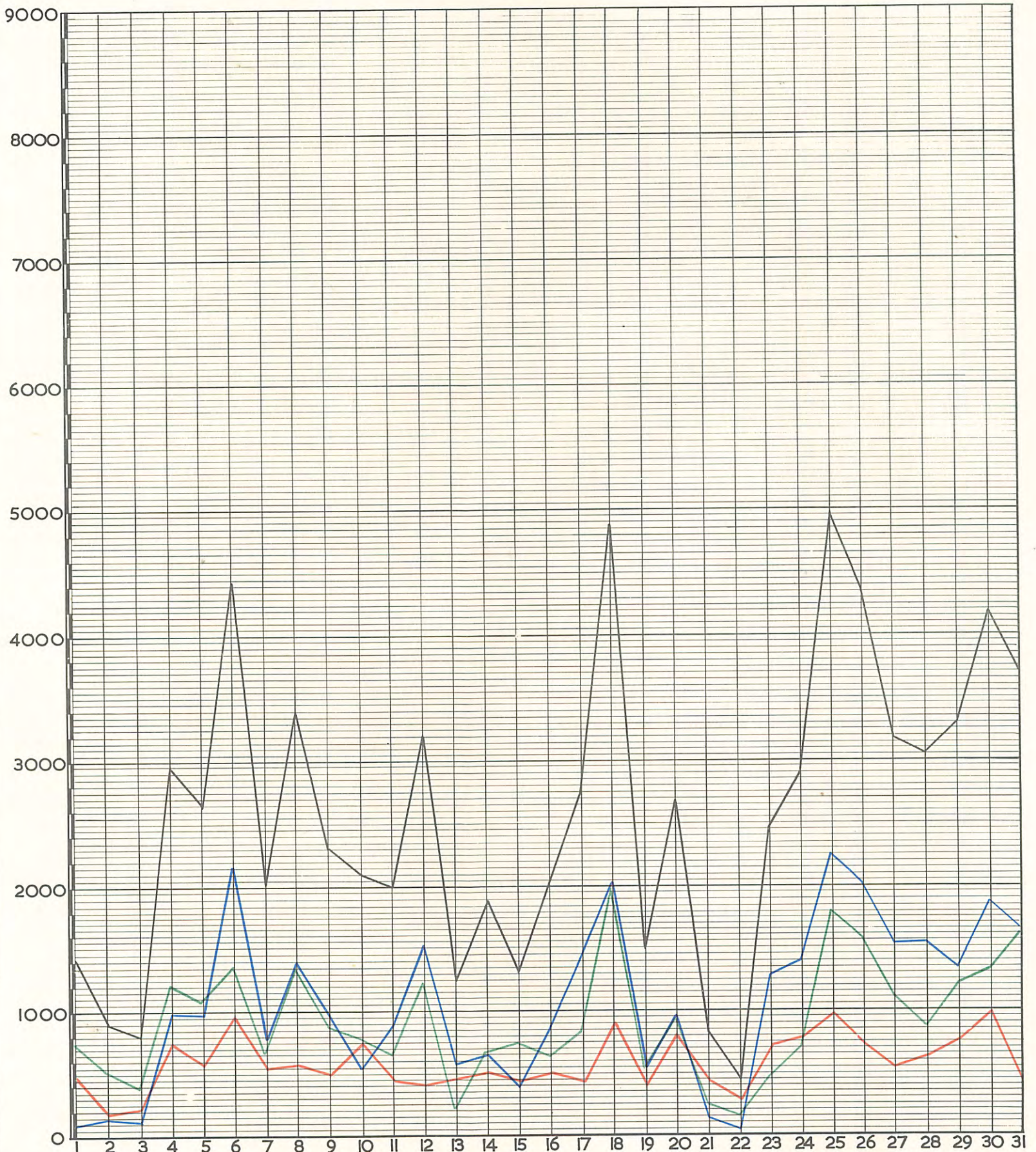
Ibid, p.6

The British Offensive at Caumont

The Commander-in-Chief, Twenty-one Army Group had intended following up the American push in the west by a number of offensives on other parts of the front. The first of these was a heavy blow to be delivered by the Second British Army about a week after the initiation of the drive in the west. The British offensive was to take place in the Caumont sector where the front touched that of the First U.S. Army and was timed to begin on 1 August.

Regrouping so that the VIIIth Corps with the 11th and Guards Armoured Divisions together with the 15th Infantry Division were deployed in the Caumont area was already in

A.E.A.F. DAILY EFFORT BY COMMAND



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|------|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|------|------|------|------|------|------|------|------|------|
| 124 | 161 | 146 | 999 | 985 | 2117 | 797 | 1427 | 949 | 551 | 890 | 1539 | 569 | 654 | 392 | 868 | 1468 | 2020 | 550 | 969 | 145 | 31 | 1269 | 1408 | 2251 | 2028 | 1523 | 1540 | 1335 | 1861 | 1632 |
| 762 | 511 | 372 | 1210 | 1069 | 1349 | 641 | 1351 | 862 | 779 | 630 | 1219 | 196 | 659 | 713 | 614 | 833 | 1943 | 536 | 912 | 246 | 125 | 473 | 702 | 1758 | 1555 | 1094 | 865 | 1191 | 1328 | 1615 |
| 500 | 207 | 283 | 745 | 586 | 986 | 562 | 597 | 496 | 754 | 459 | 433 | 466 | 514 | 430 | 509 | 448 | 914 | 398 | 823 | 442 | 282 | 715 | 781 | 964 | 731 | 544 | 647 | 779 | 992 | 464 |
| 1386 | 879 | 801 | 2954 | 2640 | 4422 | 2000 | 3375 | 2307 | 2084 | 1979 | 3191 | 1231 | 1827 | 1535 | 1991 | 2749 | 4877 | 1484 | 2704 | 833 | 438 | 2457 | 2891 | 4973 | 4314 | 3161 | 3052 | 3305 | 4181 | 3711 |

■ IX AIR FORCE. ■ A.D.G.B.
■ 2 T.A.F. ■ TOTAL.

Air C.-in-C.,
A.E.A.F. O.R.B.
July, p.19

progress when, late on 28 July, the Chief of Staff, Twenty-one Army Group telephoned the Air Commander in Chief to say that the start of the British offensive was to be brought forward two days. The object of the push was still that of seizing the Caen - Avranches road and the high land behind it dominated by Mt. Pincon (1,100 feet) but the British operation was to be launched on 30 July to unhinge the German defence line holding up the Americans which appeared to be based on Villedieu - Percy - Tessy - Torigny. Enemy resistance was particularly stubborn in these areas and strong counter-attacks by the 2nd S.S. and 116th Panzer Divisions - the latter newly arriving - had forced the Americans to evacuate some of their initial gains. A British push from Caumont towards Le Beny Bocage would quickly outflank the German front.

The plan, designed to comply with General Eisenhower's strategical direction that the whole front was to come into offensive activity, was to include the movement of the VIIIth, XXXth and XIIth Corps with the main weight on the extreme west in the direction of the Caen - Avranches road and Le Beny Bocage. In view of its urgency, air support by heavy bombers as well as by the tactical air forces was requested, but the attack on the ground would go forward whether the air support programme could be carried out or not.

Ibid,
App. JU/41

The scheme for air support proposed by Twenty-one Army Group was hastily prepared, largely because of the short notice and because the divisions were new to the Caumont area. As such it came in for universal criticism when submitted for consideration by the R.A.F. Eight areas of different sizes were to be bombed in order to put out of action troops, field guns and flak guns, but the areas were large (several square miles) and the information about the enemy was not exact. The criticism summed up by the Air Commander in Chief was mainly that the areas selected for bombing were much too large for any certain effect. Aiming points would have to be selected and in fact this was done by A.E.A.F. before the request was passed on to Bomber Command. The plan with some of its deficiencies rectified was accepted because Air Chief Marshal Leigh Mallory pointed out that in spite of the unsatisfactory nature of the bombing at St. Lo it was effective and in consequence it was not to be assumed that bombing would be ineffective at Caumont.

Ibid,
para.10

At 0745 hours on 30 July the first of nearly 700 Lancasters began to bomb selected aiming points near Amaye-sur-Seulles and Cahagnes, a few miles south-east of Caumont in very unfavourable conditions. The clouds were 10/10ths at 1,500 feet and aircraft had to come down below 1,500 feet in order to bomb. Only three out of the six aiming points assigned were bombed by 377 out of the 693 aircraft despatched and at the Allied Air Commanders' Conference on the following day Air Chief Marshal Harris said he did not want this type of operation again. Fortunately flak was not heavy and only four bombers were lost.

In this operation 1,515 (short) tons of bombs were dropped by the heavy bombers in the neighbourhood of the two above villages by about 0830 hours. At the same time other localities in the same area near the villages of Les Loges and St. Pierre were subjected to attack by IXth Air Force medium bombers. Nearly 400 (short) tons were dropped in the morning by 245 Marauders and Bostons. Repeat attacks were made in

A.E.A.F.
Int/Ops.
Summary No.193,
Section B,
para.1

the afternoon by over 200 medium bombers of the IXth Air Force which thus dropped about 700 (short) tons during the day in support of the Caumont operation. About 50 aircraft were unable to attack because of unfavourable weather during the morning but during the afternoon mission it was believed that all the bombs were correctly placed. There were no reports of bombs falling on our own troops.

No.83 Group
O.R.B. Entries
30 July 1944

The normal close support was given by No.83 Group with squadrons (186 aircraft sorties) of No.84 Group to assist. Fighter-bombers flew 32 immediate support missions (279 sorties) as well as armed reconnaissance, tactical reconnaissance and fighter missions. Altogether the Group flew 961 sorties mainly in connection with the operation of the Second Army though the pilots had few successes to report. Little enemy movement was observed and the G.A.F. offered no challenge to our Air supremacy. (1)

Ibid

Despite the cloudy conditions the bombing appears to have been effective and with its help the troops made a good start. In the VIIIth Corps area where most of the attacks by the IXth Air Force medium bombers had taken place, the ground forces quickly advanced to Les Loges and the Caen - Avranches road. The XXXth Corps was at first held up by minefields and guns across the steep banks of a minor stream east of Caumont, the only progress being around Cahagnes which had been bombed by the R.A.F. heavy bombers. On the whole, advances of from one to four miles took place during the day and these were quickly consolidated by the infantry.

German Seventh
Army Telephone
Log, 0030 hrs.
30 July

During the night of 30/31 July, Von Kluge approved the withdrawal of the German line in consequence of the British attack combined with the pressure exerted by the American Vth Corps to the west. The new line was based on the ridge of high land north of Foret L'Eveque and included the villages (from east to west) of St. Martin, St. Symphorien and Le Mesnil Opac.

Ibid, entry
0935 hours

At dawn on 31 July the 11th Armoured Division continued its thrust to Point Aunay and Foret L'Eveque making for Le Beny Bocage. It was soon evident that they had caught the enemy off balance. At 0920 hours the Chief of Staff, German Seventh Army told Von Kluge that there was no clear picture of what was happening on the extreme west of the Panzer Gruppe West front where it joined that of the Seventh Army. (2) The line of the IIInd Parachute Corps ran from La Ferriere to Cahagnes i.e. very near to the all important Avranches - Caen road but apparently the British had not attacked them in strength as yet. Troops of the British XXXth Corps had in fact, found the country difficult as they had had to push forward over low hills covered by dense bocage with excellent defensive positions every few hundred yards. However they dislodged the enemy from Cahagnes and pushed forward across the road towards Jurques.

The drive by the Second British Army added to the confusion caused by the dramatic success of the Americans and as a result No.83 Group pilots found the enemy making more moves

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- (1) In fact Jagdkorps II flew 320 day fighter and fighter-bomber sorties on 30 July, 290 of which were on fighter operations in support of the army in the U.S. area. (See A.H.B.6, Transl. VII/84, p.46).
- (2) At the Foret L'Evêque.

than usual in the daytime on 31 July. It is possible that enemy commanders thought that the prevalence of low cloud and mist justified such moves in the existing emergency. The Group flew nearly a thousand sorties of which about 700 were on armed reconnaissance and immediate support with claims - to quote the Operations Record Book - of '62 flamers, 67 smokers and 60 damaged' vehicles.

No.83 Group
O.R.B. entry
1 Aug. 44

The VIIIth Corps were engaged in a stiff battle against resistance centred on Bois du Homme (T.7151) and several formations of Typhoons were called upon to attack concentrations of enemy tanks hidden there. Pilots claimed to have damaged three tanks in the area (near the Caen - Avranches Route Nationale). On the following day the Army cleared the wood finding 30 tanks destroyed of which they credited 20 to the Typhoons.

At this stage a change came over the situation with the arrival in the Mt. Pincon area of the more mobile elements of the 21st Panzer Division which until then had been stationed east of the Orne. The 11th Armoured Division captured Le Beny Bocage and continued its drive towards Vire and the Vire - Condé road but with strengthening counter-attacks from the enemy the rate of advance soon fell.

The Second British Army thereupon initiated an attack by the 7th Armoured Division (XXXth Corps), which was directed east of Mount Pincon on 1 August while the 50th Division struck towards Villers Bocage. Heavy fighting continued in the same areas during the first days of August but Mount Pincon, Amay-sur-Odon, Estray, Vassy and Vire could not be taken even when the XIIth British and IInd Canadian Corps began offensives to weaken the enemy in the sectors further east.

The Germans brought the 9th and 10th S.S. Panzer Divisions into the line in the Mount Pincon area with the result that desperate and bloody battles raged between the three British and the three German armoured divisions. Little ground was gained but the enemy was forced to commit his armour when the sands were fast running out for him. Every day that the Germans were held in desperate battle was of great value to the Americans who were now consolidating their position in the interior of France.

The American advance into France - mobile warfare in Brittany

The swift crossing of the River See, the capture of Avranches and the seizure of bridges over the Selune and its tributaries formed an exciting climax to the end of July and the beginning of August. Taking advantage of the continued paralysis among the defenders the VIIIth Corps dispersed the moderate opposition at the vital bridges of Pontaubault and Ducey then split into two columns which were moving on Pontorson and Rennes during the afternoon of 1 August. On the same day Tessy and Villedieu were taken after heavy fighting.

The enemy was still not in full possession of information about his own units or about American movements. Weekly strength returns from H.Q. Seventh Army to O.K.W. at Berlin dated 2 August could give no information about the strength of units of the LXXXIVth Army Corps (covering the Avranches sector) although returns were rendered on behalf of the IInd Parachute and XXXVIIth Panzer Corps. Reinforcements had been called for and the 708th Infantry Division was near

Seventh Army
Diary U.S.
Transl. Vol.VI

Ibid

Angers and Nantes but not yet across the Loire. The 9th Panzer Division was on its way from Avignon - Nimes and elements had arrived at Tours - Angers on 2 August. These two divisions were to be placed under the command of a newly arrived H.Q. staff (LXXXXIst Corps) to hold the area Le Mans - Alencon. Another infantry division (363rd) was moving through Argentan and Flers to Gathemo north of Mortain.

There were more sensational reports from U.S. sources of movements into Brittany both towards the west and the south. The 6th Armoured Division had reached the defences of St Malo and Dinan while in the south spearheads were reported at Rennes on 2 August. Opposition was very weak and completely unco-ordinated. The situation was such that the Allies could choose whether to occupy the bulk of the peninsula of Brittany first after cutting it off by an advance to the north of the Loire, or they could turn towards Laval, Le Mans and Alencon while the road lay open. This was the situation visualised by General Montgomery's directive of 30 June and repeated in his later directives. Though doubtless in the minds of the American generals it was not expressed in official orders at this stage.

File D/SAC/H.12
Encl.26A
paras. 11 to 16

On 2 August General Bradley issued his first directive as Commanding General of the Twelfth Army Group. In this he said:-

File TIM/
S.136/60/3,
Encl.12

'We have been working on the general idea that we would have to launch a co-ordinated attack to secure crossings of the La See and La Selune Rivers. With this in mind, we have been planning on seizing the road centres at Vire, Mortain, and Fougeres, after which we would throw a suitable force around the corner into the Brittany Peninsula.

Due to the rapidity of the movements of the VIIIth Corps in Operation Cobra, we secured the crossings of these two rivers while the left flank was still heavily engaged in the vicinity of Villedieu, Percy and Tessy.

In order to take advantage of this bridgehead on the south side of the two rivers, our timing in seizing road centres is somewhat changed. While the First Army is still fighting toward Vire and Mortain, the Third Army has reached the vicinity of Rennes and Pontorson. In order to take full advantage of this bridgehead we must make it secure by pushing our attack vigorously until we secure the road centres at Vire, Mortain, and Fougeres as the main German threat will be from the east and south-east. With this in view, the armies are assigned immediate objectives as indicated below:-

First Army: continuing in its designated zone of action to secure Vire and Mortain

Third Army: secure the line St Hilaire du Harcourt - Fougeres - Rennes. When this line is secure, forces will be pushed vigorously into the Brittany Peninsula with the object of seizing Quiberon Bay and clearing the enemy from the rest of the peninsula. St Malo may be by-passed and contained if its reduction takes too large a force and too much time.'

The Germans for their part appreciated that they had insufficient forces to hold Brittany in addition to defending the bases in the rear of the battle area. Within the next few

days troops were withdrawn into four strongly defended areas which required some little time for their reduction. The four areas chosen were major ports already provided with defence works, viz:- St Malo, St Nazaire, Lorient and Brest.(1)

Seventh Army
Diary, U.S.
Transl. Vol.VI
p.11

The 9th Panzer Division was meanwhile being assembled around Alencon and advanced elements of the 708th Infantry Division was moved west of Le Mans where on 3 August they were ordered to defend the main road from Rennes. All forces in the areas between Domfront and Laval were ordered to block the roads and destroy all crossings to delay a possible American advance to the east.

Ibid
p.17

The German Seventh Army estimate of the situation on 4 August is of great interest. They appreciated that the first aim of the Allies was to cut off the Brittany peninsula and that the American forces moving south and east were intended merely to protect the east flank of such an operation. Their own action in face of the American moves would be to close the gap at Brecey and Avranches by a massed attack. 'It is of utmost importance for the successful execution of the attack that the enemy air superiority be diminished by the employment of all fighter forces at our disposal.'

Ibid
p.21

Meanwhile the American tide was rolling on with spearheads at Chateaubriant south of Rennes and at Vitre east of Rennes on 4 August. Mortain was also captured and tanks were fighting at Rancoudray a few miles to the east of the town. The line in this sector ran from Sourdeval - St Clement - Rancoudray southwards and westwards to Cherences: thence northwards through the hills to the Foret de St Sever and a few kilometres north of Vire. Vire itself had been entered by the British(2) but they were pushed out again by reinforcements consisting mainly of elements of the 9th S.S. and 10th S.S. Panzer Divisions. In the St Barthelemy - Mortain area the 116th Panzer Division started a counter-attack but this was smothered by IXth Tactical Air Command fighter-bombers.

Ibid, p.29
5 Aug.1944

At this stage the German Seventh Army records begin to mention the actual preparations for the attack foreshadowed by the estimate and intentions expressed on 4 August. The 84th Infantry Division was attached to the 116th Panzer Division for Operation Lutich (Liege) as the operation to cut off the American supply line at Avranches was named by the Germans.

Ibid
p.31

But on 5 August came bad news for the enemy. The Advanced Command Post of the Seventh Army informed Army Group B that reconnaissance had confirmed that the Americans were

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- (1) On 9 August an order from the Fuehrer to the Fortress Commander at St Malo was issued to all fortress commanders as a general directive:-
- (a) The fortress will be held to the last man.
 - (b) A court martial will be established to deal with civilian resistance.
 - (c) Eastern volunteers to be given a free hand to suppress populace.
- (See Document VI, Seventh Army Diary U.D. Transl. p.59).
- (2) No.83 Group Intelligence summary No.50 (3 August) reported British troops in Vire railway station and western outskirts on 2 August but heavy counter attacks by Panzer reinforcements caused the advanced elements of the British to withdraw (see also summary No.51).
However, we were again in possession of Vire on 6 August.

advancing in strength along the general line Mayenne - Laval. In consequence, the earlier opinion that the Americans were only simulating such an attack had to be revised. Nevertheless the enemy adhered to the plan for Operation Luttich although both Laval and Mayenne had fallen on 5 August. It now became a race for position between the Americans and the Germans to see whether the former could bring sufficient forces into the Le Mans - Alencon area to encircle the enemy by driving to meet the British in the north, before the latter could assemble his Panzers and cut through to the west coast from Mortain to Avranches.

On 6 August the following forces were detailed to take part in Operation Luttich:-

Ibid
p.39

- | | | |
|-------------------------------------|---|-------------------------|
| 116th Panzer Division | } | XXXXVIIth Panzer Corps. |
| 2nd Panzer Division | | |
| 2nd S.S. Panzer Division | | |
| 1st S.S. Panzer Division | | |
| 17th S.S. Panzer Grenadier Division | | |
| 9th Panzer Division | } | LXXXIst Army Corps. |
| Artillery, Flak and | | |
| Assault Gun Units | | |

Though the operation began on 6 August, these divisions were by no means at full strength. Some of their units were still committed in the line and could not be withdrawn. Other units had not arrived at the assembly points designated. Nevertheless, the Panzer force ready to take part under General Eberbach was more powerful than any which had yet been met.

Air Operations during the first week of August

But in the summery weather of the first days of August the Allied air forces were able to operate with greater effect than at any period up to that time in the campaign although haze during the day and ground mist and fog on many mornings imposed a late start on flying operations. The fighter bomber pilots were able to rest when mist made it impossible to recognise ground targets but the heavy bomber and medium bomber forces were worked very hard.

Bomber Command was not employed on a large scale to help in the land battle though a small attack by about 50 aircraft was made on naval targets (shipping) in the port of Havre on 2 August and other small attacks were made on shipping in the ports of Brest and Lorient on 5/6 and 6/7 August to prevent evacuation by sea in the face of the American advance into Brittany. Two attacks were also made on Etaples bridge and five attacks were made on French oil refineries by the R.A.F. heavy bombers. But Bomber Command was mainly concerned with its campaign against flying bombs during this period when about 3,500 sorties were flown in one week on these operations.

The Fortresses and Liberators were freely used against bridges, fuel dumps, railway targets and airfields in France operating on the scale of about 1,000 sorties on each of two days and of about 300 sorties on two other days. On 5 and 6 August over 1,000 U.S. heavy bombers made deep penetration raids into Germany but on 4 August about the same scale of attack was carried out against flying bomb sites, bridges and airfields in France and Belgium.

The medium and fighter-bombers were employed even more than usual in the effort to restrict enemy movements by road and rail while a considerable effort was also employed against the barge traffic along and across the Seine.(1) Daily attacks were made against roads and railways leading to and from the battle area especially over the Loire.(2) Bridges, railway centres and fuel dumps - especially oil dumps - were under constant attack by the Marauders and Bostons of the IXth Air Force and the Mitchells, Bostons and Mosquitoes of No.2 Group.

Mosquitoes scored one or two outstanding successes against petrol trains. One of these was the total destruction of a large fuel train at Domfront on the night 2/3 August, another was against a fuel train east of Laigle the night before and a third took place on the night of 6/7 August when one out of 24 trains attacked near Paris proved to be laden with petrol.

The fighter-bombers also had what was one of their successful weeks since the campaign began. At the same time the Mustangs and Spitfires of No.83 Group Reconnaissance Wing had also been more active with the improvement in the weather and many missions were flown whenever the visibility was clear enough for photographic and tactical reconnaissance. It will be recalled that the Typhoons had scored a great success against enemy tanks near Gavray on 29 July in support of the Americans. Two days later, after it had captured part of the Bois du Homme south of Caumont, the Second British Army discovered evidence which led them to congratulate the Typhoon squadrons on another highly successful operation against enemy tank forces in the fighting on 31 July. It was on the following day that a pilot of No.430 Squadron carrying out a tactical reconnaissance over the Bois du Homme discovered a concentration of armour of about 50 tanks close to the bomb line which observers on the ground had thought to be British. The pilot's report proved to be correct and an artillery barrage was laid down to disperse the tanks. The Second British Army signalled its thanks to the headquarters of No.83 Group for the useful piece of information.

No.430 Sqdn.
O.R.B.
Aug. 1944

No.83 Group
O.R.B. Entry
2 Aug. 1944

At this stage an account of the co-ordination of reconnaissance between the R.A.F. and the Army is necessary. All demands for photographic and tactical cover were examined at the Reconnaissance Centre in the Main Headquarters of 2nd T.A.F. This was composed of a joint Army and Air Force staff usually working together in the same room. The former received all demands from Twenty First Army Group while the latter were in close touch with the Reconnaissance Wings (Nos. 35 and 39 Wings) attached to the two Tactical Groups. As far as possible the control of photography was delegated to the Headquarters of Armies and Tactical Groups, usually located alongside one another, which ensured the minimum

A.M. Coningham's
Draft Report
App. "B"

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- (1) The Seine ferries and barge traffic between Havre, Rouen and Paris were under constant observation and attack from the latter days of July until the Allies moved up to the Seine crossings. It was realised that the enemy was making a great deal of use of the river below Paris but as this was mainly by night the traffic was difficult to stop without risking heavy damage to French life and property for possibly small results.
 - (2) The Allies were expecting the 11th Panzer Division to come north across the Loire but it was sent to the Marseilles area instead.

amount of delay in fulfilling demands. It was impossible to lay down any hard and fast rule about the areas of responsibility for reconnaissance, but normally the tactical and artillery fighter reconnaissance aircraft operated within 100 miles and the tactical photographic squadrons operated within 150 miles of the Armies to which they were giving cover. The strategical reconnaissance aircraft of No. 34 Wing operated beyond 150 miles of the front line up to a point laid down by SHAEF. Certain tasks were carried out outside this area which sometimes fell in the vicinity of the front line; such tasks were the making of photographic mosaics and the night visual and photographic reconnaissance of roads. In general, everything was done to cut down the time between a request for cover and the despatch of the reconnaissance aircraft. (1)

A good example of close co-operation between the fighter bomber and tactical reconnaissance squadrons took place on 2 August. The morning and early afternoon were misty as usual, but a sudden clearance enabled aircraft to begin armed and tactical reconnaissance soon after 1430 hours. Almost at once there were reports of a great movement of enemy armour across the British front from the Orne River to the Caumont - Vire area where the great British push was meeting strong opposition. This was the movement of the 21st Panzer Division which became heavily engaged against the British for the next few days. A pilot from No. 430 Squadron, who was carrying out a tactical reconnaissance in the neighbourhood of Conde and Vassy, photographed a long mechanised column on the road four miles north of the former place at about 1600 hours. These photographs when developed revealed the presence of some 60 tanks accompanied by about the same number of motor vehicles. Rocket carrying Typhoons were at once sent to disperse the Panzers before they had time to disperse and claims were made for five tanks destroyed and seven damaged. About 600 sorties either directly or indirectly engaged in armed reconnaissances and close support were flown during the day by No. 83 Group.

No. 430 Sqdn.
O.R.B. Aug. 1944

2nd T.A.F.
Daily Log,
Sheet No. 1186

Numerous attacks in support of the British troops engaged in the heavy fighting around Vire, Aunay and Villers Bocage were also undertaken by the fighter-bombers on 3 August (650 sorties) but on 4, 5 and 6 August the prevalent mists were so late in dispersing that only half of an ordinary day's programme could be completed. The main effort continued to be directed to armed reconnaissance and ground attacks in support of the Army. The tactical reconnaissance squadrons were busy on 4 and 5 August. On 5 August two Mustang pilots, also from No. 430 Squadron, located a concentration of about 150 motor vehicles south and south east of Amay sur Odon at about 1045 hours. Typhoons were directed to the area but it appears that the enemy transport had had sufficient time to disperse and large claims were not made by the fighter-bomber pilots. Apart from these incidents an abnormal amount of enemy movement was not noticeable although important relocations of troops were known to be taking place.

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

(1) Assessments of tactical reconnaissance were made by 2nd T.A.F. ORS for the week following 'D' Day. They show that on the whole the major moves made by enemy divisions were observed in spite of the poor weather (2nd T.A.F. ORS Assessments of Reconnaissance Nos. 1 to 3).

No.84 Grp.
O.R.B. Aug.1944,
Appendix 3

Perhaps the most important event for 2nd T.A.F. in the first week of August was the long delayed movement of No.84 Group to the Continent. Twelve squadrons were still in England waiting for airfield accommodation to become available in Normandy but on 7 August there were 41 squadrons of 2nd T.A.F. based on 11 continental airfields in addition to seven Auster squadrons allocated to Corps. Main H.Q. No.84 Group transferred from Goodwood to Amblie (T.98) on 6 August but the operational control of squadrons continued for the time being to be exercised from Bazenville where No.484 Group Control Centre worked side by side with that of No.83 Group. (1)

The period following 1 August was in many respects an even more significant one in the history of the IXth Air Force than it was for the Second Tactical Air Force. The forward surge of the Third U.S. Army presented the XIXth Tactical Air Command with a number of difficult problems resulting from rapid movement and changes of plan and direction. Unfortunately the nature of these operations was such that records in the possession of the R.A.F. are scanty. The divergence of the American Tactical Air Commands and the British Groups from centralised control due to the expanding sphere of operations, together with the avoidance of paper work and the stretching of communications during active mobile operations has meant that a period of the campaign with perhaps the greatest intrinsic interest cannot be fully recorded.

Four main activities may be distinguished in the operations of the XIXth Tactical Air Command during the first two weeks of its co-operation with General Patton:-

- (a) Armed reconnaissance missions particularly on the open Loire flank.
- (b) Maintenance of air superiority.
- (c) Close co-operation with armoured columns.
- (d) Limited operations against fortresses in Brittany.

Every day General Weyland flew from his own H.Q. to confer with General Patton but he also maintained an advanced echelon with Third Army Advanced H.Q. at all times. On the first day of the month the two H.Q.s moved to a site near Granville and a week later they were at St James (south of Pontaubault).

One of the first principles established by General Patton was that the P.47 pilots must no longer destroy bridges unless it was to prevent enemy forces getting away. To conform with that policy the great bulk of the missions flown were on armed reconnaissance duties when pilots were ordered to attack traffic, troop concentrations, guns and military installations rather than bridges which would be needed by their own troops.

On 1 August the XIXth Tactical Air Command had three groups of Thunderbolts but within a few days two more groups of Thunderbolts and one of Mustangs had been added when on 4 August the Third Army was ordered to turn east and envelop the German forces. To do this the Third Army was given additional forces of which the XVth Corps was entrusted with the task of striking from Fougères towards Laval, Le Mans and Alençon. On 7 August the strength of the XIXth Tactical Air Command was raised to nine groups.

(1) Viz: No.483 G.C.C.

The advance of General Patton's columns into Brittany southwards and westwards has already been briefly described. One Thunderbolt group was assigned to each of the two armoured divisions and was ordered to maintain patrols of four to eight aircraft over the spearhead of the column throughout the day. Pilots were able to warn tank crews of hazards in their path while the latter could call upon airmen for assistance when necessary. This armoured column co-operation proved highly successful and was one of the most distinctive contributions of the U.S. forces to modern ground-air technique.

The advance into Brittany soon required a separation of the ground forces into three columns but as the enemy offered little resistance the Thunderbolts were not fully extended despite the broadening of their responsibilities. The third Thunderbolt group was ordered to fly armed reconnaissance missions all over Brittany but enemy air opposition was almost non-existent in this area (though considerable around Avranches - Pontaubault - Mortain) and thus one Group was able to cope satisfactorily with this large commitment. Operations against the German Air Force bases in Brittany were not required as aircraft had been withdrawn, while operations against the four main fortress areas in Brittany were on a limited scale. This latter development was due to two main reasons:-

- (a) Fortifications in Brest, St Malo (and Ile de Cezebre), St Nazaire and Lorient were too strong for fighter-bombers.
- (b) It was decided to defer siege operations against them until a later date.

In the Brittany peninsula the situation existing on 7 August was that the main routes were all firmly held by the Third Army and the four fortresses were contained by American and Maquis troops. Rennes had fallen without a struggle and this was also true of the great majority of smaller towns. The peninsula was cut off when American troops reached the sea south west of Redon on 5 August. The bulk of the Third Army was already turning to the east and despite the great place that Brittany and its ports had occupied in Allied thoughts during the planning of Overlord its conquest was almost forgotten when the way to Paris and the German frontier seemed open.

On 3 August the XVth Corps commenced a thrust towards Laval and the fighter-bombers undertook armed reconnaissance as far south as the Loire. For the next two weeks they carried out a task which must be almost unique in air-ground co-operation. As the Third Army pushed forward to Laval and then to Le Mans and even further to the east, an extended right flank lay open to the south. General Patton was determined to risk everything on a forward thrust and could not afford troops for a strong screen to protect this open flank.

The German 11th Panzer Division was known to be in the south of France and was reported - erroneously as it turned out - to be moving towards the battle. The fighter-bombers were therefore entrusted with the grave responsibility of reporting the arrival of Panzers at the Loire and of holding them at the Loire crossings as long as possible. This vigil was faithfully maintained for day after day by the

XIXth Tactical Air Command but the threat never materialised: however, the assistance to the Third Army and the saving in resources thus effected, was undoubtedly considerable.

The air operations were aimed primarily at any attempt by the 11th Armoured Division to get across the Loire but in effect they caught the 708th Infantry Division. Certain elements had crossed the river before the American spearheads cut off the Loire valley from the battle but the bulk of the division appears to have been delayed at Angers on 4 August.

German Seventh
Army Diary,
U.S. Transl.
Vol. 4
entry 1520 hrs.
4 Aug. 1944

CHAPTER 4.

THE BATTLE OF MORTAIN AND THE THRUST ON FALAISE

The German counter-attack at Mortain

A.H.B.6.
Transl. No.
VII/73, p.p.
52 to 54.

Von Kluge's estimate of the situation for the week 31 July - 7 August told the O.K.W. that Paris appeared to be the objective of the Allies. The British were attempting to win territory around Falaise and the Americans were striving to cut off the Seventh Army in Normandy by occupying the Le Mans area. The broadening of operations in Normandy thus made it unlikely that a second big landing would be undertaken on the west coast although airborne operations on the road to Paris may be attempted.

All available forces in Army Group B had been hurried to the front and an armoured force had been assembled on the western flank of the Seventh Army to be employed in a thrust to Avranches. If this manoeuvre should succeed further American operations to the south would be rendered impossible. But Von Kluge stressed the difficulties of the situation. The shortage of armour and of mobile units when compared with those at the disposal of the Allies was very grave. Because of the material preponderance of the Allies, especially in the air, German losses had been high. Total losses from 6 June to 6 August had been 148,000 and only about 20,000 replacements had arrived. Fourteen generals had been lost.

Ibid,
p.p. 53 and
54.

A more detailed picture was supplied by S.S. General Hausser in command of the Seventh Army. He said that many of the divisions⁽¹⁾ which had been fighting without relief from the commencement of the campaign had been split up into small groups by the American break through. Groups of men, most of them without officers or N.C.O's were wandering aimlessly in a general easterly or south-easterly direction. Their morale was badly shaken as 'the enemy command of the air makes it impossible for them to steer a straight course by day'. They were a prey to rumours and despair.

Seventh Army
War Diary,
U.S. Transl.
Document VI
p.39.

But while the Seventh Army front was bending and cracking under the heavy pressure, a special Panzer Gruppe Eberbach was being organised in the Tinchebray - Flers neighbourhood and in the hills immediately behind Sourdeval (T.62). The Gruppe was set up on the orders of the O.K.W. and the command was given to Eberbach who handed over command of the Fifth Panzer Army (formerly the Panzer Gruppe West) to Dietrich. Eberbach was to be given the XXXXVIIth Panzer Corps (with substantial elements of four armoured divisions), the LVIIIth Corps (with at least two armoured divisions, and the LXXXIst Panzer Corps with one armoured division, one infantry division and a number of composite units hastily assembled and thrown into the line.

The role of this powerful Panzer Group was nothing less than that of turning the tables on the Allies by cutting across the narrow American corridor from Mortain to Avranches. In this way, the Third Army spearheads thrusting deep into Brittany would be isolated from their bases and the enemy could hope to re-establish a line which would once again seal off the beachhead.

(1) Hausser specifically named the 77th, 91st, 275th, 353rd 5th Para, 2nd S.S. Panzer and 17 S.S. Panzer Grenadier Divisions.

Seventh Army
War Diary,
U.S. Transl.
Vol.4 entry
dated 6 Aug.
2200 hrs.

The attack was due to start at noon on 6 August or as soon as possible thereafter by the Seventh Army in the first instance with the Leibstandarte Adolf Hitler Division (1st S.S. Panzer), the flower of Nazi youth in the lead. This was perhaps in recognition of the fact that the plan had come down from Hitler himself. After the war some of the German Generals - notably Dietrich - criticised the plan for Operation Luttich because it did not take into account the inadequacy of the road network around Mortain. This, according to them, made the manoeuvre of such a powerful force of armour, quite impracticable especially as the roads down the narrow valley of the River See to Avranches were also secondary ones. The rugged and heavily wooded country around Mortain was also unsuitable for the operations of Panzer forces.

Canadian-Special
Interrog. Repts.,
Doc.838, Vol.2,
Dietrich, p.24.

The heavy pressure of Allied forces on all fronts made it difficult for the Germans to disengage their armoured forces as planned, and the close watch on movement behind the German lines which was constantly maintained by the Allied Air Forces were important factors in making it impossible for the Operation Luttich (Liege), to start on time. At 2120 hours on 6 August units of the 1st S.S. Panzer Division were still many miles behind the battle line (they were at Tinchebray) and their Commander, General Wisch, later explained⁽¹⁾ that his tanks would require servicing before they could fight as some of them had travelled 70 kilometres.

Seventh Army
Diary (U.S.),
Vol.4 entry
6 Aug.,
2200 hrs.

In any case the operation could not start as planned because the Commander of the 116th Panzer Division had not carried out an order to transfer certain units to the 2nd Panzer Division. Both these Divisions moved forward in a westerly direction towards Avranches after 2000 hours on 6 August but they made little real progress. Heavy fighting at Vire where there were local penetrations of the German lines by the Americans which made it impossible to withdraw the 10th S.S. Panzer Division, combined with the American capture of Laval and threat to Mayenne which kept the 9th Panzer Division engaged, reduced the size of the force available for Operation Luttich.

Ibid,
Document VI,
p.40.






Operations on 7 August

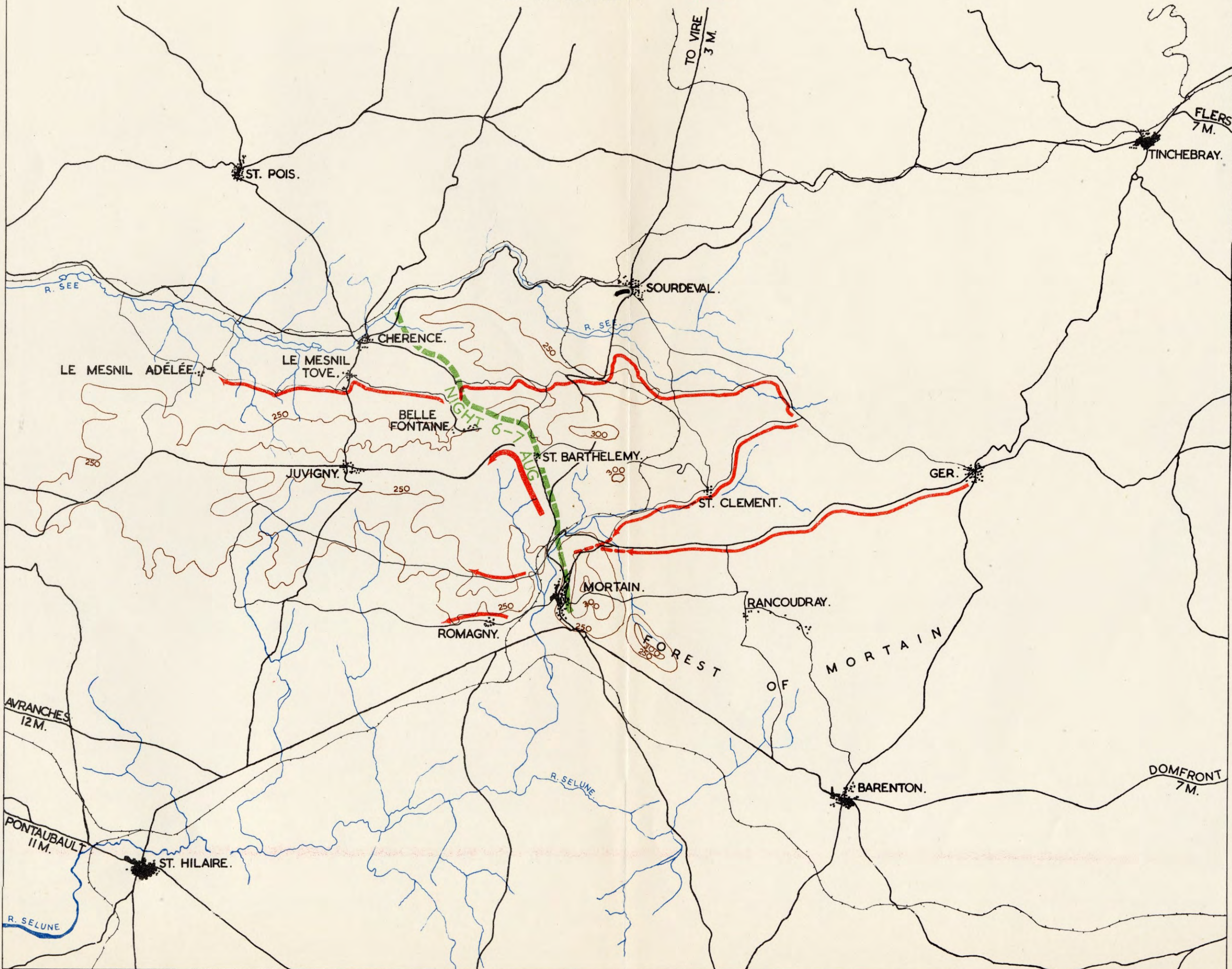
After all these delays General Eberbach's force was at last assembled on the evening of 6 August. The attack was planned to be launched under cover of darkness and it was hoped that sufficient progress would be made before the Allied Air Forces could begin their harrying tactics. About 300 fighters of the Luftwaffe had been gathered together from far and near to provide cover for the ground forces. Von Kluge himself came to the battle area to watch the start of this attack in which German supremacy in Normandy was at stake. The Panzers moved westwards on a front of three divisions, the 2nd Panzer Division being in the centre, the 116th to the north and the 2nd S.S. Panzer Division to the south.

(1) General Wisch told the Chief of Staff of the Seventh Army at 1630 hrs. on 6 Aug. that the 1st S.S. Panzer Division could not attack at noon on 6 August because of the necessity to re-service after travelling. They would be ready for re-grouping at 2200 hours. In fact, they were not ready when the other Panzer Division set out but fought well on the 7th.

THE BATTLE OF MORTAIN 17 AUGUST 1944.

LEGEND.

- ROADS 
- RAILWAYS 
- RIVERS 
- U.S. FRONT LINE 
- GERMAN MOVEMENTS 



File
2nd T.A.F./S
30317/11/Ops.
Encls. 4A -
5A

The American force holding the rugged and wooded ground in the neighbourhood of Mortain consisted of the 9th Infantry Division at St. Pois (east of Sourdeval) and the 30th Infantry Division which had just moved into the area between Juvigny and St. Barthelmy. The Panzers were first encountered by a reconnaissance patrol from the latter division at about 0100 hours on 7 August and were seen to be moving along a lane from Grand Dova to Le Mesnil Adelee. The American troops were soon overwhelmed by this superior force and, although they fought back hard with their anti-tank weapons, some units were cut off. The advance by the 116th Panzer Division in the north did not, however, make much progress during the early hours of the morning despite the surprise it had achieved.

A.E.A.F.
Daily Int/Ops.
Summary
No.201

No.168
Squadron
O.R.B.
6 Aug. 1944.

The low lying mist and haze to which the Air Forces had grown accustomed during the past few days began to clear over Normandy at about 1100 hours but it was not until over an hour later that extensive air operations could begin. Mustangs of the IXth Air Force took off at 1100 hours to make a reconnaissance of the battle area in general but they appeared to have discovered nothing of interest. Indeed, the Germans assisted both by the weather and the wooded nature of the countryside in addition to their thorough training in the art of camouflage succeeded in concealing their preparations for the thrust on Avranches. The area immediately north of Mortain being in the American sector was of course the responsibility of the IXth Air Force. But the day before (6 August) Mustangs of 2nd Tactical Air Force had reconnoitred the road from Vire to Tinchebray without observing any unusual activity. One interesting comment recorded by the Squadron undertaking the mission was that the neighbourhood between Tinchebray and Flers was obscured by a dense smoke screen. No extraordinary activity was seen by American pilots.

As the morning wore on it became all too clear that the enemy was making a desperate attempt to reach the sea and cut off the Avranches corridor. The heavy tanks continued to lumber through the mist and the Americans attempted to halt them with their Bazookas and anti tank guns but without much avail. By mid-day the 2nd S.S. Panzer had captured Mortain and the 2nd Panzer Division had taken the villages of Le Barthelmy, Cherence and Le Mesnil Adelee. A situation had arisen where there was no time to bar the way with strong Allied Forces which could ensure that the enemy armour would not break through. Nor was there sufficient time to lay on an attack by the powerful forces of heavy bombers at the disposal of the Supreme Commander even if there had been targets or well defined enemy positions or concentrations for which their employment was suitable.

A.M.
Coningham
Draft Report
para.43.

2nd T.A.F.
O.R.B.
7 August 1944.

At Allied Air Headquarters in Normandy consultations took place when the news from Mortain came through. The Commanding General of the IXth Air Force and Air Marshal Commanding 2nd Tactical Air Force agreed that the latter's rocket-carrying aircraft should deal exclusively with the armoured columns while the IXth Air Force was to put up a fighter screen to ward off enemy aircraft and their fighter-bombers were to attack transport moving to and from the battle zone. It must have been some time before 1100 hours that the IXth Air Force informed the Headquarters of 2nd Tactical Air Force of the grave situation at Mortain. At all events General Nugent of the IXth Tactical Air Command was told by an officer of Air Staff 2nd Tactical Air Force that the total resources of No.83 Group were to be despatched to the threatened area

between Mortain and Sourdeval. Shortly after this the Senior Air Staff Officer of 2nd Tactical Air Force, Air Vice Marshal Groom, spoke to Air Vice Marshal Broadhurst over the telephone and instructed him to assist the Americans with all his resources. Plans were then co-ordinated directly between the Headquarters of No.83 Group and the IXth Tactical Air Command. The good communications that existed between the British and American air headquarters greatly facilitated the speedy transmission of orders.

Ibid.

Nos. 174, 181
Squadrons
O.R.B.s.

2nd T.A.F.
Daily Log
Sheet No. 1238.

A.E.A.F.
Daily Int/Ops.
Summary
No. 201

The first British aircraft to participate in the battle at Mortain were from Nos. 174 and 181 Squadrons. They took off from the advanced landing grounds at 1215 hours and 1225 hours respectively and went into action shortly before 1300 hours. They spotted some 50 to 60 tanks and 200 vehicles filling the hedge-lined road from St. Barthelmy to Cherence via Belle Fontaine(1). The tanks were bunched together and it appeared that they had not foreseen that the mist would clear so rapidly. The Typhoons dived down on the front and rear of the column bringing it to a halt and at once caused great confusion. At about the same time 24 Thunderbolts of the IXth Air Force discovered and bombed a concentration of motor transport near Sourdeval. Another U.S. fighter squadron equipped with rockets operating in the vicinity attacked vehicles near Mortain. There seems to have been some enemy air activity at this time for a pilot of a Thunderbolt claimed that he had scored a 'probable' against an enemy fighter. According to the Intelligence Summaries issued by Headquarters, A.E.A.F. there appears to have been no action taken by the IXth Air Force against the enemy offensive before mid-day presumably because of the foggy weather.

The good visibility which had begun after mid-day continued. This was momentous because it afforded the Air Forces their first opportunity to make prolonged attacks against an armoured concentration. Another two Squadrons of No. 83 Group became airborne at 1300 hours and 1335 hours and attacked the great concentration of tanks and transport. But it was half an hour later that the 'shuttle service' of Typhoons began; flight after flight then sought out their targets, fired their rockets and returned to base to refuel and rearm. After the first attacks the enemy had managed to disperse a little and the fighter-bombers had to seek out and attack the enemy armour wherever it was to be found in the fluctuating battle. This was waged at speed; American and German units became interlocked and tanks advanced and retreated along the lanes, fields, hillsides, woodlands and as often as not in the practically dry bed of the River See(2). From 1400 hours to 2000 hours that evening the British fighter-bombers took off from their landing grounds every twenty minutes. Pilots used their cannon as well as rockets and great destruction was wrought amongst the 'soft' or unarmoured vehicles. Enemy tank crews and drivers were seen to abandon their charges and run to cover under the trees and hedgerows. The Typhoon pilots were greatly impressed with the moral effect of the rockets and so were the troops on the ground whose vulnerable position was at once relieved.

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- (1) The secondary road which branched off at Grand Dove led to Le Mesnil Adelee was where the Panzers first came into contact with the U.S. ground forces.
 - (2) It was only a brook at Cherence.

Seventh Army Doc.
VI
p.44.

By the afternoon the situation had eased a little and the Americans were able to re-establish part of their front between the Panzers and their objectives. The German right wing did not penetrate beyond the village of Le Mesnil Adelee, lying some 14 miles from Avranches by country roads and this was the nearest the enemy stood to the Atlantic coast. Further south the situation was still grave and radio messages which reported that reconnaissance tanks belonging to the southern prong of the attack had reached St. Hilaire, seven miles south west of Mortain on the Route Nationale to Brittany, were intercepted by the Germans at mid-day. Meanwhile the 1st S.S. Panzer Division had joined in the battle at St. Barthelmy while further armoured forces were being organised in a LVIIIth Panzer (Reserve) Corps and concentrated in the hills and forests round Ger (T7014).

Seventh Army
Diary U.S.
Transl. Vol.4
7 Aug. 1944
Entry
1445 hrs.

At this stage the views of the enemy are of particular interest. Early in the afternoon the Seventh Army Headquarters had urgently requested General Bulowius to provide the XXXXVIIth Panzer Corps with the air support planned as the latter was being subjected to heavy fighter-bombers attacks. Bulowius replied that fighters of Jagdkorps II were over the battle at that very moment with instructions to hold off the Typhoons. Later that evening the Luftwaffe admitted that they had been so hard pressed by Allied fighters on taking off from their bases that the German fighters were unable to reach the Mortain area. Thus the arrangement made between the British and American Tactical Air Forces whereby the British aircraft attacked the tanks and the U.S. Squadrons held back the enemy fighters proved highly successful. The nearest point to the battle reached by the Luftwaffe appears to have been Couterne well to the east of Mortain and over 40 fighters were intercepted by the IXth Air Force that evening. Credit is also due to the VIIIth Fighter Command whose fighters were out in great strength during the day over German advanced airfields, around Chartres and east of the Seine.

Ibid
entry
1740 hrs.

A.E.A.F.
Daily Int/Ops
Summary
No.201

Seventh Army
Diary U.S.
Transl. Vol.4
7 Aug. 1944.

2nd T.A.F.
Daily Log
Sheets No.1233 -
1235.

Throughout the afternoon the complaints of the Panzer Commanders were passed back to Army Headquarters. At 1520 hours a message was recorded stating that the attack of the 'Leib Standarte(1) had been brought to a complete halt as a result of fighter-bomber action in a position two kilometres east of Juvigny' (T5340). By this time clouds of dust and smoke hung over the battlefield which made it difficult for the pilots to identify their targets. It was then that a call was received from the Second Army sector at Vire where another Panzer column had begun to attack. At once the Typhoons were switched to the new area and some five tanks were claimed to have been brought to a standstill. But the enemy was still driving forward into the American front and once the pressure against the British had been relieved, the fighter-bombers returned to harry the columns at Mortain.

2nd T.A.F.
O.R.S.
Report No.1

It is important to remember that the pilots of No.83 Group were greatly handicapped during these operations. Not only were they unfamiliar with the country round Mortain which was so rugged and thick with cover for vehicles but the troops on the ground with whom they were operating were unacquainted with their technique of close support. Yet great appreciation of the R.A.F. was shown by all ranks of the troops involved and in spite of the fact that American and German units were often fighting at close quarters there

(1) 1st S.S. Panzer Division.

was only one case of a British pilot mistaking U.S. troops for the enemy.

Seventh Army
Diary U.S.
Transl. Vol. 4
7 Aug. 1944.

'Invasion 1944'
Period 25 July -
18 Aug. 1944.

Seventh Army
Diary U.S.
Transl. Vol. 4
7 Aug. 1944.

At 1940 hours the Chief of Staff of the Seventh Army telephoned to the Chief of Staff of Supreme Command West that the armoured attack had been at a standstill since 1300 hours due to the 'employment of fighter-bombers by the enemy and the absence of our own air support'. Five years later General Speidel who was Chief of Staff to Rommel and then Von Kluge confessed in his book 'Invasion 1944' that the 'armoured operation was completely wrecked exclusively by the Allied Air Forces, supported by a highly trained ground wireless telephone organisation'. At 2035 hours that evening General Funk (XXXXVIIth Panzer Corps) told General Hausser (Seventh Army) that the tank situation was very serious and this was repeated by the latter to Von Kluge. The Field Marshal replied that if a considerable advance was not achieved during that night and the morning of the 8th then the whole plan would fail. The Panzers were told that they must get through regardless of cost and arrangements were made to add the 10th S.S. and 12th S.S. Panzer Divisions to their strength.

By night fall No.83 Group had flown 294 Typhoon sorties against the Panzer divisions spread over a period of about eight hours.

The claims made by the pilots were as follows:-

| | <u>Flamers</u> | <u>Smokers</u> | <u>Damaged</u> |
|-----------------|----------------|----------------|----------------|
| Tanks | 84 | 35 | 21 |
| Motor Transport | 54 | 19 | 39 |

Several Typhoons were damaged by flak but fire from the ground was less concentrated than had been experienced when tanks were laagered and only three Typhoons were lost. No losses were incurred from enemy aircraft.(1) Thus ended perhaps the most decisive air operation in the north-west European campaign and the Avranches corridor was preserved. The credit for stopping the armoured thrust should indeed be shared both by the Air and ground forces. But the fighter-bomber, owing to the fact that it could be switched at short notice to any critical sector of the front had proved itself to be once again a battle winning factor. Its flexibility, ease of control and the weight of fire power that it could bring to bear quickly on any threatened point, justified the confidence that Allied commanders reposed in it during the crisis.

It has always been accepted that the employment of Typhoons was timely and decisive on that day because the attacks by enemy armour were broken up and though fighting on the ground was exceptionally bitter for the next four days, the large scale attack by Panzer divisions was never renewed. But the claims by pilots to have destroyed and damaged such large numbers of tanks have frequently been called in question. On the whole, such evidence as has been obtained from the

(1) After the operation reports were compiled both by No.83 Group and 2nd T.A.F. The former may be found at Appendix C to No.83 Group O.R.B. August 1944 and the latter at Appendix 16 to 2nd T.A.F. O.R.B. September 1944. 2nd T.A.F. Operational Research Section also made investigations and interviewed troops taking part in the battle. See 2nd T.A.F. O.R.S. Report No.1.

ground examination of vehicles after the territory had passed into Allied hands has not inclined to support large claims on behalf of rockets but destruction by cannon fire was very great.

The difficulties in accurately assessing the results of rocket-projectile attacks has always been recognised by the R.A.F. In the first place there were no combat films with strike photographs to show hits by rockets because the aircraft had to be pulled out of its dive as soon as the projectiles were discharged. Thus there has never been a convenient way of comparing the accuracy of rockets with that of cannon and guns. However it had long been known that it was difficult to secure a large percentage of hits with rocket projectiles. On the other hand one hit invariably disabled a tank. There remained the constant probability that claims admitted must have included cases where several pilots had attacked (and claimed) the same tank. And finally it must be added that mainly because of difficulties of recognition from the air, any armoured vehicle was likely to be called a 'tank' by pilots.

On 9 August a signal was received by A.E.A.F. and 2nd Tactical Air Force asking that information be sent to the Director of Air Tactics (Air Ministry) about the salient features of the operation and the report already quoted was compiled as a result(1).

In brief, the Air Marshal Commanding 2nd Tactical Air Force said that the only definite conclusion that could be drawn from that operation was that air action was capable, in certain conditions, of breaking up a determined land attack. On that occasion the following circumstances existed:-

- (a) an ideal target was presented by tanks and M.T. head to tail in close country.
- (b) opposition was negligible.
- (c) maximum air effort was used at a critical stage of the battle.

Such circumstances as these had rarely occurred together - at any rate, on the British front, but the clouds had lifted suddenly. The interrogation of prisoners had shown them extremely nervous of the rocket-projectile attack despite the fact that the chances of a direct hit were small. That might have been due to the knowledge that the chances of survival if hit were known to be slight. At all events many tanks were abandoned when only superficially damaged although the enemy recovery service was definitely efficient after the battle(2).

Operations at Mortain, 8 - 11 August

Over the next three or four days, the tense situation at Mortain gradually became easier. Two infantry divisions on

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- (1) At Appendix 16 to 2nd T.A.F. O.R.B., September 1944.
 - (2) An interesting account of his visit to the scene of the action and of the damaged tanks and vehicles still remaining at Le Mesnil Adélee (T.4918) and St. Barthelemy (T.5814) was written by the Head of the Ops. Research Section, 2nd T.A.F. on 12 and 13 August - See 2nd T.A.F. File S.30317/11/Ops, Encls. 4A and 5A.

their way through the corridor were quickly diverted to the scene of the crisis and leading elements of them were in the line to meet attacks by the XXXXVIIth Panzer Corps which were renewed on 8 August. American fighter bombers were available in very large numbers and the weather was so fine that the enemy dared not concentrate powerful forces of his panzers during the daytime. At no time during the next three days was the enemy able to begin an armoured attack on the scale of the one crushed on the 7th.

Seventh Army
Diary, U.S.
Transl. Vol.4,
entry 7 Aug.
2150 hours

During the night of 7/8 August Von Kluge impressed upon Hausser (Seventh Army) the vital importance of getting to Avranches soon. If considerable advances were not made that night and during the morning of 8 August then the plan for Operation Luttich would undoubtedly fail. Some of the measures adopted by the enemy High Command began to look like panic. Events were taking place on the north and south flanks that caused it deep concern and no reminders were required about the necessity for speed. But it was not satisfied that all the commanders were of one mind and the result was soon seen in a number of panic dismissals.

First to go was the General commanding the 116th Panzer Division who was replaced on 8 August by a more obedient officer. The garrison commander who had just lost Mayenne to the advancing Americans was also dismissed on the same day and an investigation was ordered into the circumstances of the withdrawal. A number of other changes in command were recorded in the records of the Seventh Army at this period. Arrangements were made for further armoured forces to be withdrawn from the line in other parts of the front and put at the disposal of Hausser for the Mortain offensive. The 10th S.S. Panzer Division was to be taken from the Caumont sector (German Fifth Panzer Army) and moved to the Tinchebray - Ger area where it was to come under the orders of the LVIIIth Panzer Corps for a flanking drive to the south west of Mortain in the direction of Pontaubault⁽¹⁾. The 12th S.S. Panzer Division was also to be moved from the Canadian front to an area north-west of Conde'. Both these movements were planned for the night 7/8 August but could not be carried out in their entirety because the British and Canadians were pressing too hard for units in the line to be withdrawn.⁽²⁾

On the morning of 8 August, elements of four Panzer divisions moved to the attack at Mortain and once again there was bitter fighting in which the IXth Tactical Air Command fighter bombers were able to play an important part. But on this occasion the Germans made no ground and the re-inforced Americans began to take over the offensive. East and south-east of Mortain the U.S. troops gained positions around Barenton in the direction of Ger which threatened the immediate rear of the two Panzer Corps.

To the north of this sector in the Vire neighbourhood another battle was going badly for the Germans. Reports came through that the Americans and British were likely to break through there at any time. Still deeper to the rear, to the south and east of this battle, the situation around Le Mans where the main headquarters of the Seventh Army was located, had developed alarmingly. At 1530 hours on 8 August, the Germans heard that the American spearheads had occupied the

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- (1) Along the valley of the Selune River.
(2) The Canadian thrust towards Falaise (Operation Totalise) began on the night 7/8 August and had developed unfavourably for the Germans by noon on the following day.

city of Le Mans and reports were also coming through about American troops in great strength moving eastwards.

Seventh Army
Diary, U.S.
Transl.
Document VI,
p.58.

However, the factor that appears to have caused the German Commander in Chief to call off the Mortain operation was the grave situation around Vire. The General commanding his Army corps on that front (1) told him that troops were completely exhausted and quite unable to hold a further thrust. As a result, reinforcements had to be sent there in order to prevent utter collapse and the Field Marshal prohibited 'for the time being, a continuation of the attack' at Mortain. Nevertheless thorough preparations for the major attack were to continue.

21st Army
Group
Directive
M517
6 Aug. 1944

On 9 August the Third U.S. Army began to execute a variant of the original plan. The first idea was that the American thrust was to carry them into the Le Mans - Alencon area: thereafter they were to press forward to the Seine and Paris in a straight drive and thus prevent an escape through the Paris - Orleans 'Gap'. The British were intended to direct their advance on Argentan and Laigle, then to the Seine below Mantes. It was hoped to envelop the German Armies in this way and in any event it was intended to press them hard against the Seine where the bridges were all broken. On 11 August General Montgomery ordered the Twelfth U.S. Army Group to change the direction of the right flank and swing due north to Alencon 'at full strength and with all speed'. At the same time he ordered the British and Canadian Armies to press on towards Falaise.

Normandy to the
Baltic, p.99, and
21st Army Grp.
Directive M518
11Aug. 1944

This was the beginning of the operation to close what has been known as the 'Falaise - Argentan Pocket'. The aim of the Canadians was to reach Falaise at the earliest possible moment and in order to realise that aim they planned and executed two major set-piece operations to reduce the formidable defences in their path, viz Operation Totalize on 8 August and Operation Tractable on 14 August.

The task of the Third U.S. Army was to advance to Alencon and Sees where the German main supply bases were located. Once the Americans reached that area it would be possible to cripple the enemy's main effort. The task of the Third U.S. Army was to advance on Alencon and Sees where the German main supply bases were located. Once the Americans reached that area it would be possible to cripple the enemy's main effort. On 9 August the U.S. XV Corps was reorganized for this operation and a force of five divisions (including the French 2nd Armoured Division) struck towards the north.

In the narrow and still vulnerable corridor around Avranches between the sea and the battle line reinforcements reached the First Army. General Hodges (the First U.S. Army Commander) had the task of driving back the powerful enemy divisions concentrated near Mortain. The American troops made little progress up the rugged escarpments from Mortain to Surdeval but an advance was made on Ger from the line of the road Mortain - Barenton and a corresponding pincer movement from the north closed on Gathemo and Surdeval.

The German forces were thus unhappily placed after their attempt to cut the corridor and reach the sea. Furthermore with the capture of Le Mans and Alencon by General Patton's troops they lost their principal supply dumps while shortly

(1) The German LXXXIV Army Corps.

they were to lose those located in the Chartres area. General Eberbach assumed command of the Armoured Group on 11 August only to find that he was required to organize this force to defend the southern flank of the Seventh Army.

The Canadian drive on Falaise - Operations Totalize

21st Army Grp.
Directives
M517
M518

The necessary concomitant to the plan for the Americans to turn north from the Le Mans-Alencon area and strike towards Argentan was an order to the First Canadian Army to drive southwards to meet them. On 4 August when the Americans were moving from Fougères towards Laval and Mayenne the Canadian front line positions were in some areas further back than they had been after Operation Goodwood. Bourguebus, Cagny, Frenouville and La Hogue, were all in enemy hands. Between the Canadian lines and Falaise therefore lay a series of defensive positions which were without doubt the strongest along the whole front and it was fully realised that extraordinary efforts would be required to get through them.

In essence, the problem was one of enabling the Allied armoured forces to pierce strong enemy gun screens far enough to disrupt his whole defensive system of mortars and anti-tank guns. In Operation Totalize it was planned to achieve this by:-

- (a) infiltrating through the gun screens at night to a sufficient depth to disrupt defences
- (b) Overwhelming air support destroying or neutralising enemy tanks, anti-tank guns and mortars in commanding positions until the completion of the break-through.

Thus the first essential to launching the attack was the availability of a large force of heavy bombers and this depended upon the weather. The target date for the operation was the first suitable day after 8 August and it was intended that Bomber Command should undertake the major air attacks, the first at midnight and the second at mid-day on the following day.

Two factors caused these intentions to be modified. The heavy withdrawals of German armour to the Mortain area were thought to have weakened the enemy positions around Falaise: in any case the swift development of a crisis at Mortain made it essential to relieve pressure on the Americans by a rapid stroke at the Caen-Falaise 'hinge'. Consequently the target date for the operation was brought forward by one day. The second factor was the summer weather. The settled fair weather was marked by an absence of wind which resulted in persistent morning fogs. This entailed the risk of R.A.F. Bomber Command's forces having to land away from their bases after a night operation and thus it would be impossible to guarantee a sufficiently strong force for the second phase of the bombing operations on the following day. The commitment for the second attacks was therefore accepted by the U.S. VIIIth Air Force.

The major questions regarding the air plan were settled at a meeting of all the principal Allied Air Commanders concerned on 5 August. The most novel feature of the air plan was that the troops began to advance by night at the same time as bombs were being dropped on the flanks. The infantry advanced with the armour being carried in armoured vehicles (Kangaroos). Searchlights were exposed towards the south in order to create conditions of artificial moonlight. This was

all arranged because it had been realised from the experience in Goodwood and other operations that the Germans normally expected the ground attack to follow the bombing after an interval and not come simultaneously.

See Map No.13

The main obstacles to the Canadian push were expected to be two successive zones of defence. The first of these followed the general line May sur Orne - Tilly la Campagne - La Hogue, from which high ground the enemy had long been able to observe the lower country sloping down to Caen. The second line ran from Hautmesnil (U.0852 near Bretteville sur Laize) to St. Sylvain (U.1354).

It was rightly thought that the enemy had other positions selected for defensive purposes further back, notable the sides of the narrow valley through which flowed the River Laison. The ground between Caen and Falaise though reasonably open was in many respects suited to defensive fighting because of the patches of good cover alternating with ideal fields of fire. In view of the fact that there were at least two successive crusts to break therefore, the Canadian Army determined to profit by the lessons of Goodwood and Charnwood by asking for the bombing operations to be carried out in two distinct phases.

In other respects, the operation bears a marked resemblance to Goodwood. Villages on the flanks and ahead of the advance were to be bombed with blast and fragmentation bombs respectively: cratering was acceptable on the flanks but not on the main axis of the advance, viz: the Caen-Falaise road.

Night air attacks, 7/8 August

Over a thousand (1019) heavy bombers were dispatched by Bomber Command to attack five villages, namely: May sur Orne, La Hogue, Fontenay le Marmion, Mare de Magne and Secqueville la Campagne, some few miles south of Caen. Attacks began at 2254 hours and ended at 2350 hours, the timing of the attacks depending on the direction the wind was forecasted to blow the smoke, together with the planned movements of our own troops. Aircrew were strictly warned not to bomb unless they were certain they were bombing the correct markers.

Bomber Cmd.
Night Raid
Rept.No.682.

During the attacks the artillery co-operated by firing red night marker shells and these were bombed by the Pathfinders. At first all went well but as the wind was negligible smoke and dust soon began to obscure the target. With insufficient backing up Pathfinders to renew the coloured target indicators, the Master Bombers decided to call off the remainder of the bombers from the first two targets (La Hogue and May sur Orne). At Fontenay there was a remarkable concentration of bombs until all target indicators were used up and then, as the smoke persisted, the Master Bomber ordered the cessation of bombing. At Secqueville the Oboe Mosquitoes failed to function and target indicators were therefore dropped by the other Pathfinders on the red star shells fired by the artillery. Bombing was well concentrated but again smoke made it necessary to call off the later arrivals as the target indicators faded. Mare de Magne was also heavily bombed for a time but here again the target indicators became obscured by smoke. Fortunately the Master Bomber was able to cope with the situation until all the aircraft had bombed.

Ibid.

Altogether some 660 aircraft bombed out of the force of 1019 despatched and about 3435 tons (3812 U.S. tons) of bombs were dropped. The effects of the bombing were undoubtedly great: whole areas were made quite impassable by heavy cratering, the village streets were blocked and all communications around them were completely severed. In view of the opposition encountered more especially at Fontenay Le Marmion it would seem that many of the defence positions survived but there was no question that they were quiescent or powerless during the night.

Ibid p.4.

An elaborate programme of Bomber Support operations was laid on to assist the heavy bombers but 10 bomber aircraft were lost to enemy fighters and flak and an additional five became total losses on taking off or landing. Enemy night fighters were active as was flak, both enemy and our own (Cherbourg).

Ground Operations - night phase

Half an hour after the first bombs began to drop, two Canadian divisions each with an armoured brigade, began to move forward astride the Caen - Falaise road. They were organised in eight powerful columns pushing through the enemy lines in the artificial moonlight, the infantry being well protected by their armoured Kangaroos. The enemy was so confused by the bombing and by the novel methods used by the attackers that the Canadians were able to penetrate a maximum distance of about four miles by first light.

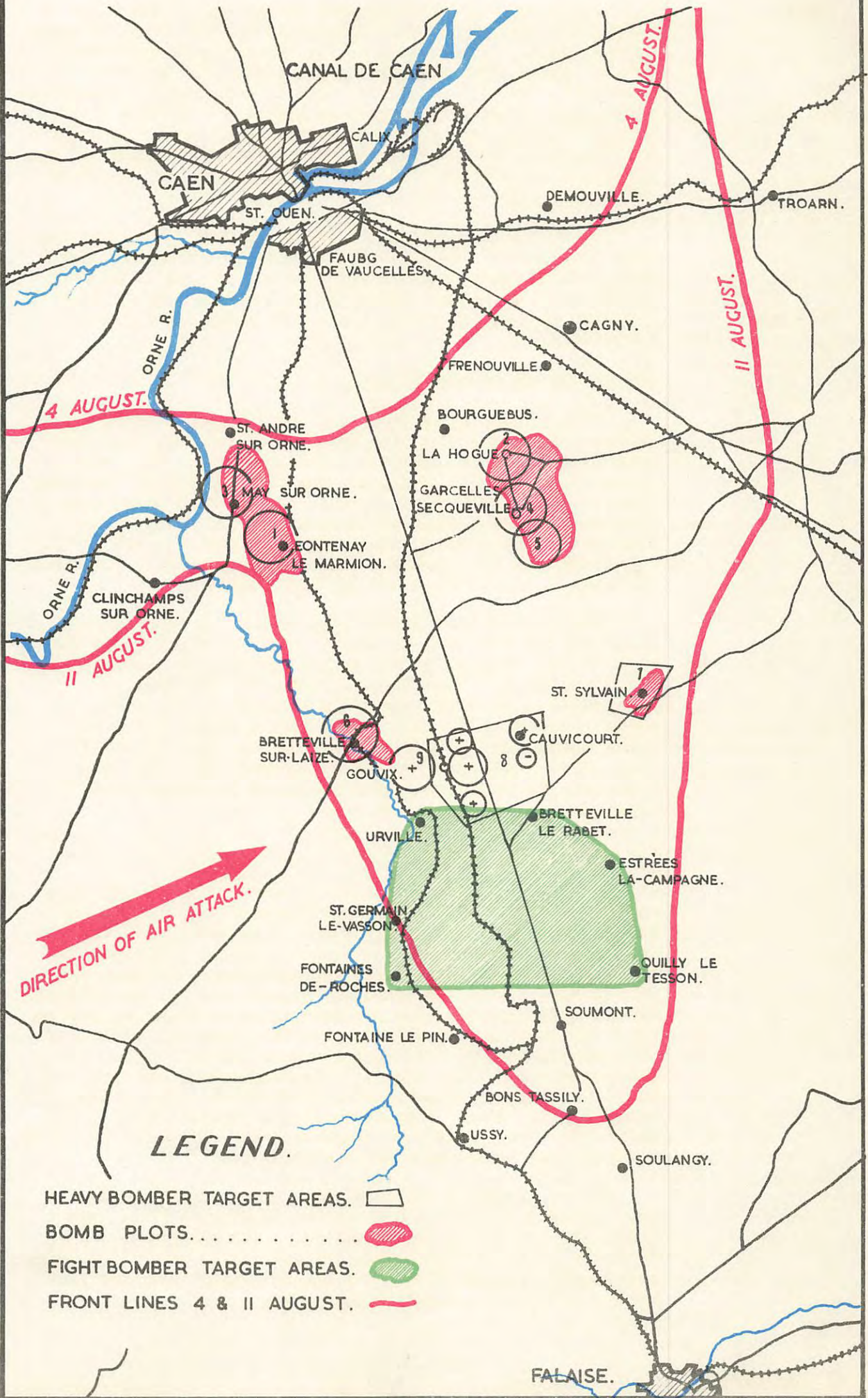
Behind them, more troops were mopping up enemy defence positions but this was, as usual, a difficult matter as the enemy fought stubbornly when he had had time to recover from the bombardment. Despite opposition, May sur Orne, Rocquancourt, Garcelles and Tilly la Campagne were soon occupied and this was also true a little later of Fontenay where resistance had been stiff. By the time the second phase of the operation was due to commence i.e. 1300 hours, 8 August, the Canadians were established on their first objectives.

Air Operations, 8 August

Four targets similar to those bombed by the R.A.F. were assigned to the U.S. VIIIth Air Force except that one area (target No.9) was open ground rather than a village. Blast and fragmentation bombing was required of the Fortresses in the case of three targets, and fragmentation bombing on the open ground. Here the Canadian 'Request for Air Support' had asked for the 'progressive neutralisation of enemy weapons on the frontage of attack thereby providing a moving curtain of air bombardment behind which the armour can be launched for a break-through in this phase'. The requirement was thus for the Fortresses to begin by bombing objectives nearest the Canadian start line: thereafter it was expected that succeeding waves would bomb slightly further towards the south until the air bombardment had finished.

Fighter bomber attacks on three areas on either side of the main road commencing H-hour plus 30 minutes (i.e. 1330 hours) were to finish the pre-arranged air programme. The object of these fighter-bomber attacks was to neutralise enemy guns in his main gun area covering the road at the time that the break-through was gaining momentum.

OPERATION TOTALIZE CAEN AREA 7-8 AUGUST 1944.



LEGEND.

- HEAVY BOMBER TARGET AREAS.
- BOMB PLOTS.
- FIGHT BOMBER TARGET AREAS.
- FRONT LINES 4 & 11 AUGUST.

VIIIth Air Force Operations

At 1235 hours on 8 August the first of a force of 681 heavy day bombers arrived over Bretteville and St. Sylvain and began the attack. This first part of the operation was well executed, forces of about 100 aircraft in each case bombing the two areas with good concentrations. At H-hour, when the troops again moved forward (on 8 August) from the line of their first objectives, the main bombing was due to begin at Cauvicourt and Gouvix. Unfortunately, these Fortresses had been attacked by flak while on their run from Vire and in consequence were badly disorganised during the vital stage of their operation. Out of the 474 aircraft sent for this part of the attack only about 250 bombed the Cauvicourt targets while none of the 70 aircraft assigned succeeded in bombing the Gouvix area. Many of these aircrews were unable to find the target areas at all and some boxes dropped their bombs at Caen while others bombed near Thury Harcourt. These resulted in about 350 casualties to Canadian, Polish and British troops. Happily however, they did not greatly affect the battle that was proceeding.

File TLM/
S.136/60/4
Encl. 12

American aircrews reported considerable haze in spite of visibility of about 10 miles. As there was no wind they soon discovered that the smoke and dust from the first bombs would not clear with the result that later crews could not find the aiming points. Pathfinder technique was faulty and contributed to the errors as also did the fact that a very high percentage of inexperienced crews were used on leading aircraft.⁽¹⁾

IIL/26
p.p.95 and 96.

Ibid

Throughout the morning 2nd Tactical Air Force gave support to the operation by attacking targets in the wooded country around Bretteville-Le-Rabet on both sides of the road to Falaise. The area provided excellent cover for the enemy to concentrate his troops and site artillery and mortars. The valley of the River Laison, in particular, was well defended by guns and infantry and several attacks were made in this area by the Typhoons. Other important targets were batteries in the neighbourhood of St. Sylvain (about four miles from Bretteville-Le-Rabet) and infantry and mortars in the woods south of Thury-Harcourt. Two believed enemy headquarters were attacked with bombs, one near Bretteville-Le-Rabet and the other at the little village of Tournebu a few miles west of the Falaise road. The attack on the former was believed to have been very successful. In the evening 2nd Tactical Air Force returned to the battle area and continued attacks on gun positions and enemy reserves attempting to concentrate for a counter attack. Nos. 83 and 84 Groups flew some 200 sorties during the day and only suffered three casualties.

2nd T.A.F.
Daily Log
Sheets
No.1246 - 7,
1255.

By the following day the Canadians had captured Bretteville, Cauvicourt and St. Sylvain but they came up against a number of anti-tank guns cunningly concealed in

(1) It so chanced that both the Air C.-in-C. and the Commanding General of the VIIIth Air Force were eye witnesses of the unfortunate errors during these operations as they were both airborne at the time to watch the bombing. General Doolittle took energetic and effective action to see that there was no repetition of such errors. No official report was called for but in view of possible enquiries from Canada the Air C.-in-C. was required to furnish brief particulars to the Deputy Supreme Commander and the Chief of the Air Staff (File T.L.M./S.136/60/4.)

the high ground north of the River Laison and their progress was considerably slowed up. The armoured divisions attempted to blast a way down the Falaise road while the infantry secured the flanks. West of the road Canadian troops made a crossing of the River Laize, a tributary of the Orne and on 12 August linked up with the Second Army which was extending its bridge-head east of the Orne. On the left flank the 51 Division mopped up the area south of Caen and I British Corps which had taken over that area began an advance in a south easterly direction towards Mezidon.

The Second Army appeared to be making more progress towards Falaise than the Canadians and by 12 August XII Corps advancing from the Orne was only six miles north west of the town.

Operation Tractable

On 13 August the enemy still continued to resist stubbornly on the road to Falaise and Twenty First Army Group decided to launch an attack from the north east across the River Laison. An infantry and an armoured division were to advance from the area Soignolles - Estrees-La-Compagne several miles east of Bretteville-Le-Rabet where operation Totalize was fought. The object of this advance was to seize the high open ground south-east of the River Laison. After this had been accomplished they were to continue the advance and capture the ridge dominating Falaise and which lies only about two miles from the town. It was intended that the Second Army should capture Falaise as its advance was gathering momentum. The Canadian troops were to swing in a south easterly direction so as to close the Pocket between Falaise and Argentan.

A powerful group of enemy armour was known to be assembled in the area of Soumont-Le-Quentin (U1045) quite close to the Falaise road. The Canadian Army requested that Bomber Command should bomb this area after the ground assault had been launched so as to prevent the Panzers counter-attacking the Canadian right flank. This request was first made on 12 August with a view to the attack taking place in daylight on the following day. The Army postponed the date of the operation until 14 August and further consultations about the employment of heavy bombers took place during the afternoon of the 13th. In the first plan the direction of the bombing was to have been from the south west spreading to the north east but this was changed so as to fit in with the timed programme of the ground advance and the Army insisted on targets being bombed from north to south. Bomber Command accepted this condition although the Commander in Chief realised that with a northerly wind many of the aiming points might be obscured by smoke. Six aiming points were selected at Quesnay, Aisy, Soumont St. Quentin, Bons Tassily, Fontaine-Le-Pin and an area north of Hamel-Le-Marais. Heavy bombers were to start bombing the area two hours after the launching of the ground assault.

Thirty minutes before H Hour medium bombers of No.2 Group were to attack three defended localities in the thickly wooded valley of the Laison. At the same time fighter-bombers of Nos. 83 and 84 Groups were to attack strong points and gun positions on the high ground between Olendon and Sassy south east of the Laison.

On 14 August visibility was very good but there was a slight wind blowing from the north. The Canadians moved forward from their start line at 1200 hours and made satisfactory progress. Bomber Command dispatched 811 aircraft

File Advanced
AEAF/24264.

No.84 Group
O.R.B.
App. 13
Aug. 1944.






AEAF Daily
Int/Ops
Summary No.208

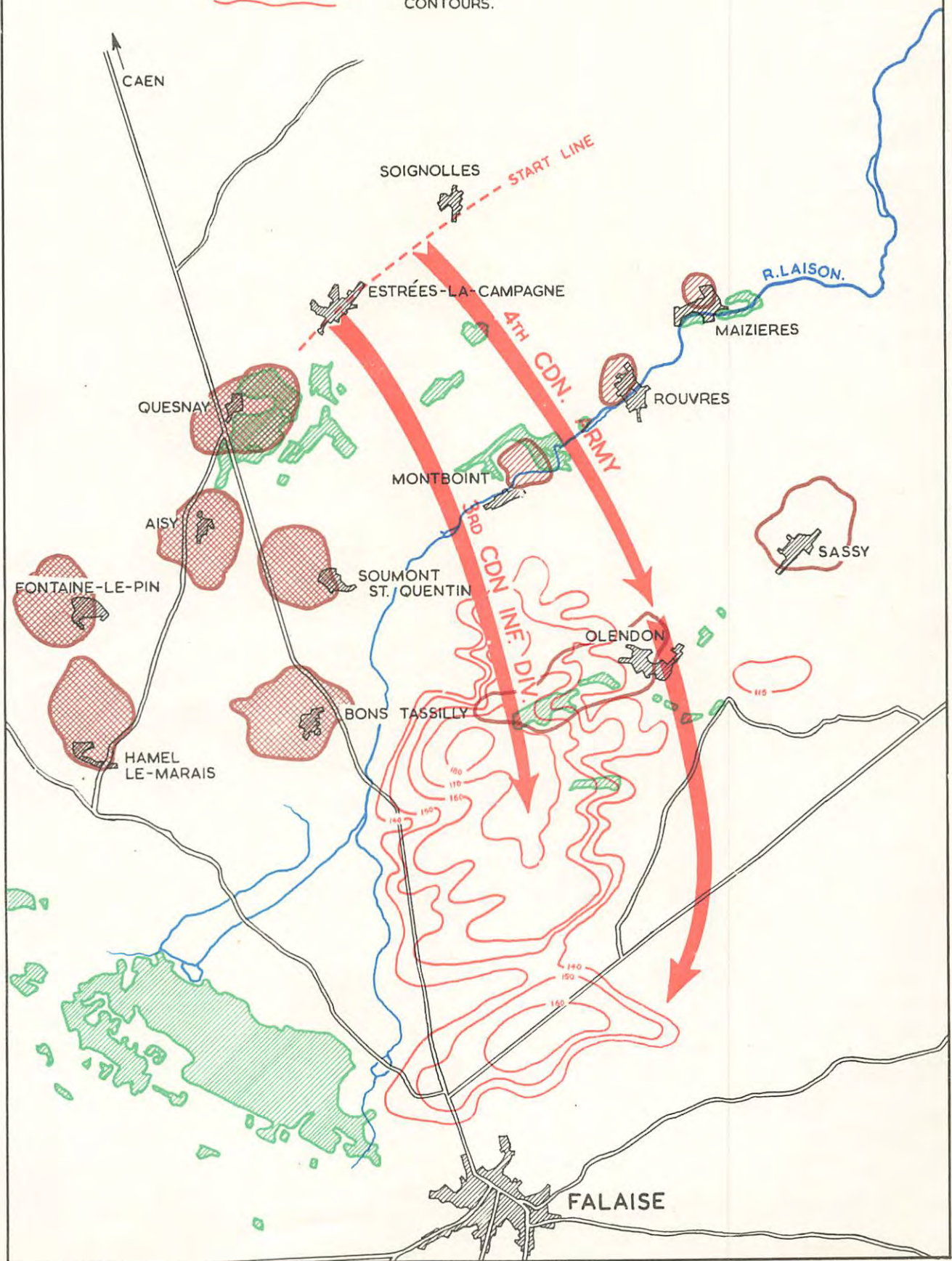
DS 50647/1 (102)

OPERATION TRACTABLE.

14TH. AUGUST 1944.

LEGEND.

-  HEAVY BOMBER AREA. BOMBER COMMAND.
-  MEDIUM BOMBER AREA. 2nd T.A.F.
-  FIGHTER-BOMBER AREA. 2nd T.A.F.
-  WOODED AREAS.
-  CONTOURS.



which began to arrive over the area at 1400 hours. Heavy concentrations of bombs fell on the six aiming points and a total of 3723 tons was dropped by all the aircraft. Air photographs taken shortly afterwards revealed the accuracy of the majority of the bombers. But the attack was called off at 1530 hours (half an hour before time) as a number of bombers had dropped their bombs about six miles north of the target area. About 80 troops were discovered to have been either killed or missing and approximately 100 vehicles and 14 guns were destroyed.

File
D/SAC/T.S.100
Encl. 38A.

An enquiry was ordered by the Air Commander in Chief and Air Chief Marshal Harris submitted a report on the incident. It appeared that the errors began when a Pathfinder aircraft and 13 bombers of No.6 Group bombed an area round St. Aignan (U0958). They were followed by a number of other aircraft which dropped their bombloads around St. Aignan and Haut Mesnil about two miles to the south. The Master Bombers who were over the correct target area at the time instructed all crews to bomb the yellow target indicators. It so happened that some troops had lit yellow recognition flares as they were afraid of a repetition of the events of 8 August when the VIIIth Air Force dropped bombs behind the Canadian lines. These flares were mistaken for target indicators by the bomber crews. Shortly after this occurrence several Auster aircraft controlled by the Army took off and began to fire red very lights to prevent further attacks being made on their troops. These were observed by bombers flying in the stream and once again mistaken for target indicators. A total of 77 aircraft were involved in these unhappy incidents.

File
T.L.M./S.136/
60/5

All the mistakes could have been avoided if the aircrews involved had correctly estimated the interval of time between crossing the French coast and arriving over the target area(1). On the other hand visibility was impeded by the smoke from bombs and artillery while Bomber Command was unaware of the Canadian Army system of recognition signals. In any case there was nothing laid down in the plan for using them. The Commander in Chief Bomber Command took disciplinary action against the aircrews concerned and fresh instructions were issued for operations in support of the Army.

No.2 Group
O.R.B.
14 Aug. 1944.

The attacks undertaken by No.2 Group went according to plan. They were carried out by 78 Mitchells which arrived over the valley of the Laison half an hour before the advance began. Three strong points were attacked; one north of Montpoint (U145469), one further east at Rouvres and the third at Maizieres. Canadian artillery fired red smoke shells over the targets which were easily identified by No.2 Group pilots. Reports by troops occupying the area shortly after the attack indicated that the positions had been hastily abandoned by the enemy.

2nd T.A.F.
Daily Log
Sheets No.
1313 - 1314

Fighter-bomber and rocket-carrying squadrons of No.84 Group attacked the first objectives of the Canadians at Sassy and a wood a few miles to the east of this village. Other aircraft attacked a strong point west of Olendon. Typhoons of No.83 Group also attacked targets in that neighbourhood. While the heavy bombers were over their target area home-based Spitfires of 2nd T.A.F. patrolled an area from Vire to Argentan but the Luftwaffe did not make an appearance.

Typhoons and Spitfires flew about 130 sorties in support of the Army during the morning. Largely owing to the success of the attack by Bomber Command the Canadians

(1) Several bomber crews taking part in this attack were new to this type of operation.

gained their first objectives fairly easily and did not call upon the fighter-bombers for support during the afternoon. As there were no large concentrations of vehicles or armour in the vicinity of the battle area the main effort of 2nd Tactical Air Force was directed into armed reconnaissances east of Falaise and a number of sorties were flown in support of the Second Army fighting towards Falaise from the line of the River Orne.

The object of Operation Tractable was achieved on 16 August when Canadian troops entered Falaise but the vital task now was to trap the German Seventh Army by closing the Pocket. The Polish Armoured Division was instructed to carry this out. It advanced across the River Dives in the direction of Trun to link up with U.S. First Army troops who had enveloped Argentan.

During this period many support missions were flown by the British fighter bombers around Falaise and Putanges for the Second and Canadian Armies. On one occasion No.2 Group was instructed to attack a tank concentration at St. Pierre-sur-Dives north east of Falaise. Attacks were commenced by fighter-bombers of No.84 Group but the enemy began to fire red smoke shells among British troops north of the river knowing that they were target indicators. Fighter-bombers of 2nd Tactical Air Force started to strafe this area and the medium bomber operation was cancelled on instructions from the Army.

No.2 Group
O.R.B.
15 Aug. 1944.

CHAPTER 5

THE BATTLE OF THE POCKET AND THE ADVANCE TO THE SEINEAir Operations 9 - 12 August

Although on 9 August the enemy was still hoping and preparing for a break through from Mortain to Avranches his position had become increasingly grave as threats began to develop both from the east and from the south. General Patton's XVth Corps had captured Le Mans and had been ordered to strike north in the direction of Argentan. There was considerable pressure by the First U.S. Army in the Mortain sector and American tanks frequently broke through the German line. That morning Von Kluge remarked to his Chief of Staff 'the events of today will decide whether the attack is to be made at all'.

Seventh Army
Diary, U.S.
Transl. Vol.4.
Entry 9 Aug.
1030 hours.

Another adverse factor for the enemy was the persistence of the favourable weather which had enabled the Tactical Air Forces to strike so effectively against the German counter-attack at Mortain two days before. Offensive activity by both British and American aircraft continued at a high level throughout the week. The fighter-bombers of 2nd Tactical Air Force concentrated on assisting the British and Canadian Armies. North of Falaise, enemy troops well dug in on the wooded slopes stubbornly resisted the advances of the Canadians and were very reluctant to give ground. Further west the Second Army was trying to get into Thury - Harcourt east of the Orne and on the other side of the river the British were pushing towards Flers. In three days very nearly 2,000 sorties were flown by Nos. 83 and 84 Groups in support of the two Armies. They attacked tank concentrations, 88 mm guns, mortars and infantry forming-up areas. At night No. 2 Group operated in strength paying particular attention to the crossings over the Seine where supply columns and reinforcements were trying to get through to the German Armies in the Pocket.

2nd T.A.F.
Daily Log
Sheets No.
1257, 1258,
1273, 1274,
1280-1283.

A.E.A.F. Hist.
Record p.7
Aug. 1944.

On 10 August the Air Commander in Chief issued a fresh directive to the Tactical Air Forces from his new advanced headquarters situated at St. Sauveur Lendelin, north of Coutances. The IXth Air Force was to operate south of a line running through Vire - Argentan - Dreux - Mantes - Gassicourt - Arras - Boulogne and 2nd T.A.F. was responsible for the area north of this line. This meant that once an enemy withdrawal took place the Typhoons and Spitfires of 2nd T.A.F. would have many opportunities of attacking his columns en route to the crossings on the Lower Seine. But it was laid down in the directive that the IXth Air Force would be required to assist 2nd T.A.F. with their longer-range fighter-bomber whenever necessary.

While 2nd Tactical Air Force was operating in the Falaise area the IXth Tactical Air Command supported First Army operations in the Mortain-Domfront sector and the XIXth Tactical Air Command covered the advance of the Third Army. Tasks for the latter were multifarious as missions were flown to support U.S. troops investing the ports of Brittany at St. Malo, Dinard and Brest and in the Le Mans area road obstacles were cleared for the XVth U.S. Corps. On the whole when compared with 2nd T.A.F. there were fewer opportunities for the American pilots to attack vehicles and tanks in their area.

By 12 August it seemed that the enemy had lost the opportunity of launching an offensive from Mortain. Two American Corps were advancing westwards, one on Domfront and

the other on Tinchebray situated on the road to Flers. The Third Army having captured Alencon on the previous day was advancing up the road to Argentan and was pushing out troops in a westerly direction towards Carrouges. The Pocket was thus beginning to decrease in size.

Seventh Army
Diary U. S.
Transl.
Document I,
p. 206 - 207

The enemy had realised what the intentions of the Allies were on the previous day when Von Kluge, Hausser and Eberbach conferred together. The most serious factor was the threat to the German supply depots east of Alencon and the commander there had stated that he could not save the ammunition stocks. In any case it was impossible to bring supplies into the Pocket during daylight because of the attacks of the Allied fighter-bombers. In the Mortain sector Eberbach's troops were desperately short of anti-aircraft and mortar ammunition.

From the German point of view it was difficult to know whether the greatest danger lay from the east or from the south. Eventually it was decided that the Panzer Group under Eberbach should face south in the Domfront area while the Fifth Panzer Army and the Seventh Army should hold off British and U.S. forces pressing from the east. This necessitated a withdrawal from Mortain towards the line Flers - Domfront and the German commander decided that, with the consent of the Fuehrer, the offensive towards the coast should be abandoned. The Fuehrer agreed that it was essential to stave off the American thrust from the south. On 12 August the XLVIII Panzer Corps began to pull out from the Mortain sector and the threat to the Avranches corridor was over.

For several days the Allied Commanders were not fully aware that a general withdrawal was taking place as it had begun in an orderly fashion but every opportunity was taken to strike at the enemy as soon as it was discovered. During the 12th it became evident that some movement in a easterly direction was taking place from Mortain⁽¹⁾ and during that afternoon and evening a concerted attack was made on bridges over the upper reaches of the Orne which the enemy might use in his passage through the Falaise - Argentan gap. Three bridges were in the area of Le Mesnil - Villement about nine miles east of Conde on the Orne and there were two more bridges over the River Rouor a tributary of the Orne, one Les Tourailles and the other at Notre Dame du Rocher ten miles north of Briouze. Over 100 sorties were made by Typhoons and hits were observed on at least one of the Orne bridges; on the others there were many near misses. Strong anti-aircraft defences were encountered and five Typhoons were lost in the course of the attacks.

2nd T. A. F.
Daily Log
Sheets No.
1289 - 1290

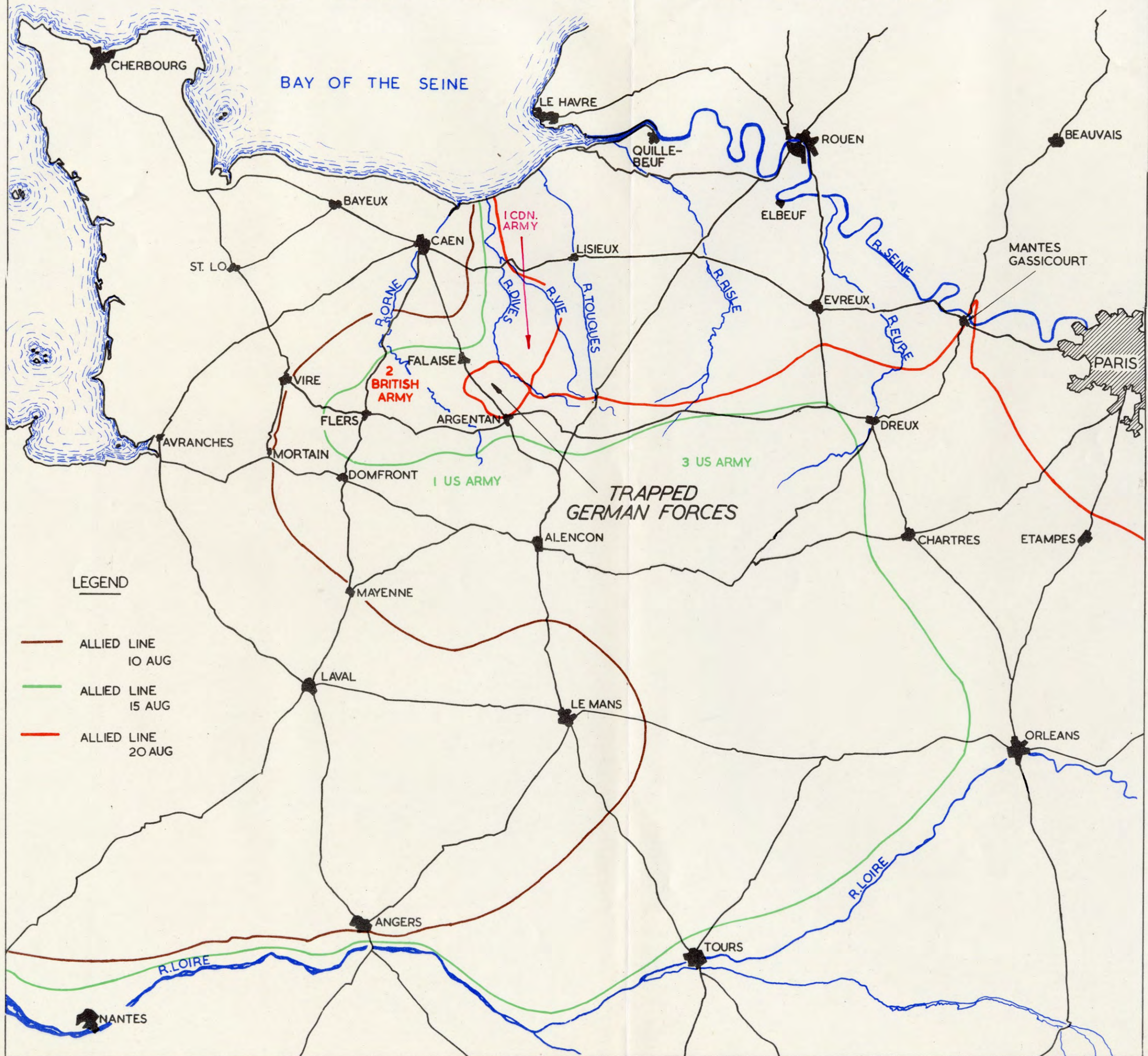
Marauders and Bostons of the IXth Bomber Command operated in the Argentan area (254 sorties) attacking roads and choke points. Other aircraft of this Command continued attacks on the Oise bombing the important bridge of Oissel just east of Paris.

A. E. A. F.
Daily Int/Ops.
Summary No. 206

During the evening of the 12th a conference was held at Advanced Headquarters, A.E.A.F. to discuss the best method of employing heavy bombers to thwart the enemy's withdrawal. Twenty-First Army Group had drafted a plan in which Bomber

(1) Squadrons on tactical reconnaissance had seen little movement before 11 August. At about 1700 hours on the 12th two Mustangs reported the Briouze-Argentan road to be full of transport moving eastwards (No. 39 Wing O.R.B.)

THE BATTLE OF THE POCKET



Historical
Record A.E.A.F.
pp.10 - 13
Aug. 1944.

Command was to attack roads and bridges just east of the gap to stop supplies being brought into the Pocket. But Air Chief Marshal Leigh-Mallory believed that the majority of these targets were far more suitable for medium and fighter-bombers. This discussion was continued on the following day at the Headquarters of 2nd T.A.F. at which representatives of Twenty-First Army Group attended. Their views were supported by Air Marshal Coningham who advocated night attacks by heavy bombers for reasons that not only would they slow up more movement and sap morale but that at night the enemy would not be able to by-pass cratered roads, possible during daylight because of the dry weather. The Air Commander in Chief held to his opinion that this was a tactical rather than a strategical problem, that the Air Forces had pressing tasks outside the immediate battle area and that in any case heavy bombers would not perform the task as effectively as light and medium bombers. It was eventually decided that night operations by No. 2 Group in the Falaise area should be intensified by using Mitchells in addition to Mosquitoes and that these operations should be co-ordinated with daylight attacks on roads by the Tactical Air Forces. Fighter-bombers of Nos. 83 and 84 Groups would deal with movement on the roads near the Pocket while the IXth Air Force medium bombers would form a line of interdiction on the River Risle which flows from Laigle northwards into the Channel west of the Seine estuary. From the Seine eastwards the VIIIth Air Force would continue attacks on transportation.

Bomber Cmd.
Night Raid
Rept. No.687

2nd T.A.F.
Daily Log
Sheets No.
1296-1297

On the night of 12/13 August, in response to a request from General de Guingand a force of 114 aircraft from Bomber Command dropped 660 tons of high explosive on a road junction in Falaise; very good results were reported. Mosquitoes and Mitchells dropped bombs and flares on the roads south of Falaise and renewed attacks on the Orne bridges. Other aircraft covered the area east of the Seine as far as Amiens. During the night No.2 Group aircraft flew 221 sorties.

See Map No.16

On the evening of 12 August the progress made by the Allied Armies to trap the German forces in Normandy was as follows. On the northern side of the Pocket VIII Corps, which formed the right flank of the Second Army, had advanced about five miles in the bocage country east of Vire and was trying to get to Tinchebray. Further north XXX Corps slowly continued to advance along the high ground south of Mount Pincon. East of the Orne XII Corps, having captured the village of Thury-Harcourt after hard fighting, had begun to strike southwards down the valley towards Falaise and Argentan. Between the Caen-Falaise road and Vire, north of Mortain the enemy was yielding ground only under the most intense pressure. On the Canadian front there was little movement as the enemy grimly blocked the northern approach to Falaise and manned his well-sited positions in the wooded valley of the River Laison.

Perhaps the fiercest fighting in Normandy was still in the area where Von Kluge's counter attack had been delivered. North of Mortain the First U.S. Army fought its way forward yard by yard in the hills west of Tinchebray. It was south of Mortain on the lower side of the Pocket that most progress was being made. Here XX Corps of the Third U.S. Army held a line stretching from Mayenne to Le Mans. On the right, XV Corps the spearhead of the Third Army thrust along the straight road north of Le Mans and had already reached a point only a few miles south of Argentan. From there columns were to deploy on the line See - Carrouges, southwest of Argentan. Elsewhere U.S. troops had crossed the Loire and were fighting in the area of Nantes and Angers.

The Closing of the Pocket - Air Operations 13 - 20 August

During the third week in August the Falaise - Argentan gap

was closed thereby virtually trapping the German Seventh Army and a considerable portion of the Fifth Panzer Army whose troops abandoned their tanks guns and transport in the lanes and woods east of Falaise. The battle resulted in the greatest capture of troops and equipment which had been made by the Allies up to that date.

After the capture of Falaise the Allies made a powerful effort to close the gap. The Polish Armoured Division under Canadian command crossed the River Dives and together with Canadian troops pressed southwards to join up with U.S. forces which had reached the Argentan area on 15 August. The enemy fought stubbornly to hold this town and so keep open the Pocket and it was not firmly in Allied hands until the end of the week.

While these advances were in progress on the east side of the Pocket the Second British and First U.S. Armies exerted a steady pressure against the Seventh Army and Fifth Panzer Army from the west. Thrusts were made towards Flers and Domfront, the latter being taken by U.S. troops on 14 August. This compelled the enemy to withdraw from the Flers - Domfront line to the Briouze - Argentan area and their main line of defence was established south of the main Flers - Argentan road. The withdrawal of the Seventh Army was protected by the Fifth Panzer Army on the north flank and by Panzer Group Eberbach on the south flank. By 18 August the First Army had pushed back the Panzer troops to the Orne and was holding the line Briouze - Ecouche - Argentan. At the same time the Second Army advanced up the Orne Valley to Putanges. The First U.S. Army had by that time taken over from the Third U.S. Army the task of closing the Pocket between Argentan and Falaise allowing the latter to thrust forward to the Seine and the north-east.

A wider encircling movement by General Patton's troops began on 14 August when armoured columns struck out towards Orleans, Chartres and Dreux. Plans had been made to drop airborne troops in the Orleans gap (Operation Transfigure) but the U.S. Third Army moved with such rapidity that this operation was eventually abandoned.

Minutes
71st Air Cmdrs.
Meeting

The fine weather which continued until the end of the week proved to be a most important factor in the battle as it allowed the Tactical Air Forces to operate in great strength. Only two days of poor visibility were encountered but fortunately this did not affect the fighter-bombers. 2nd Tactical Air Force operated in an area east of the Pocket which stretched from Quillebeuf at the mouth of the Seine to Mantes south of Paris. The IXth Air Force covered the Seine Valley, the southern area of the Pocket and in addition, flew sorties over the Third Army columns south-west of Paris. Operations were also conducted over the enemy occupied ports of Brittany.

See Map No.17

The threat from the Third Army compelled the enemy to use the lower crossing places of the Seine and thus the Second Tactical Air Force was provided with the opportunity to attack the greatest number of targets it had ever encountered in its history. From 15 August considerable enemy movement was observed east of Falaise in a triangular area bounded by the small towns of Bernay, Laigle and Evreux. Armed reconnaissance became the most frequent task but many pre-arranged attacks were made by Typhoons against barges and steamers on the Seine often with great success. From 13 - 16 August 2nd T.A.F. claimed to have destroyed over 500 motor vehicles and about 40 tanks and other types of armoured fighting vehicle.

See Map No.17

An interesting feature of these operations was that pilots (both British and American) frequently reported that the enemy was using the red cross on vehicles other than ambulances to carry troops and fuel. On some occasions even armoured vehicles were seen bearing a red cross. Without photographs these allegations were difficult to prove. The Air Commander in Chief decided that on the evidence then available he could not give permission for pilots to shoot up vehicles marked with the red cross. (1)

A. E. A. F.
Hist. Record
p. 13 Aug. 1944

The medium and light bombers of No. 2 Group and the IX Bomber Command made an important contribution to the battle during this period. The controversy that arose as to whether heavy bombers should be used to attack road and road transport has already been noted. It recurred at the Air Commanders' Meeting on 15 August. Two days before Liberators and Fortresses of the VIII Air Force had dropped over 2,300 tons of bombs on the roads east and west of the Seine from Le Havre to Paris. The Deputy Supreme Commander considered this form of attack to be a waste of time when there were so many minor roads which the enemy could use.

Minutes
73rd Air
Cmdrs. Meeting

The Air Commanders agreed that an all-out effort should be made to stop the enemy escaping from the 'bag' and A. E. A. F. officers flew to France to work out a plan which would include the use of heavy bombers near the Pocket. This proved to be impossible as Allied troops were closing in on Argentan so rapidly. A further conference was held at Advanced Headquarters A. E. A. F. on the following day. Air Marshal Commanding 2nd Tactical Air Force still wanted Bomber Command to assist the Tactical Air Force. But the Air Commander in Chief pointed out how unsuitable heavy bombers were against small targets and insisted that it was the time for the medium and fighter-bombers to strike.

A. E. A. F.
Hist. Record
p. 14 Aug. 1944

The IXth Bomber Command had been employed in attacking road and rail bridges between the Somme and the Seine in order to delay enemy reinforcements coming from the Pas de Calais and from 9 - 13 August about a dozen attacks had been made with varying success. This force was now directed to attack targets nearer the battle area.

The Rivers Risle, Touques and Eure formed three obstacles between the Falaise-Argentan gap and the Seine. The Risle and Touques flow parallel to the Seine and enter the Channel in the Honfleur - Deauville area. The River Eure flows into the Seine near Louviers. The IXth Air Force attacked the bridges across these rivers in daylight while No. 2 Group dealt with them at night.

On 14 August three bridges at St. Martin de la Lieue, Notre Dame le Courson and Ticheville were bombed by Bostons and Marauders. On the 16th they attempted to destroy bridges on the Risle. Over 400 bombers were dispatched but half of them were recalled owing to the low cloud which lay over the river valley on that morning. Another effort was made on the next day, this time with greater success. Eighteen bridges were attacked with results ranging from fair to excellent. They were as follows:

A. E. A. F.
Daily. Int/Ops.
Summaries
Nos. 207 - 210.

(1) On 14 August the Supreme Commander directed that despite the clear evidence that the red cross was being misused no attacks were to be made by Allied pilots on vehicles thus marked. This did not prevent a pilot defending himself if he was fired on. D/SAC/T.S. 100 Encl. 27A. Pt. 6.

| | |
|--------------------------|---------------------|
| Apperville (two bridges) | Beaumontel |
| Montfort sur Risle | Le Bourg |
| Pont Audemer | Foulbec |
| Nassandres | La Rai sur Risle (3 |
| Beaumont | road bridges 1 rail |
| Pont Authou | bridge) |
| Brionne | Launay |
| La Ferriere | |

No. 2 Group maintained the line of interdiction at night attacking with flares, machine gun and cannon. They also searched the roads leading to the battle area for targets. On the night of 14/15 August pilots observed surprisingly little movement. For the next three nights Mosquitoes and Mitchells attacked bridges across the Seine, Touques, Risle and Vie. Pilots claimed to have hit the bridge at Vernon on the Seine and on one night large fires were seen at Duclair (near Rouen) where there was a ferry service frequently used by the enemy.

2nd T.A.F.
Daily Log
Sheets No.
1315 - 1316
1328 - 1329
1337 - 1338
1351 - 1352

The operations by fighter and medium bombers were becoming disastrous to Von Kluge's troops. The loss of the fuel and ammunition dumps in the Orleans area had been a serious blow and now supply columns were unable to reach troops inside the Pocket. On nearly every page for that week the Seventh Army diarist recorded the desperate need for fuel and ammunition. On 15 August, for example, General Ellfeld Commander of the LXXXIV Army Corps requested the Chief of Staff Seventh Army that petrol for the assault guns should have priority over other types of transport. Orders to the Armies from Von Kluge on the following day stated that unnecessary motor transport must be abandoned.

By 17 September the Allies had manoeuvred into a most favourable position to close the trap. That essential pivot of the enemy - Falaise which General Montgomery believed to be so essential to success was now in Allied hands and armoured troops of the Canadian Army were stretching out to close the gap in the region of the Trun north-east of Argentan. East of Falaise 1 British Corps was beginning to move towards the Seine from the Mezidon area. West of the River Orne VIII Corps of Second Army had linked up with the First U.S. Army just north of Briouze and XXX Corps which was pressing into the Pocket on that side had taken Conde and crossed the River Noireau. On the left flank of the Second Army XII Corps had crossed the Falaise - Conde railway and was heading for Putanges north of Argentan.

See Map
No. 16

The First U.S. Army which had become responsible for squeezing the Pocket from the south was in Ranex about 12 miles west of Argentan and other forces were some eight miles north-east of Domfront. The small town of Tinchebray had also fallen to U.S. forces. There was violent opposition from enemy rearguards on all parts of this sector.

While the slogging battle continued between Domfront and Argentan the Third Army freed from its responsibilities round Argentan had gone ahead with the enveloping movement towards the Seine. The XIIth and XXth Corps had raced north of the Loire and liberated Orleans and Chartres by 17 September. The XVth U.S. Corps after advancing northwards from Argentan swung eastwards on Dreux - a town which stands on a direct line between Alencon and Paris. On the 17th it was ordered to seize a bridgehead across the Seine in the Mantes - Gassicourt area. Meanwhile forward elements of XXth U.S. Corps had struck out beyond Chartres and had reached

Rambouillet 25 miles south-west of Paris. But the main body of this Corps was compelled to consolidate in the Orleans - Chartres area while their line of communication was made secure.

Seventh Army
Diary
Document VI.

The narrowing gap between Falaise and Argentan was thus the only exit for the enemy. Orders had been issued by Army Group B on 16 August for the regulation of traffic on the Orne bridges west of Argentan. One bridge was to be used for bringing up supplies (St. Criox) and two were to be used for the withdrawal (Putanges and Mesnil - Hermei). But on 17 August Von Kluge ordered the Seventh Army to withdraw in strength behind the Orne during the night covered by II Parachute Corps and LXXXIV Army Corps. This covering force was only to withdraw in the face of strong pressure by the Allies. On the same day General Hausser (Seventh Army) requested Von Kluge that I S.S. Panzer Corps and LXXXIV Army Corps should be placed under his command in order to achieve a 'more unified control'.

On that evening pilots of 2nd Tactical Air Force observed hundreds of vehicles travelling along the two main roads to Chambois and Trun; villages about twenty miles south east of Falaise. Some cover was afforded by the Foret de Gouffern (north of Argentan), but the roads often crossed hilly ground which exposed the columns to air attack. The Luftwaffe attempted to form a protective screen with some 40 Messerschmidt 109s and Focke Wulf 190s but this proved relatively ineffective. The Tactical Commands of the IXth Air Force co-operated with 2nd Tactical Air Force and both forces strafed the columns of vehicles with rockets and cannon until it was too dark to see. In view of the uncertainty regarding the positions of the forward elements of the Allied Armies advancing to close the gap, it was decided to direct the night effort of No. 2 Group against the fleeing enemy at the Risle and Seine crossings during the night 17/18 August.

On 18 August the gap had diminished to a distance less than ten miles. The Second Army was in Putanges and Canadian troops were thrusting south of Falaise. Trun was in Polish hands and First Army troops advanced through the Foret de Gouffern towards the road linking Trun and Chambois. Furious counter attacks were made by the Fifth Panzer Army east of the Pocket to keep the escape hole open.

21 Army
Group Directive
M. 519
20 Aug. 1944.

General Montgomery had laid down that the Twenty First Army Group should operate north and the Twelfth Army Group south of a line running due east and west through Argentan. At the same time the First U.S. Army had been ordered to close the Gap at Chambois north of Argentan. This caused confusion in the allotment of areas to the Tactical Air Forces. The IXth Air Force was, of course, supporting the First Army operations but during the confused fighting on the morning of the 18th Canadian troops in the Trun area reported that they had been fired on by Thunderbolts. During the day Air Marshal Commanding 2nd Tactical Air Force requested Advanced H.Q. A.E.A.F. that the IXth Air Force should be excluded from the area north of Argentan and a new inter Tactical Air Force boundary was laid down in which the IXth Air Force was to operate south of a line Laigle - Evreux - Vernon while 2nd Tactical Air Force was to operate north of this area. General Vandenberg took exception to this arrangement because his pilots were excluded from supporting their own Army and later in the day 2nd Tactical Air Force

Adv. H. Q.
A. E. A. F. O. R. B.
pp. 35 - 38
Aug. 1944.

and IXth Air Force came to an arrangement whereby IXth Air Force fighters would answer requests from U.S. troops in the 2nd Tactical Air Force area. American fighter-bombers still continued to operate in the small pocket west of Argentan in which a number of Panzers were contained.

See Map No. 17

The zones of operation for 2nd T.A.F. were as follows. No. 83 Group undertook targets south east of Falaise (which included the villages of Trun, Chambois and Vimoutiers); No. 84 Group dealt with targets in the triangular area Pont Audemer - Lisieux - Bernay. Special support targets were engaged by No. 83 Group.

Apart from a little cloud which dispersed by mid-day the fine weather held and visibility was excellent. During the morning operations continued quite normally and small groups of vehicles were spotted and attacked along the roads from the Gap to the Seine. One operation during this time is worthy of note. This was an attack on a tank-carrying train proceeding in the direction of Evreux. Several trucks were set on fire and claims were made for the destruction of two tanks. Minor as well as major roads were patrolled, but on the whole movement observed was not exceptional. On the Seine No. 83 Group attacked river craft and claimed to have sunk ten barges and two steamers carrying Germans to the east bank.

During the middle of the afternoon of 18 August events began to move rapidly. Lengthy convoys amounting to about four hundred vehicles were seen heading towards the village of Vimoutiers. The jaws of the Gap was about to close and Allied artillery fire was brought down to bear on the fugitives in addition to the continual attacks from the air. This forced the enemy to keep moving in the dangerous hours of daylight. By 1700 hours hundreds of trucks, lorries and tanks were forming up outside Vimoutiers. No. 83 Group took full advantage of this concentration and as evening drew on the maximum effort of 2nd T.A.F. was directed to this area. Never before had the pilots seen so many targets and they were able to attack them with comparative immunity. The photographs which they took were ample proof of the high claims which they made. Road blocks were formed by blazing trucks and the drivers behind either abandoned their vehicles or drove off across country to find shelter in the woods; others turned back vainly endeavouring to discover a safer route. Some troops even spread out white flags on their vehicles. The area between Trun and Chambois where these attacks by fighter bombers were made became known as the Shambles. Investigators, after the battle, counted over 3,000 motor vehicles and about 1,000 horse drawn carts and wagons which were either destroyed by Allied air and ground attacks or else abandoned and set on fire by the enemy.

File 2nd
T.A.F./5/21/5/
ORS Encl. 14A.

Air Vice Marshal Broadhurst and his Senior Air Staff Officer (No. 83 Group) inspected the area on foot two days later and saw the havoc which had been caused. A large number of tanks and vehicles had been abandoned and bodies of men and horses lay on the ground many of them obviously killed by strikes from the rockets. Complete panic had started with the fighter bomber attacks and, although at a later date the ground observers discovered disappointingly little evidence of destruction attributable with certainty to air attack, it was clear that the moral effect caused by the combined strafing of cannon and rocket projectiles had undoubtedly turned the withdrawal into a rout.

These operations continued well into the evening of 18 August and no peace was given to the enemy wherever he happened to be. At the end of the day claims made by 2nd Tactical Air Force were as follows:-

| <u>Vehicles destroyed</u> | <u>Tanks destroyed</u> |
|---------------------------|------------------------|
| No. 83 Group 1074 | 73 |
| No. 84 Group 230 | 37 |

A larger number of tanks and vehicles was claimed to have been damaged at the same time. Unfortunately the low-flying tactics were costly to pilots and aircraft. No. 83 Group lost 17 pilots and their aircraft and No. 84 Group lost eight aircraft.

The IXth and XIXth Tactical Air Commands made over six hundred sorties including many flown over the Brittany peninsula and the Chartres-Orleans area. By being excluded from the Vimoutiers area they did not achieve such a high score as the British, but nevertheless they claimed a total of four hundred vehicles destroyed.

A. E. A. F.
Daily Int/Ops.
Summary
No. 212.

No. 2 Group continued the destruction throughout the night. Aircraft dropped flares on the roads near Bernay and a concerted attack was made on the Seine crossings where much activity was seen at Quillebeuf near the mouth of the river and at Elbeuf south of Rouen. A ferry at La Mailleraye (east of Quillebeuf) and pontoons at Elbeuf were blown up. Pilots, when questioned later, estimated that they had seen over seven hundred vehicles during the night and claimed to have destroyed one hundred and twenty five of them.

2nd T. A. F.
Daily Log
Sheets No.
1369 - 1371.

Seventh Army
War Diary
Document VI
19 August. 44

Ibid

See Map No. 17

On 19 August orders were issued by Von Kluge for the Seventh Army to withdraw behind the River Dives protected by the battle weary II Parachute Corps. But by now many German divisions had become hopelessly mixed up while the nerves of the troops were shattered by the fighter-bomber attacks. At mid-day Von Kluge himself seemed to be out of touch with the situation. A signal sent by the Seventh Army during the afternoon stated that LXXXIV Army Corps had received no supplies during the previous night while all the artillery of the 84th Infantry Division had been abandoned for lack of fuel. During the evening of the 19th, Polish and U.S. troops joined hands to the north of Chambois and Canadian troops were established in the village of St. Lambert sur Dives between Trun and Chambois. The gap was thus closed.

Adv. H. Q.
A. E. A. F.
p. 77.
Aug. 1944.

A conference was held at the Advanced Headquarters A. E. A. F. during the afternoon of 19 August at which the vexatious problem of inter-tactical boundaries was discussed by the Air Commander in Chief, Air Marshal Coningham and General de Guingand. They agreed that the arrangements made for U.S. aircraft to support their own troops when requested should continue and that the IXth Air Force should operate from the valley of the Risle to the Seine and 2nd T. A. F. west of this area.

Fighter-bombers of 2nd Tactical Air Force continued the task of destruction working in approximately the same areas as the day before. Hundreds of vehicles were still milling round in the Chambois area on the roads and in the woods. Rain fell fairly heavily and roads were churned up into mud as tanks, guns and lorries ploughed along them. Over a thousand armed reconnaissances were made by the

British fighter-bombers and claims were made for 649 vehicles and 51 tanks destroyed. Attacks inside the Pocket were not made owing to the difficulty of distinguishing between friend and foe. The Luftwaffe again attempted to provide a covering screen but with no success and several fighters were shot down by No. 83 Group. Fifteen more aircraft were lost to German flak by 2nd Tactical Air Force during the day's operations.

That night the enemy was given some respite for weather conditions made it impossible for No. 2 Group aircraft to take off. Rain during the following morning made flying difficult until mid-day.

A final attempt was made on 20 August by the Fifth Panzer Army to extricate the troops that remained in the Pocket and much confused fighting went on in the Chambois area. The position even of the German forces which had escaped was now precarious as the Third U.S. Army had crossed the Seine at Mantes - Gassicourt while south-west of Paris it was also consolidating around Orleans and Chartres. An offensive by the Canadians had been launched north east of Falaise and these troops advanced on Lisieux. That night crossings were made by Twenty-First Army Group over the River Vie and the town of Livarot was seized. Further north attacks were made on enemy positions along the River Dives by the 6th Airborne Division.

Fighter-bomber and fighter activity continued whenever there was a break in the clouds. The rocket-carrying squadrons of No. 83 Group were given a well earned rest after the strenuous operations of the last two days round Vimoutiers but other squadrons carried out armed reconnaissances in the area Thiberville - Bernay - Orbec farther away from the Pocket. No. 84 Group was responsible for giving support to the Army.

The fighting at the mouth of the Pocket was still very confused with British, Canadian and American troops rounding up the enemy infantry and Panzer troops which were fighting in small groups endeavouring to force their way through the Gap. Duels between Allied and enemy armour and clashes between infantry patrols took place among the wooded hills and along the hedgerows east of Chambois. Further incidents of U.S. aircraft attacking Canadian troops were reported but owing to the uncertain position of boundaries between the respective Armies, the smoke of battle and the low cloud which so often covered the area it was easy for such mistakes to occur. Fortunately the incidents were never of a very serious nature.

A skilful attack against a group of tanks and vehicles by No. 84 Group did much to restore the confidence of the troops during the afternoon of the 20th. Polish armour advancing from north of Chambois and First Army troops moving forward to Vimoutiers were bearing down on a large concentration of enemy tanks. No. 123 Wing was given the task of destroying this battle group of Panzers and four squadrons went into the attack with the Allied troops only a short distance away. Squadrons claimed to have destroyed seven armoured vehicles. Two more squadrons attacked the same target area during the evening and claimed three more tanks. This demonstrated clearly that fighter-bomber attacks carried out at close proximity to friendly troops were effective provided the operation was well planned and boldly led.

No. 84 Group
O. R. B.
20 Aug. 1944.

Another planned attack that day by No. 84 Group was against a suspected enemy headquarters in a chateau near Lisieux. This was carried out by eight Typhoon fighter-bombers which claimed to have completely destroyed the target with twelve direct hits. The IXth Air Force continued to operate over the Seine valley and they also made attacks against shipping in the estuary.

The Falaise - Argentan gap was now securely closed and although mopping up operations were to continue for some days inside the Pocket the main battle may be said to have ended on 20 August. A brilliant manoeuvre had been planned and executed by British, Canadian and American troops but the success of the operation must be largely attributed to the persistent attacks by the Tactical Air Forces which, while the Armies on the ground were fighting hard to close the jaws of the gap caused such havoc and confusion amongst the enemy's tanks and transport trying to force their way to safety. Seven infantry divisions were trapped together with a large part of the 10th S.S. Panzer and 21st Panzer Divisions. Elements of seven S.S. Panzer and Panzer Divisions managed to extricate themselves but with the loss of much of their equipment. Henceforward they were only able to fight in hastily improvised battle groups.

Other air operations during the Battle of the Pocket

While the Tactical Air Forces were striking hard at the enemy in and around the Pocket a number of important operations were undertaken by the Strategic Air Forces farther afield. Air Chief Marshal Leigh-Mallory and General Spaatz had agreed on 6 August that the VIIIth Fighter Command should concentrate on attacking transport east of the Seine as soon as the Germans began a withdrawal. This was carried out from 11 - 14 August and from 17 - 18 August covering an area from Brussels to Paris. Locomotives, wagons, motor transport and airfields were all subjected to attack and never were enemy reinforcements or supply columns in complete safety.

A. E. A. F.
Hist. Record
Aug. 1944
p. 4.

Heavy bombers continued their attacks on railway centres. At the beginning of the battle the object of these operations was to hold up reinforcements from the Pas de Calais and the south of France but as the operations developed the Air Commander in Chief considered that the best contribution by the Strategic Air Forces would be to bomb targets in the Reich. On 8 August he directed that attacks should be made on marshalling yards, petrol dumps and bridges in France while the remainder of the effort was to be devoted against flying bomb sites.

A. E. A. F.
Hist. Record
p. 6 Aug. 1944.

On 11 August Bomber Command attacked the marshalling yards at Douai, Lens and Somain and a small force of Lancasters bombed the railway bridge across the Seine at Etaples. Night attacks were made during the week on the railway centres at Givors (east of Paris) and Dijon. Fuel dumps were bombed in the Foret de Mormal and Montrichard and at Fort D'Englos and Chattelerant. During these attacks strong escorts of Spitfires were provided by 2nd Tactical Air Force. At the same time small scale operations were conducted against the Brittany ports still in German hands. During the week beginning 13 August the marshalling yard at Comantre and a fuel depot at Reime near Ghent in Belgium were attacked by Bomber Command. Medium bombers of No. 2 Group and IXth Bomber Command also flew a number of sorties against fuel and ammunition in depots east of the Seine. During this period heavy bombers of the VIII Air Force also flew against railway centres

and bridges and made a big attack on marshalling yards at Metz. The attack on roads in the Seine area has already been mentioned.

The only other important operation in connection with the battle was a large scale attack on the Luftwaffe air bases. This operation had been planned for some time but was continually being postponed because of bad weather. With the prospect of a possible airborne drop in the Orleans area the Air Commanders thought it an opportune moment to begin the attack on the German Air Force during the battle of the Pocket. On 12 August the VIII Air Force, specialists at this type of operation, attacked eight airfields east of Paris and on 15 August a combined attack was undertaken by both of the Strategic Air Forces. Twenty-one airfields were attacked in north-west Germany and the Low Countries. Bomber Command on that day dispatched 1,000 aircraft. On the whole it appears that satisfactory results were achieved. (1)

Minutes
69th Air Cdmrs.
Meeting

A. E. A. F.
Daily Int/Ops.
Summaries
Nos. 206, 209.

The Advance to the Seine

After the closing of the gap at Chambois the enemy found himself in a desperate position. A large part of the Seventh Army had been taken prisoner and hundreds lay dead around the gap. The remainder were retreating back to the Seine. Formations of the Fifteenth Army were also entangled in the battle. Six divisions intended as reinforcements for the Seventh Army crossed the Seine during the Battle of the Pocket only to be diverted to meet the threat of the U.S. forces wheeling north from the vicinity of Chartres and Orleans. South-west of Paris the First German Army was also committed and vainly endeavoured to stem the Third Army advance. Finally the German Supreme Commander in France was again changed. Von Kluge was replaced by Field Marshal Model on 20 August. Fate had been against Von Kluge from the day he took over command in Normandy and on his way back to Berlin he preferred to commit suicide rather than face the anger of the Fuehrer.

The German withdrawal from the vicinity of the gap took place in a north-easterly direction. As the Americans were forming up on the Upper Seine the focal point for the crossings was inevitably at Rouen from where good roads led back to the valley of the Somme. The Fifth Panzer Army tried to hold out in a salient stretching from Pont L'Eveque near the coast to Bernay and Elbeuf south of Rouen while the crossings were in progress. The right bank of the Seine was held by the 18 G.A.F. Division and miscellaneous infantry regiments. Many elements of the German Army were still fighting doggedly inside the Pocket and small battle groups of II S.S. Panzer Corps succeeded in breaking out. At the head of one group was General Hausser the commander of the Seventh Army who had been severely wounded during the battle.

On 20 August General Montgomery issued his orders for the advance to the Seine. The immediate task of Twenty-First Army Group was to round up the enemy remaining in the Pocket. After this a drive to the Seine was to be mounted. This operation entailed a series of complicated evolutions. The Canadian Army was to swing back to the north and advance on the Seine between Elbeuf and Quillebeuf. After crossing

File
T. L. M./S. 191/1

(1) These raids are briefly referred to by Luftflotte 3 but no details are given. See A. H. B. 6 Transl. No. VII/86, p. 18.

the river at Rouen they were to liberate the Havre peninsula and seize the port. At the same time the Second Army was to advance on the right of the Canadians and close to the Seine between Vernon and Louviers afterwards advancing to the valley of the Somme.

While the mopping up operations in the Pocket were in progress General Montgomery directed the Twelfth Army Group under General Bradley to cut off the enemy's retreat from the Pocket to the Seine by advancing down the left bank of the river. The XIX Corps of the First U.S. Army swung across the front of the Second Army and arrived at Elbeuf on 25 August. Elements of the Third U.S. Army (XV Corps) which had already reached the Seine cleared the left bank of the river as far down as Vernon. General Montgomery intended that once the British forces reached the Seine the American forces were to withdraw south of Mantes - Gassicourt and that east of the Seine Twenty First Army Group would advance between the coast and Amiens. Twelfth Army Group was directed to make for Reims and the valley of the Marne.

In the meantime the Third U.S. Army had continued its brilliant encircling movement. One spear-head was directed at Troyes due east of Orleans, and another at the wooded country round Fontainebleau. On 23 August the German First Army withdrew across the upper Seine. With the Allies advancing towards the lower and upper reaches of the Seine, Paris became the centre of two broad enveloping movements. Supreme Commander did not want to turn the city into a battlefield but the forces of the Resistance, who had been waiting for the day of liberation with great impatience, saw the straits of the German forces and, on 19 August, the barricades went up in Paris. Men of the F.F.I. attacked isolated German vehicles and hoisted the Tricolore. The French 2nd Armoured Division, which had taken part in the fighting at Argentan, was now sent ahead to march into the city. On 25 August General Leclerc, at the head of the veterans who had fought their way across Africa to join up with the Allies, made a triumphal entry into the capital of France and formally received the surrender of the German Garrison Commander. American troops also entered the city to clear out a number of the enemy who had barricaded themselves in houses, determined to hold out until the end.

The Second Army moved forward to the Seine on 20 August and, after a five day advance during which obstacles such as minefields and the wreckage of enemy vehicles on the roads had to be cleared, arrived at Neubourg and Louviers and prepared for the river crossing. They had had to cross the axis of advance of U.S. XIX Corps which sometimes led to delays when both forces were using identical roads. Other British formations halted at Breteuil so as to avoid becoming entangled with the Americans. The Canadian Army crossed the rivers Touques and Risle and contacted the First U.S. Army at Elbeuf on 25 August. On the left of the Canadians I British Corps struck out along the coastal belt to the Seine. Slow progress was made because the enemy forces here had not been involved in fighting inside the Pocket. By 27 August, however, Allied troops had reached the estuary of the Seine and were clearing the area immediately west of the river.

On 26 August General Montgomery ordered the Second Army to cross the Seine as early as possible and then push on to Arras and Amiens. From here it would be in a position to capture north east France. This would be followed by an advance through Belgium to seize the port of Antwerp. At the same

File TLM/S.191/1

time the enemy in the Pas de Calais would be cut off. This thrust was to be assisted by an airborne operation involving three airborne divisions which were to be landed east of the river Escaut. At the same time the Canadian Army was to clear the Havre peninsula and liberate the coastal belt as far east as Bruges. The keynote of this order was speed and every commander was ordered to be bold and exploit the enemy's confusion, leaving pockets of resistance to be cleared up in the wake of the advancing armies.

While the Armies were manoeuvring for position the Tactical Air Forces harried the enemy withdrawal at every available opportunity. Now that a swift advance across northern France was imminent the Air Commander in Chief after consultations with General Montgomery ordered attacks on bridges to cease as henceforward they would be required by the Allied Armies. Bridge cutting had mainly been a task for the medium bomber forces and they were now directed to attack supply dumps. There were a number of these dumps east of the Seine and it was decided to attack those near the Somme and the Marne so as to prevent the enemy forming a new defence line in that district.

A. E. A. F.
Historical
Record p. 15
Aug. 1944.

Minutes
78th Air Cmdrs.
Meeting
21 Aug. 1944.

Operations by the Tactical Air Forces were still complicated by the non-existence of a clearly defined inter-Army Group boundary. The Air Commander in Chief wanted the First U.S. Army which had reached Elbeuf by 23 August to go on to the mouth of the Seine and seal off the remainder of the Seine crossings. But General Montgomery held firmly to his order that Twelfth Army Group should withdraw south of Mantes. The IX Air Force, until this date operated in the area between the Risle and the Seine, the same boundary which had been settled on 18 August, while 2nd Tactical Air Force operated over the Havre peninsula and east of the Seine as far as Amiens.

File
T. L. M./S. 191/1

There were no airfields for the Tactical Air Forces west of the Seine and these had to be prepared by Army engineers. At the same time the bulk of U.S. Squadrons were held in the Cherbourg and Brittany peninsulas where they were required in operations to free the Atlantic ports. The construction of new sites around Dreux and Evreux began at the earliest opportunity but they were not available until the end of the month. In the meantime the Advanced Headquarters of A. E. A. F. and the Headquarters of the IXth Air Force moved forward from St. Sauveur Lendelin to Laval.

The fine weather which had been such a notable feature during the fighting south of Falaise did not continue and for four days from 20 August air operations were on a comparatively small scale. Operations by the Strategical Air Forces were very few in number. Bomber Command made a large scale attack on the fortress of Brest on the night of 25/26 August in support of the ground assault. Other attacks were made on targets in Germany. On 25 August the VIIIth Air Force heavy bombers continued their offensive against the German Air Force and attacked targets and factories in Germany and Belgium, but targets abounded for the medium and fighter bombers which were far better adapted than the heavy bombers for the fluid warfare now in progress.

Bomber Cmd.
Night Raid
Report No. 697.

AEAF Daily
Int/Ops.
Summary No. 219.

Although the spotlight of publicity fell largely on the fighter bombers during this phase, much valuable, if unspectacular, work was being performed both by the day and night reconnaissance squadrons of 2nd T.A.F. in providing information for the ground forces. The targets which were

No. 39 Wing
ORB. August
1944,

passed to the fighter bombers by the Army were nearly all located by the Reconnaissance Wings of Nos. 83 and 84 Groups, and on 18 and 19 August these pilots reported and photographed the progress of the closely packed columns of tanks and transport hurrying from the mouth of the Pocket. On 19 August for example, over 1,000 motor vehicles and 26 tanks were reported by one squadron alone and photographs taken by a pilot of No. 400 Squadron revealed about 2,000 vehicles crammed between the villages of Vimoutiers and Bernay.

After the closing of the Pocket the main task of the reconnaissance aircraft by day was to cover the roads leading to the Seine. At this stage of the battle, Army Intelligence concerning enemy movements relied almost entirely on the reports of the reconnaissance pilots and much appreciation of their valuable work was expressed. During the advance a system was evolved whereby pilots were directed by ground controllers moving ahead with the leading elements to provide information of enemy dispositions immediately in front. In this way small pockets of resistance were quickly dealt with and the rate of the advance was quickened. From 22 to 26 August a stream of German transport was observed flowing north-eastwards towards Rouen and Elbeuf on the Seine. Reconnaissances were also carried out east of that river and the general direction of the enemy's retreat was observed to be towards the east.

A close watch had also been kept on the ferry boats, pontoons and bridges along the Seine by No. 34 Wing at night. This task was performed by two squadrons; the Wellingtons of No. 69⁽¹⁾ Squadron carried out visual and photographic reconnaissances which were supplemented by No. 140 Squadron (Mosquitoes) specialising both in day and night photography. The use of Wellingtons for land night reconnaissance was a novelty and at this point some digression is necessary to describe their role. The Wellington was chosen for this type of work because of its low speed, its capacity for carrying flares and its all-round field of view. During the month of July and August the squadron was given the task of reporting the movements of Germany Army formations passing to and fro across the Seine, either reinforcements for the battle area or units withdrawing to northern France. Areas of particular interest were the railway centres of Yvetot and Motteville, some 20 miles north-west of Rouen and a number of sorties were flown over these two en-training and de-training points. On the nights of 9 and 12 August reconnaissances were carried out with the object of discovering the whereabouts of the

(1) No. 69 Squadron was attached to R.A.F. Coastal Command until April 1944 and operated in the Mediterranean theatre hunting U-boats and escorting convoys with Albacores. On 5 May the squadron was re-formed within No. 34 Wing (Northolt) with Wellingtons Mark XIII and intensive training in this new role of night reconnaissance began at once. It was able to carry out its first sortie over the valley of the Seine on the night of 5/6 June. During the remainder of that month a watch was kept on the northerly movement of enemy divisions from the Loire area particularly around St. Lo and Mortain (see No. 69 Squadron ORB. 1944). For a detailed account of night reconnaissance during the campaign the reader should consult 2nd T.A.F. ORS Report No. 33 "Night Reconnaissance in No. 34 Wing".

No. 69 Sqdn. ORB
Aug. 1944.

German 363 Infantry Division and a suspected move of 6th Parachute Division in this neighbourhood. On the night of the 9th stationary trains were observed at Yvetot and Motteville while at the latter place on the 12th eight vehicles were seen with their noses pointing east. Other aircraft made a reconnaissance of roads in the Falaise area that night. Observations of this nature coupled with reports from agents etc. often helped to build up a picture for Army Intelligence.

Ibid.

Later on, when the enemy withdrawal across the Seine began in earnest the approaches to the north and south banks were covered with both photographic and visual reconnaissances. Sometimes enemy night-fighters attempted to intercept the Wellingtons, but their attacks met with little success. At the end of the month No. 69 Squadron fulfilled yet another role, that of close co-operation with the First Canadian Army. On the night of 28/29 August three Wellingtons illuminated the river Seine at La Mailleraye with flares where artillery fire was being brought down on the ferry. This operation proved to be highly successful and the squadron was afterwards congratulated by the Canadians for their work.

The Luftwaffe like the German Army was also in desperate straits. The attacks on fuel installations in Germany by the Strategic Air Forces together with the constant attacks on German communications in France were now being severely felt and early in August restrictions were imposed on operational flights. Fighter and reconnaissance sorties were reduced just at the time when the Army required all the air support available. Another disheartening problem for the Luftwaffe commanders was the shortage of experienced pilots. As the Army withdrew to the Seine fresh squadrons were brought up from Germany and thrown into the battle with little, if any, experience.

An intensive effort was made during the last days of the week ending 19 August to cover the withdrawal of the valuable Panzer Divisions and a few air combats occurred east of Vimoutiers resulting in a handful of aircraft shot down by British and U.S. fighters. But although several fresh fighter squadrons were dispatched to France during the following week the daily effort began to drop as the German bases near Paris were threatened by the Allied Armies. From 20 - 26 August Luftflotte 3 averaged about 150 sorties per day. It attempted with no success to provide cover over the Seine crossings and a few desultory raids were made on the U.S. bridgeheads at Mantes and Melun. Transport aircraft dropped supplies to German units still west of the Seine.

Trans No.
VII/86
A. H. B. 6.
pp. 21 - 25.

Meanwhile fighters of 2nd T.A.F. and the IXth Air Force conducted sweeps over the Luftwaffe airfields east of Paris. On 23 August No. 83 Group Spitfires clashed with a large formation of Focke Wulf 190s and Messerschmidt 109s and claimed to have destroyed twelve of the enemy. Two days later while fighter bombers of 2nd Tactical Air Force were attacking the German Army columns at Rouen, Lightnings and Mustangs of the IXth Air Force kept the Luftwaffe at bay. They claimed to have destroyed 77 aircraft in the air mainly around Soissons and east of Rouen. Other formations attacked airfields at St. Quentin, Juvin-court, Dijon and Beauvais claiming to have set on fire 49 aircraft on the ground. Their attacks were apparently effective as Luftflotte 3 issued no reports of operations for 25 and 26 August. Evacuation to airfields on the Belgium frontier had begun already with U.S. forces

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Summary No.
219.

AHB6 Trans.
No. VII/86
pp.27 - 30

striking east of Paris and consequently ground staffs were in a state of disorganization. In the early hours of 28 August the Headquarters of Luftflotte 3 moved from Reims to Arlon west of Luxembourg. While this evacuation was in progress several attacks on the American forces in the Paris area were made by large forces of German long-range night bombers. Melun and Sceaux (on the southern outskirts of Paris) were attacked by over 100 bombers. After this final effort the long range and night fighter forces were withdrawn to airfields in north west Germany and on 30 August Luftflotte Reich took over control of all night-fighter squadrons.

Air Operations against the crossings on the Lower Seine
25 - 28 August

The rain and low cloud which covered the battle area during the week beginning 20 August cleared suddenly on the 25th and after the habitual river mist had dispersed visibility was excellent. These favourable conditions held for the next three and a half days and the Tactical Air Forces struck with all their might against the German forces retreating across the Lower Seine.

See Map No.18

File
2nd TAF/5/
21/5/ORS
Report No.15
Pt. IV

The main crossing places were between Quillebeuf at the estuary and Les Andelys south of Rouen. The river at this stage of its course is wide and tidal. The country along the left bank is well covered with woods which afforded excellent cover to the enemy who lay up during the day and crossed over the river at night. He had also taken full advantage of the spell of bad weather to ferry across many hundreds of troops during daylight. Investigations were made after the battle by the Operational Research Section of Twenty First Army Group who interrogated French officials and civilians on the spot. It appears that the Germans used some 24 crossing places. Ferries, pontoons, barges and river steamers were all pressed into service. The ferry boats (of which the majority were hauled by chains) and pontoons were used mostly at night. During daylight they were carefully camouflaged beneath the trees overhanging the river bank. The size of the vessels used at the ferries seems to have varied considerably. Some carried up to six vehicles and one apparently had capacity for 10 vehicles but their trips across the river were constantly interrupted by air attack. Improvised rafts were also constructed to carry troops, horses and vehicles. Towards the end some troops even swam across in their anxiety to reach safety. Once east of the Seine the Germans travelled in the direction of Abbeville, Beauvais and Amiens.

While the German evacuation continued below Rouen the Allies began to throw bridgeheads across the Seine higher up. The Second Army had planned an assault at Louviers and Vernon and, on 25 August, crossed at the latter place with little opposition. Three days later the bridgehead had been expanded to a distance of four miles wide and three miles deep. At Louviers assault crossings were successfully made, although heavy resistance on the far bank was met at some points. By the 29th British troops had firmly secured the right bank of the river between Les Andelys and Vernon. The Canadian Army crossed at Pont de L'Arche and Elbeuf above Rouen, the first patrols reaching the far bank on the evening of 26 August.

The pressure from the Allied ground forces made the enemy redouble his efforts to reach safety. Many hundreds of

2nd T.A.F.
Daily Log
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14.14 to 14.20.

troops were now cornered in the loops of the Seine below Rouen. The situation on 25 August resembled the scenes of destruction round Vimoutiers, seven days earlier. Disregarding the early morning mists, fighter bombers of 2nd Tactical Air Force were airborne at 07.00 hours and began to attack the convoys of vehicles clustered along the left bank of the Seine from Rouen to the estuary. Visibility improved later in the morning and a series of attacks were delivered against the barges ferrying troops across the water from Le Havre, near the mouth of the estuary as far up the river as Rouen. Several large ships of approximately 4,000 to 5,000 tons were spotted on the first bend of the river below Rouen and these were attacked again and again by Typhoons with rocket projectiles. The attacks on barges by Typhoons and Spitfires reached a climax shortly after midday. Other squadrons paid special attention to transport which had concentrated on the borders of the Foret de la Londe hoping to keep under cover until the evening. The longer ranged Mustangs patrolled the roads beyond the Seine and the area Rouen - Neufchatel - Amiens. By the evening movement on the river had been brought to a standstill and the fighter bombers devoted their attention while it was still light to the motor vehicles and tanks which had managed to cross over.

No. 2 Group
O.R.B.
25 Aug. 1944.

No. 2 Group played a notable part in the day's operations. During that evening Air Vice-Marshal Embry directed 54 Mitchells and Bostons to attack the crossings below Rouen. While the bombers were leaving their bases in southern England, reconnaissance aircraft over the Seine saw a large convoy of motor vehicles lining up on the quays near the Rouen bridge. The crews of No. 2 Group were at once re-briefed in mid air and they made for the bend in the river opposite Rouen. The area was by now obscured in cloud but 30 aircraft attacked from 11,500 feet to 14,000 feet and at least one large explosion from the vicinity of the quays was observed. The remainder of the force, unable to find the new target, attacked the crossings at Duclair and Caudebec.

IX Air Force
Monthly Summary
of Ops.
Aug. 1944.

Thunderbolts and Mustangs of the IXth Tactical Air Command were called in to attack troop concentrations, barges and motor and horse-drawn transport along the upper reaches of the Seine. But the main task of the American fighters that day was to prevent the Luftwaffe from protecting the German Ground forces. A strong effort was made by Luftflotte III to reach the Seine area but these attempts proved abortive and no enemy aircraft were encountered by the Spitfire patrols of 2nd Tactical Air Force which had been detailed to act as cover for the fighter bombers. As already related Lightnings and Mustangs sought out the enemy fighters near their new bases east of Paris and claimed a total of 90 aircraft destroyed in the air and on the ground. One force of fighter bombers from the IXth Tactical Air Command detailed to attack targets east of Paris encountered a large force of German fighters. They at once jettisoned their bombs and went into the attack, claiming to have destroyed 21 aircraft at the end of the action.

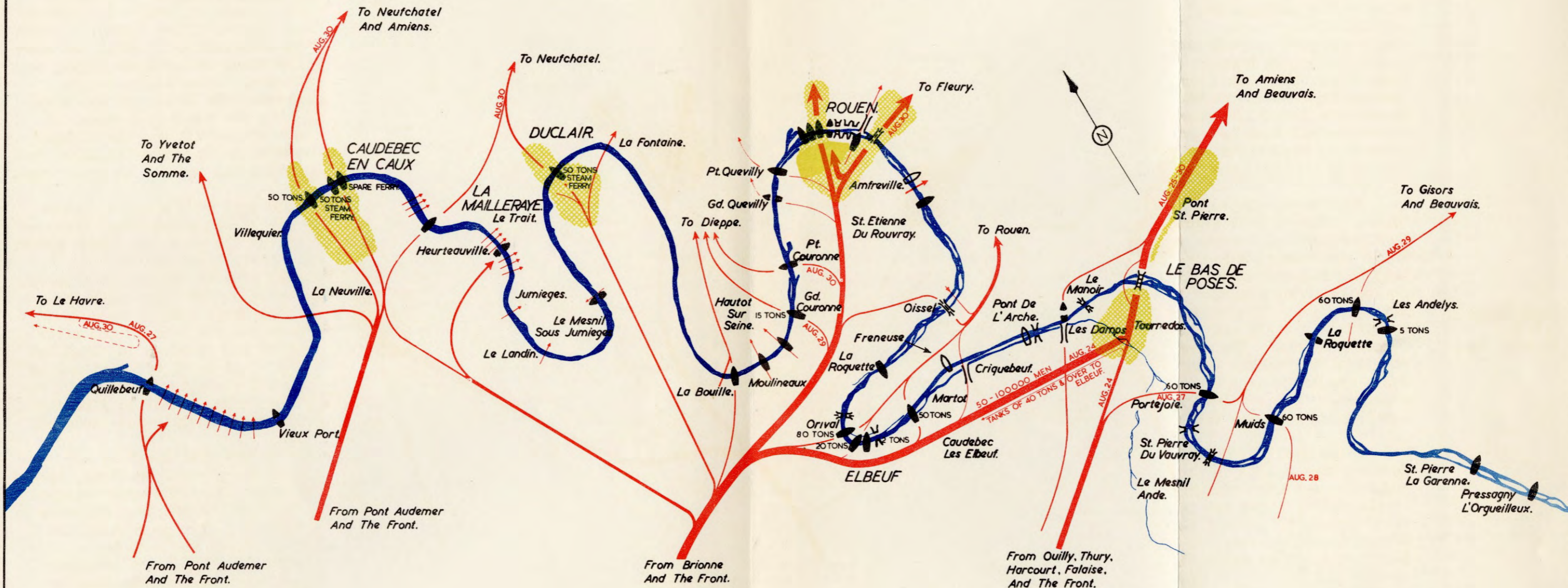
A.E.A.F. Daily
Int./Ops.
Summary No. 219

By nightfall the British fighter bombers had flown just over 730 sorties against the enemy south of Rouen and claimed to have destroyed two ships, a ferry boat, 23 barges and just under 100 motor vehicles.

During the night No. 2 Group continued their usual attacks against the crossings near the estuary which had gone on without ceasing since the beginning of the week.

THE GERMAN RETREAT ACROSS THE LOWER SEINE AUGUST 1944.

NOTE :- There were many air attacks in the Seine area which are not shown in this diagram because their exact location or the results are unknown.



LEGEND

- ▬ 8000 16000 Vehicles & 40,000 80,000 Men.
- ▬ 4000 8000 Vehicles & 20,000 40,000 Men.
- ▬ 2000 4000 Vehicles & 10,000 20,000 Men.
- ▬ 1000 2000 Vehicles & 5,000 10,000 Men.
- ▬ 500 1000 Vehicles & 2500 5,000 Men.
- ▬ Under 500 Vehicles & Under 2500 Men.

- || Road Bridge
- ⌘ Rail Bridge
- ⌘ Pontoon Bridge
- Ferry
- Ferry Under Construction.
- Vehicle Concentrations.

- ⌘ Road Bridge
- ⌘ Rail Bridge
- ⌘ Pontoon Bridge
- Ferry
- x TONS. Safe load capacity of Ferry
- Area at Rouen in which a concentration of over 1,000 vehicles was destroyed.

2nd T.A.F.
Daily Log
1427 to 1429

Mitchells operated in addition to Mosquitoes and dropped flares along the main road from Rouen to Beauvais, along which scores of German vehicles were travelling.

Ibid Sheets Nos.
1430 to 1435.

On 26 August, the fighters and fighter bombers of 2nd Tactical Air Force and the IXth Air Force once again made a powerful effort to disrupt the enemy withdrawal. The attention of 2nd Tactical Air Force was now directed to the roads leading away from Rouen. They avoided the town, for not only was the area thick with anti-aircraft defences, but Allied troops were approaching the river from a southerly direction. The road from Rouen to Beauvais was the most frequented by the enemy and blocks of vehicles formed outside the large road junctions at Gournay about ten miles east of Rouen. Other patrols by 2nd T.A.F. were made in the neighbourhood of Amiens. Here too, much transport and armoured vehicles were shot up. The Luftwaffe made a further attempt to interfere with Allied air operations and about 50 aircraft were encountered by Spitfires. But the enemy had little desire to continue the battle after three of their number had been destroyed.

No. 2 Group
O.R.B.
26 Aug. 1944.

The honours of the day went to the British and American medium bombers. At about 1800 hours a large force of No. 2 Group Mitchells and Bostons once again attacked convoys waiting to cross the bridge at Rouen or board ferries. This time the attack was made in better visibility. The bombs of the Mitchells fell on the south bank of the Seine, quite close to the bridge. The results achieved by the Bostons are unknown because the pilots could not see through the thick black smoke which arose from the ground. (1) An hour later medium bombers of IXth Bomber Command continued the attack on the same target and reported satisfactory results. Thus, the Germans around Rouen were given no peace throughout the day.

A.E.A.F. Daily
Int./Ops.
Summary No. 220.

As soon as darkness fell, Mosquitoes of No. 2 Group began to appear over the river. They attacked the crossings at Duclair, Caudebec and La Mailleraye. A small force of Mosquitoes was detailed to attack the bridge at Rouen and they claimed to have scored a hit on the north east approaches. This was confirmed later by other aircraft over the scene. While flares and bombs were dropped round the Germans at Rouen, other Mosquitoes attacked railways and roads as far east as Metz and Luxembourg to delay reinforcements reaching the proposed enemy defence line on the Somme. By daybreak No. 2 Group had flown 194 sorties and had caused great confusion amongst the enemy.

2nd T.A.F. Daily
Log Sheets Nos.
1441 to 1443.

Apart from mist and cloud in the mornings, the weather kept fine for the next two days and air operations proceeded

(1) The scene of destruction on the south bank was visited by members of 2nd T.A.F. O.R.S. on 1 September. According to French witnesses the enemy had arrived in a disorganized state and finding no bridges began to use the two barge ferries. The medium bomber attacks appear to have been accurate and although on one occasion the bombs fell on the north bank they destroyed a number of vehicles sheltering in an avenue. It was impossible to count the dead but the estimate of 1500 vehicles made from photographic reconnaissances was found to be fairly accurate, being if anything, a rather conservative figure. (2nd T.A.F. O.R.S. O.R.B. App. 1 Sept. 1944).

Nos. 83 and 84
Groups O.R.B.
August, 1944.

A.E.A.F. Daily
Int./Ops.
Summary No. 221.

at full spate. On 27 August the Canadian Army closed in on Rouen and the Typhoon squadrons devoted most of their effort to barges, boats and pontoons crammed with troops trying to escape to the far bank. Pontoons which were swung across in daylight were strafed with rockets and cannon. No. 2 Group did not operate in daylight on this occasion and in its place the American medium bombers attacked troops who were still assembling opposite Rouen road bridge and made further attempts to destroy the bridge.

By the 28th I British Corps had reached Duclair and Caudebec and at the end of the day enemy troops still on the left bank were left to their fate while the bulk of the German Army moved back to the Somme. 2nd Tactical Air Force flew armed reconnaissances throughout the afternoon and evening over the roads leading out of Rouen to counteract this movement. A final attack was made by No. 2 Group on the ferry at Duclair for seven minutes shortly before dusk. Fires and dense clouds of smoke billowed over the landing stages denoting the success of the bombing. It was during this operation that a large vessel was observed between Rouen and Duclair swinging across the river, obviously serving as a bridge for troops still on the west bank. A fierce barrage of anti-aircraft fire met the British bomber force and just under half were hit by flak but all managed to return to the United Kingdom in safety.

2nd T.A.F.
Daily Log
Sheets Nos.
1453 to 1459.

In four days over 530 sorties were flown by British and U.S. medium bombers against the dense concentration of transport west of Rouen. The pilots could not have wished for a better target but credit is due to them for pressing home their attacks often in cloudy conditions and nearly always in the face of heavy anti-aircraft fire. Their effectiveness is demonstrated by the fact that over 700 vehicles were found by ground observers in the area where their bombs fell. Praise is also due to the night flying squadrons of No. 2 Group, which in varied weather, incessantly harried the Seine crossings from the beginning of the Battle of the Pocket.

A.E.A.F. Daily
Int./Ops
Summary
Nos. 221 - 224.

Another type of target for the medium bombers was the ammunition, petrol, oil and lubricant dumps hidden in the woods around Reims and Beauvais. As the enemy fell back these grew in importance for, at this stage, every drop of fuel was precious. From 27 to 30 August IXth Bomber Command attacked these dumps. On the 27th three attacks were made in the Reims area and, on the next day, four attacks were made near Beauvais; for the last two days of August the depot in the woods of Arques La Bataille, near Amiens, was bombed. No. 2 Group also attacked the latter target and dumps at Clermont and Nomexy, near Beauvais.

No. 83 Group
O.R.B.
28/8/44.

On 29 August troops of I Corps concluded the British crossings of the Seine. They went over at Caudebec and Vieux Port, near the estuary, making use of assault craft and barges which they found on the river bank. Rain once more covered the battle area and operations by the Tactical Air Forces almost came to a standstill. By this date three airfields had been completed in the neighbourhood of Evreux and No. 83 Group began to occupy them, thus considerably extending its range.

The VIIIth Fighter Command, operating from England, had in the meantime returned to the attack of transportation targets in northern France, Belgium and north west Germany and made high claims for goods-waggon, motor vehicles and locomotives. Aircraft of Air Defence Great Britain were also

called upon to strike at the enemy supply routes in Belgium and northern France. It was largely owing to these attacks by day and night not only on the Seine but all the way back to the Rhine that the enemy's attempt to build up a defence line east of Paris was frustrated.

Operations by Twelfth Army Group across the Seine

The American advance across the Seine, south of Paris, was conducted with the vigour and audacity which had become characteristic of General Patton's operations. After crossing the Seine at Troyes on 27 August, the XII U.S. Corps moved swiftly down the road to Chalons sur Marne, liberating that town on the 30th. It then swung southwards in the direction of Nancy. On the left flank of the Third U.S. Army, the XX U.S. Corps crossed the Seine near Fontainebleau and, within a few days, had struck out beyond the Marne. U.S. troops liberated Reims on 30 August and continued to advance in the direction of Verdun.

The enemy was too dazed by the swift speed of the Americans to offer effective resistance at any point. At the same time the XIXth Tactical Air Command greatly simplified the problems of the armoured spearheads. An air-ground liaison had been worked out successfully during the sweeping movement eastwards from Brittany and enemy troop concentrations and road blocks were effectively dealt with by the Air Force before the Army had arrived on the spot. Fighter bombers also protected the vulnerable flanks of the American columns along the River Loire.

The problem of maintaining these flying columns with ammunition, fuel and rations was a difficult one and, as the Third Army raced towards the Seine, it came to rely almost entirely on resupply by aircraft of IXth Troop Carrier Command. At this stage the Supreme Commander had to choose between reserving these troop carrier aircraft for training in airborne operations or committing them to supply tasks. But the speed with which the Army kept up its advance rendered the airborne operations round the Paris - Orleans gap and elsewhere unnecessary and General Eisenhower's decision to carry on with the supply operations so as to keep the momentum of the advance going appears to have been fully justified.

Operations in Brittany

At the beginning of the battle for Normandy the Allied Commanders required free ports on the Atlantic coast for the use of reinforcements from the United States as quickly as possible. But after the American break through at St. Lo, all available forces were needed by the Supreme Commander to develop the encircling movement around the German Armies and with the Allies advancing eastwards the VIII U.S. Corps, under General Middleton, was left behind to clear up the Brittany peninsula. As operations developed so favourably during August, the ports in the west began to lose their importance with the likelihood of the ones in the Channel becoming available at an early date. Nevertheless, the German garrisons on the coast, although their crack troops were being annihilated west of the Seine, determined to hold out until the end so as to deny the use of the ports to the Allies.

St. Malo and Dinard were the first to fall, but not until heavy demolition in the port areas had been carried out. The island of Cezebre in St. Malo Harbour held out until 31 August despite continual battering by warships, heavy bombers and fighter bombers. The garrison at Brest was particularly tenacious composed, as it was, mainly of hardened parachute troops. The Commander, Lieutenant General Ramcke was an aggressive fighter and won the praise of Hitler, Goering and Goebbels by his conduct of operations.⁽¹⁾ As the Americans slowly encroached upon the defences the port facilities were demolished by the enemy and it soon became evident that they would be useless for many months after the capture of the town. After much fierce fighting the enemy at last surrendered on 18 September. Garrisons still held out at Lorient, St. Nazaire and Quiberon Bay.

Having achieved victory west of the Seine General Eisenhower required all the available forces under his command to strike a decisive blow at the German Armies reeling backwards towards the frontiers of the Reich and he therefore decided to abandon active operations on the Atlantic coast. The French Force of the Interieur were now given the task of investing these ports.

The Allied Landings in the South of France

Early in the morning of 15 August the Seventh U.S. Army, commanded by General Patch, and French troops, led by General De Lattre Tassigny under the overall direction of General Devers landed on the French Riviera near Cannes with the object of capturing the ports of Toulon and Marseilles. French Commandos, Special Air Service detachments and forces of paratroops and glider troops took part in the landings. The coast was only lightly defended and the force experienced little difficulty in gaining its initial objectives.

The German Nineteenth Army opposed the Allied landings without the customary Teutonic vigour and attempted in vain to delay their advance up the Valley of the Rhone. Toulon and Marseilles surrendered on 29 August and U.S. troops struck out towards Lyon and Dijon to link up with the troops of General Eisenhower's command. With Allied forces sweeping across France from the west and from the south, the German armies, now no longer a co-ordinated fighting force, fell back in confusion towards the Reich.

Conclusion

A decisive victory had been won by the Allied air and ground forces over the German Armies and when the last troops of their rearguards crossed the Seine at the end of the month the Nazi domination of France was clearly at an end. With the closing of the Falaise - Argentan Gap the British and Canadian forces which had been compelled to fight for every foot of

(1) During the siege, a number of incidents occurred in which German hospitals and hospital ships marked by the Red Cross were accidentally hit by Allied aircraft and artillery. A series of communications passed between General Middleton and Ramcke which are of some interest. See German Seventh Army Log, Volume IV (U.S. Transl.) Section 5. Personal file of Lt. General Ramcke, 27 August to 17 September, 1944.

ground south of Caen, were able to advance with rapidity to the Seine and that line was reached two weeks before the target date laid down by General Montgomery.

The enemy had suffered huge casualties in men and equipment. Eleven Panzer Divisions had either been destroyed or else were so thoroughly disorganized that they were negligible as a fighting force. The infantry of the Wehrmacht were sacrificed in great numbers so that the precious personnel of the Panzer Divisions might fight once again - this time to defend the Reich. Twenty-three divisions suffered either complete elimination or very heavy casualties. In the air the Luftwaffe had been dealt a severe blow. Not only was it incapable of providing effective cover and support to the Armies but in combat German pilots were constantly outwitted by the Allied airmen. The dislocation of supply services, the rapid moves from airfield to airfield were also causes for the complete failure of the German Air Force.

A controversy arose in Allied circles after the Battle of the Pocket and the advance to the Seine over the effectiveness of the contribution to the victory made by the Tactical Air Forces. This resulted from the investigations made by the Operational Research Section of Twenty-First Army Group. The object of its report was firstly to examine what losses were suffered by the enemy from air attack and secondly to assess the capabilities of the various air weapons employed.⁽¹⁾ The researchers covered three large areas: The Pocket, the neighbourhood of Trun, Chambois and Vimoutiers known as the Shambles and the area from the Gap to the Seine crossings. Selected numbers of tanks and vehicles were examined and a detailed analysis was made. The destruction by air and ground action was enormous and it was estimated that a total of 12,369 tanks, guns and vehicles were lost by the enemy. In short this was one of the greatest defeats which the German Army had suffered. It was claimed, however, that although a very large number of 'soft' vehicles had been destroyed by cannon and machine gun fire the claims made by the two Tactical Air Forces were much higher than the number which could definitely be attributed to air action. The report also doubted the efficacy of the Rocket Projectile maintaining that only ten out of 301 tanks and self propelled guns could be put down as having been destroyed by this weapon.

Folder
TAF/5/21/5/
O.R. S.

The difficulties of discovering the results of air attacks especially with regard to Rocket Projectiles when there were no aerial photographs to show their strikes has already been discussed in connection with the action at Mortain. Furthermore it should be borne in mind that the investigations took place some time afterwards when salvage parties, looters and the tide of battle had covered the ground so that it was difficult to ascertain exactly what were the causes of destruction. In the third place there is the fact, previously mentioned, that any type of armoured vehicle was called a 'tank' by pilots. Fourthly, the enemy's recovery service was never idle and damaged fighting vehicles being so valuable were, as often as not, towed away.

The task of the Air Force during the Battle was to strike confusion into the enemy and to prevent his carrying out a

(1) R.A.F. Commanders in Chief and their Staff denied the competence of Army Group O.R.S. to assess the capability of air weapons.

withdrawal according to plan. Thus it was not their intention to destroy tanks or vehicles one by one but to attack the heads of convoys and so disorganize the enemy troops that they were incapable of moving as a disciplined body. This was undoubtedly achieved by the 2nd Tactical Air Force in the Shambles area and by British and U.S. fighter and medium bombers west of Rouen. They carried out interdiction in the true meaning of the term - the prevention of enemy movement. The Air Forces as a whole by their persistent attacks upon communications not only in the battle area but across France to the Reich prevented reinforcements, fuel and ammunition reaching the forward areas.

The report by Twenty-First Army Group stated that the withdrawal was enforced by the advance of the ground troops. Rather was it the result of a combined effort by both air and ground forces. Finally it should be borne in mind that air operations have always to compete against a number of limiting factors, the state of the weather, the extent of enemy flak and in this case the care which had to be exercised in regard to the bomblines and the necessity to distinguish whether red cross vehicles were among the columns under attack.

No statistics can show the effect of constant air attack upon the spirit of the German soldier. Reports by prisoners of war give vivid proof of the terrifying effect of such attacks from the moment when he entered the battle area and which gradually ground into him so that he took cover whenever the noise of aircraft was heard. Those troops who escaped to fight again infected their comrades with panic. In addition to this was the complete lack of faith in the protection of the Luftwaffe.

The Air Commander in Chief, A.E.A.F. was fully prepared to support the claims of the pilots during the Battle of the Pocket. But as a result of the investigations carried out on the battlefield, which were published after Air Chief Marshal Leigh-Mallory's untimely death, it was decided to omit the figures of claims which had been included in his Despatch on Operations in France and simply to refer to the air effort as a great victory.

CHAPTER 6

THE ADVANCE FROM THE SEINE TO THE GERMAN FRONTIER

The Advance of the Second British Army on Antwerp

File D/SAC/H.12
Encl. 50A

During the first week of September the enemy was in full retreat across France. Intelligence at SHAEF estimated that there were no more than two Panzer Divisions and nine Infantry Divisions northwest of the Ardennes all of which were in a state of disorder. To the south of this region there were six Infantry and Panzer Divisions of poor quality while a mixed force of approximately 100,000 troops was withdrawing from the south western districts of France. Only two Infantry Divisions, together with a few Panzer troops, formed the German Nineteenth Army retreating up the valley of the Rhone.

See Map No.19

The Second Army began its advance north of the Seine on 29 and 30 August. On the right flank the First U.S. Army which had crossed north of Paris made towards the Maastricht Gap and the Third U.S. Army after a rapid advance to the Meuse liberated Verdun and Commercy and pressed on towards Nancy. On the left, the Canadian Army crossed the Seine and fought its way along the coastal belt cutting off the enemy garrisons which had been left behind in Le Havre, Calais, Boulogne and Dunkirk. Following the instructions of Field Marshal Montgomery everything was done to increase the speed of operations. Armoured divisions led in the van closely followed by mobile infantry which consolidated the newly won ground and mopped up pockets of resistance.

On the right flank of Second Army the 11th Armoured Division struck out towards Amiens from XXX Corps' bridgehead at Vernon and liberated it on 31 August. The advance had been so swift that the Tactical Headquarters of the German Seventh Army situated just outside the town was surrounded and General Eberbach, who had taken over command from the wounded Hausser, was among the prisoners. The Guards Armoured Division crossed the River Somme east of Amiens, swung to the south of Arras and by 2 September had liberated Douai and Tournai. On the left of the Guards the 7th Armoured Division crossed the Somme and entered St. Pol north of Arras. In the early morning of 3 September the Guards armoured cars crossed over the Belgian frontier and by the evening had completed the occupation of Brussels. The enemy made few attempts to resist this impetuous advance.

In the meantime 11th Armoured Division striking ahead of XII Corps from the bridgehead at Louviers thrust between the industrial towns of Lille and Tournai, their objective being the port of Antwerp. On 4 September they entered the city and seized the docks intact while the enemy withdrew along the Scheldt. The 7th Armoured Division was then instructed to make for Ghent on the left of the 11th Armoured Division. The enemy, however, had drafted in several fresh divisions around La Bassee to protect their withdrawal into the Channel ports. Leaving infantry to deal with them the British armoured troops swung to the east before reaching Lille and took Ghent on 5 September. The XII Corps then assumed responsibility for holding the area south of Ghent thus freeing XXX Corps so that it could continue the advance to the north-east. In six days the Second Army had advanced 250 miles bringing them almost to the German frontier. The speed of this advance had been made possible by the crushing defeat of the German Armies south of the Seine which left them powerless to form a defensive line along the rivers in northern France.

The brilliant operations by the Guards Armoured Division led to the abandonment of the airborne operation around Lille (Operation Linnet) although on 2 September Twenty One Army Group were still expecting it to take place in spite of the fact that their troops had occupied Tournai. The object of this operation was to employ I British Airborne Corps and elements of two U.S. Airborne Divisions under Lieutenant General Browning to block the enemy's escape route from the Pas de Calais to the east by seizing crossings over the River Escaut at Tournai. They were to consolidate in the region of Lille and Tournai holding the airfields in that area so that they could be maintained by air. The Allied Air Forces were to give full support by escorting the glider and transport aircraft streams, attacking flak positions, drawing a line of interdiction round the threatened area and bombing enemy fighter airfields in the vicinity. The mounting of the operation entailed the "freezing" of a number of transport aircraft, all of which were required at this period to ferry in supplies to assist the advance. The Air Commanders expressed dissatisfaction at this measure, in particular, the Deputy Supreme Commander while General Brereton, Commander of the First Allied Airborne Army, thought that the area of the drops should be moved forward to Liege.

File
AEAF/T.S.25061

Minutes
89 Air
Cmdrs.
Meeting

Similar complaints were to follow in a few days time (11 and 12 September) over the next airborne operation - Comet(1) from General Bedell Smith Chief of Staff to the Supreme Commander who thought like the Supreme Commander that the opening of a port was the next essential, and from General Bradley who complained that he could not obtain enough petrol to keep his troops on the move. But both Air and Army Commanders agreed that if airborne troops could hold a bridgehead on the Rhine the operation would be worth while. The Commander in Chief Bomber Command offered to ease the situation by flying in petrol to supplement the efforts of the VIII Air Force which had been carrying fuel in cans to Orleans airfield for some days.

File
TLM/F/S 34

Minutes
96th Air
Cmdrs.
Meeting

With operation Linnet in mind Field Marshal Montgomery had realigned the boundaries of Twenty First Army Group so as to swing his Armies more to the east. Thus Second Army's axis of advance ran through Brussels and Louvain and was directed at the northern edge of the Ruhr. The Canadian Army was to mop up the coastal belt and afterwards clear the enemy from the estuary of the Scheldt. Field Marshal Montgomery decided to retain this boundary after the airborne operation had been shelved.

File
TLM/S.191/1
Encl. E.11

Air Mshl.
Coningham's
Report
pp. 22-23

Problems of 2nd Tactical Air Force during the advance

Air Marshal Coningham appreciated the need for his aircraft to keep pace with the ground forces and took special measures to keep his groups on the move. No.83 Group which provided the main air support for Second Army began a series of leap frog advances across Northern France to the Dutch frontier. Only three operational airfields were employed at a time and whenever possible those used were captured from the enemy. Ground staffs and fuel were brought forward by air whenever possible and on occasions aircraft of 2nd Tactical Air Force were turned into transport aircraft.

(1) This was the first plan for airborne landings in the Arnhem area.

File 2nd TAF
Orders of
Battle May
1944 - Jan. 1945

By the beginning of the second week in September Air Marshal Coningham had established his Main Headquarters in Amiens and his day fighter and fighter-bomber squadrons were across the Seine. The Main Headquarters of No. 83 Group and its squadrons were in position around Brussels at Evere, Vitry, Grimbergen, Douai, Illieres, Melsbroek and Avrilly. (1) The squadrons of No. 84 Group responsible for supporting the Canadian Army were based around Merville and Lille Vendeville while their Headquarters was about to move to Ypres. (2)

Adv. AEAF
O.R.B.
pp. 21 - 22
Sept. 1944

The Air Commander in Chief and Air Marshal Commanding 2nd Tactical Air Force flew to Brussels on 10 September to attend the conference between General Eisenhower and Field Marshal Montgomery and while the talks on strategy were conducted by the Army Commanders the airmen discussed a number of important problems. Air Marshal Coningham pressed the Air Commander in Chief to transfer to his command the Mustang and Tempest Wings which were then under control of Air Defence Great Britain for operations against flying bombs. With the possibility of a rapid advance into Germany Air Marshal Coningham desired these longer-ranged fighter aircraft to support the thrusts of the ground forces in place of the Typhoons and Spitfires which would move forward more slowly because of the necessity to prepare airfields near the front line. The Air Commander in Chief decided, however, that the squadrons were at the moment more usefully employed in Air Defence Great Britain. The move of No. 2 Group, still based in the U.K. was also discussed and as recommendations had already been made by the Senior Air Staff Officer of No. 2 Group it was decided that the airfields around Lille seemed to be the most suitable.

Minutes
95th Air
Cmdrs. Meeting

The Air Commanders had agreed on the previous day (9 September) that it was no longer practicable to control operations of the Tactical Air Forces from the Headquarters of A.E.A.F. and that discussion at the Air Commanders Meetings should be restricted to operations of a strategic nature. The Daily Conference which had first been held at Stanmore and then on the Continent was discontinued and the Air Commander in Chief decided to hold the meetings in future only twice a week. As Granville was now so far away from the scene of operations the meetings were to be held at Versailles where Forward SHAEF was situated.

Effect of the first rockets on operations of A.E.A.F.

A.M. Signal
to SHAEF
11 Sept. 1944.

Early in September the population of southern England began to suffer from a second V weapon for on the evening of 8 September the first rockets were launched against London. One of them fell at Chiswick and sixteen seconds later another fell in the Epping district. Three people were killed and twenty injured as a result of these attacks. Air Force Intelligence Officers believed that both the rockets had been fired from the Netherlands area.

An elaborate scheme had been drawn up to counteract the threat of Big Ben, the code name given to the rockets, and on the following day several conferences were held in London to decide what action should be taken. The War Cabinet believed that full counter measures should be put into force immediately. The British Chiefs of Staff, on the other hand, took a more

- (1) Illieres and Avrilly are both south of the Seine and are not included in the map 'The advance into Belgium'.
- (2) No. 85 Group dispatched a Ground Control Interception Unit to Brussels to protect the city from night attack.

optimistic view; they thought that with the swift advance to the German frontier then in progress the over-running of the launching sites would only be a question of time. They were determined to pursue a similar policy which had been adopted for the flying bombs, which was that the threat of these weapons should not detract from air - ground operations on the Continent. The organisation under the Deputy Chief of Air Staff set up to combat the flying bombs continued to deal with the new form of attack. The Air Commander in Chief was in theory responsible for controlling offensive operations but as his attention was fully occupied with the land battle it was Air Defence Great Britain under Air Marshal Hill which bore the brunt of dealing with the rockets.

See A.D.G.B.
Narrative
Vol. VII.
pp. 230 - 1

On 10 September at the conference in Brussels already mentioned, the foremost topic discussed by the Air Commander in Chief and Air Marshal Coningham was the relationship between 2nd Tactical Air Force and Air Defence Great Britain. Now that the Pas de Calais and the Netherlands were within the Tactical Area the problem of co-ordination between the two Commands arose. With the arrival of the first rockets this became a matter of urgency. On the same day a conference was held at the Air Ministry to discuss offensive counter measures for Big Ben. Representatives of A.E.A.F. were present at the meeting. The main decisions were that No. 11 Group should carry out reconnaissances over Holland from where it was believed the rockets had been fired and that 2nd Tactical Air Force should give support whenever possible with armed reconnaissances and strikes against the rocket organisation. Secondly, a radar system with sound ranging and flash spotting equipment was to be set up in the Antwerp area and was to be linked with No. 11 Group A.D.G.B. Filter Room.

File Adv.
AEAF/24290

Stiffening of enemy resistance

As soon as the German forces reached the frontiers of the Reich their resistance became more effective. They knew that in the next major battle the fate of the Fatherland might be decided. Changes of command marked the Fuehrer's decision to call a halt to the rout. On 4 September Field Marshal Rundstedt who had fallen into disgrace during the Battle of Normandy was reinstated as Commander in Chief West. Field Marshal Model who had taken the place of the luckless Von Kluge retained his command of Army Group B (Seventh, Fifteenth Armies and Fifth Panzer Army). The underlying motive of the German strategy was to hamstring the Allied advance by holding on to the ports all along the French coast-line and the Supreme Command determined to keep German forces in Holland from where they could maintain the V weapon campaign against the U.K. The Fifteenth Army originally based in the Pas de Calais withdrew into the Channel ports and other elements crossed over into the islands dominating the mouth of the Scheldt. The First Parachute Army was given the task of defending the important area along the Albert Canal to Maastricht, the Seventh Army fell back towards the Maastricht Gap, the Fifth Panzer Army took up positions along the river Meuse and the Fifteenth Army withdrew on Metz. Reinforcements were dispatched from Italy to protect the Belfort Gap and squads of the Todt labour force hastily began work on the neglected defences of the Siegfried Line.

A.H.B. 6.
Trans. No.
VII/89 War
Diary
Luftflotte 3
Sept. 1944

Strategy for the Advance

The Supreme Allied Commander moved his Headquarters across the Channel to Granville on the western side of the Cherbourg peninsula late in August. He decided to take over

File
D/SAC/H. 12
Encl. 47A

personal command of the Allied Expeditionary Force on 1 September. From that date he would issue directives to the Army Group Commanders allowing them to deal with the tactical situation on their respective fronts. The two Army Groups in action on the continent were given new designations which defined their positions for the advance to the frontier of the Reich. Twenty First Army Group remained under Montgomery, who had been promoted to the rank of Field Marshal from 1 September, and was called the Northern Group of Armies; the Twelfth Army Group commanded by General Bradley bore the title of Central Group of Armies. The Tactical Air Forces supporting these Army Groups retained their original roles; the 2nd Tactical Air Force operated with Twenty one Army Group and the IXth Air Force continued to co-operate with Twelfth Army Group.

Ibid
Encls. 49A
and 54A

Later in September another Army Group came into being; this was the Sixth Army Group or the Southern Group of Armies commanded by an American-General Jacob Devers. It contained the Seventh U.S. Army commanded by General Patch and the First French Army under General de Lattre Tassigny. But for the time being it remained as the Dragoon Force and was directed by General Wilson at Allied Force Headquarters in the Mediterranean. General Eisenhower planned to take over this Force when it was possible to establish communications between SHAEF and General Dever's Headquarters and after the troops advancing from the south had joined force in strength with the Central Group of Armies. It was estimated that this would take place in the Dijon area on or about 15 September. The Supreme Commander made it clear that he wanted the Dragoon forces to be maintained for as long as possible from the ports in the south of France so as not to cause an extra burden upon the already over-taxed port facilities in the north.

The air support for the Southern Group of Armies came from the XIIth Tactical Air Command under Brigadier General Saville and was controlled during the initial operations by the 12th Air Force in Italy while after being absorbed into the A.E.F. it was to come under command of the IXth Air Force. Later in the campaign this Command was swelled by fresh American and French air units and was raised to the status of the First Tactical Air Force.

As soon as General Eisenhower took over direct command of the land forces from Field Marshal Montgomery a divergence of opinion as to future strategy which had existed since the start of the campaign grew pronounced. General Eisenhower had all along favoured advancing to the Rhine on a broad front with his two Army Groups abreast and his geographical designations gave proof that he still favoured this theory. Field Marshal Montgomery on the other hand favoured an all out thrust in the north which would cross the Rhine at the earliest moment taking the enemy forces by surprise and defeating them on the northern plains of Germany.

On 4 September General Eisenhower issued a directive to his Senior Commanders explaining his strategy for future operations. He believed that the enemy would dispose his forces so as to protect the industrial areas of the Ruhr and the Saar both of which were vital to his national economy. The Allies would aim blows at both these areas and thus destroy the German Armies in the west. Following upon this an advance into the very heart of the Reich would be launched. The task for the Northern Group of Armies and the First U.S. Army operating north west of the Ardennes was firstly to seize the port of Antwerp, storm the Siegfried Line defending

SCAF.13
4 Sept. 1944

the Ruhr and then cross the Rhine and envelop this great industrial area. The remainder of the Central Group of Armies (i.e. the Third U.S. Army) had four objectives to fulfil. The first of these was to clear Brest of the enemy in order to gain another port of entry for the U.S. Armies on the Continent. Secondly it was to protect the long flank of the A.E.F. from the south. Thirdly it was to launch an assault against the Siegfried Line protecting the Saar and having forced an entry, was to secure crossings over the Rhine in the area of Frankfurt. Finally the Twelfth Army Group was to endeavour to destroy the enemy withdrawing in the face of the Dragoon forces in southern and south-western France.

The boundary between the two Army Groups was to be a line traversing northern France and Germany passing through the towns of Amiens, Brussels and Krefeld, all of which were to be within the Northern Group of Armies area. The most important part of this directive was the Supreme Commanders statement that the thrust to the Ruhr should take priority over operations in the south. In order to give Twenty First Army Group additional offensive power for this advance, the First Allied Airborne Army was placed at its disposal to support operations up to and including the crossing of the Rhine.⁽¹⁾

The Combined Chiefs of Staff had decided to hold a conference in Ottawa⁽²⁾ in mid September which was to be presided over both by Mr. Churchill and President Roosevelt. They requested the Supreme Commander to furnish them with a report of operations in Europe together with his intentions for the future. General Eisenhower in his reply on 9 September restated his plan written a few days earlier. By that date the situation in Europe had already changed considerably. Allied troops had crossed France and Belgium and were standing at the frontier of the Reich itself. In southern France the Seventh U.S. Army under General Patch had advanced up the Rhone Valley to the Besancon area and was just about to link up with General Bradley's Army Group. The Supreme Commander's intention for the Dragoon Force was that it should be absorbed into the A.E.F. on 15 September after which it was to prepare for an advance into southern Germany via Mulhouse and Strasbourg.

FACS 69
6 Sept. 1944

General Eisenhower warned the Combined Chiefs of Staff that in spite of these successes his lines of communication were stretched to their utmost and he informed them that the immediate task was to open up the ports of Le Havre and Antwerp while the twin drives to the Ruhr and Saar were in progress. He believed that it was essential for his force to have deep water ports available before further large-scale advances could be made.

SCAF.78
9 Sept. 1944

Operations subsequent to the crossing of the Rhine were referred to only briefly. A thrust was to be made on Berlin either along the route north of the Ruhr through Hanover and Hamburg or else along the southern route through Leipzig or Magdeburg. While all these operations were in progress the Strategic Air Forces were to continue the destruction of industrial targets in Germany.

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- (1) The First Allied Airborne Army consisted of British Airborne Corps (the 1st and 6th British Airborne Division) and the XVIII U.S. Airborne Corps (82nd, 101st and 17th U.S. Airborne Divisions). Transport was provided by the IXth U.S. Troop Carrier command and Nos. 38 and 46 Groups R.A.F.
 - (2) Known by the Code name Octagon.

File TIM/S.191/1

File
D/SAC/TS100/12
Encl. 15a

During this time Field Marshal Montgomery was endeavouring to establish a plan whereby the Ruhr thrust would not only take priority over other operations but would immobilize part of the A.E.F. thus allowing his forces to spring forward into Germany backed up by all the available administrative resources. Just before General Eisenhower issued his directive on 3 September, Field Marshal Montgomery had ordered the Second Army to cross the Lower Rhine in the area of Arnhem and Wesel and then to envelop the Ruhr itself. On 4 September he told General Eisenhower in an 'eyes only' signal that a 'powerful and fullblooded thrust at Berlin' would end the war. He believed that there were insufficient resources to make two thrusts simultaneously and he ended his message with the words 'If we attempt a compromise solution and split our maintenance resources so that neither thrust is fullblooded we will prolong the war'.

Ibid Encl.17a

In reply to this General Eisenhower stated that while he agreed with the importance of the Ruhr thrust it should not be made at the expense of other operations. He felt that a stranglehold should be exerted both on the Ruhr and the Saar before further advances were practicable.

Ibid Encl.18a

By 7 September both Brussels and Antwerp were in Allied hands although the enemy still held the mouth of the River Scheldt thus preventing Antwerp being used as a port. Supplies for Second Army were still being carried from Bayeux in Normandy. On that date Field Marshal Montgomery sent the Supreme Commander another signal in which he demanded that 1,000 tons of supplies per day should be delivered to his Army Group by air to keep the momentum of his advance going. He requested the Supreme Commander to visit him so that they could both discuss the re-allocation of supplies to enable him to reach Berlin.

Ibid Encls.19a
and 20a

On that day General Eisenhower suffered an injury to his knee after his aircraft had made a forced landing near S.H.A.E.F. and he was incapacitated for several days. But on 10 September he flew to Brussels to meet Field Marshal Montgomery accompanied by Air Chief Marshal Tedder and General Gale his chief administrative officer. The conference was held in the Supreme Commander's aircraft.

Ibid Encl.24a

The main issue of this first Brussels conference appeared to be not so much whether a thrust to Berlin was feasible at the moment but a dispute over the degree of priority that Field Marshal Montgomery could claim. Twenty First Army Group had been given priority over the Central Group of Armies and Field Marshal Montgomery took this to mean that his advance should be made at the expense of other operations on the continent. Air Chief Marshal Tedder supported the views of the Supreme Commander and in a personal signal sent to the Chief of Air Staff reporting on the Conference pointed out that as the U.S. Armies were equally short of supplies the British Armies in the north would receive little benefit.

Ibid Encl.23a

The Commander in Chief, Twenty First Army Group did however succeed in increasing his maintenance resources and while General Eisenhower went on to visit General Bradley his Chief of Staff General Bedell Smith came to Brussels to re-allocate transport for the British thrust. The daily airlift was to be increased by an extra 500 tons per day and another 500 tons per day were to be dispatched to Twenty First Army Group area in U.S. Army transport. This measure would immobilize certain American divisions and also cause repercussions to the IXth Air Force as will be seen later in this chapter.

FACS 78
12 Sept. 1944

SCAF 82
14 Sept. 1944

In the meantime the Combined Chiefs of Staff signalled to the Supreme Commander their approval of his plan of operations sent to them on 9 September. They, too, were in favour of the thrust to the Ruhr and urged General Eisenhower to consider its advantages. On 14 September the latter replied that full support was being given to the northern thrust but he warned them again that either Antwerp or Rotterdam must first be opened for shipping.

A.E.A.F. Hist.
Record p.16
Aug. 1944

File D/SAC/H.20
Pt. III
Encl. 47A

Crusade in
Europe p.117

Significant changes also took place about this time with regard to the control of the Allied Air Forces. In the first place Air Chief Marshal Leigh-Mallory learned during the third week in August that he was to take over the post of Air Commander in Chief South East Asia. He continued, however, to direct the operations of A.E.A.F. for another month before he left for the Far East. As yet there was no indication as to who was destined to take his place or alternatively how control of the Tactical Air Forces was to be exercised. Secondly on 14 September the Combined Chiefs of Staff sitting in conference at Quebec decided to remove General Eisenhower's control over the Strategic Air Forces and place it in the hands of the Chief of Air Staff, R.A.F. and the Commanding General U.S.A.A.F. This power was to be exercised through the Deputy Chief of Air Staff, Air Marshal Bottomley and the Commanding General U.S.S.T.A.F.E., General Spaatz. The decision was not so drastic as it might appear as the Supreme Commander was to be given direct support by heavy bombers whenever he required it. General Eisenhower regarded this procedure as 'clumsy and inefficient' but as his control remained more or less undiminished he did not make any objection.

File D/SAC/H.120
Pt. III
Encl. 51A

Apart from giving direct support to the ground and naval forces the Strategic Air Forces were to attack the German military, industrial and economic systems whenever the weather permitted. This was expressed in more detail when a directive was framed by Air Chief Marshal Tedder, the Deputy Chief of Air Staff and General Spaatz. They agreed that the following three priorities should stand:

- (i) Attacks on oil targets.
- (ii) Attacks on enemy rail and water transportation systems with particular reference to the Ruhr and Saar areas.
- (iii) Attacks on the German Air Force.

Operations of 2nd Tactical Air Force over the Scheldt and Lower Rhine 9 - 16 September

2nd T.A.F.
Daily Log
Sheet No.1503

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

Air operations during the first week in September were on a small scale due not only to the rapid advance and the consequent shortage of targets but because of a spell of bad weather. The latter also precluded the use of airborne troops. Armed reconnaissances took place whenever possible. On 3 September No.84 Group had an eventful day and sank or damaged two large merchant vessels near the Dutch islands. No.2 Group maintained its nightly attacks on enemy communications when the weather permitted but only one large daylight attack was made. That was against a troop concentration at Abbeville and a supply depot at Givet on 1 September.

Better weather returned on 9 September enabling the fighters and fighter-bombers of 2nd Tactical Air Force to fly a large number of sorties during the next five days in pursuit of the enemy. His withdrawal took place north of the cities of Antwerp and Ghent into the islands of Walcheren and North Beveland and the peninsula of South Beveland which dominate the mouth of the Scheldt while other formations passed into Germany using the excellent railway facilities of Holland.

See
Liberation N.W.
Europe Vol.V
Map 40.

The crossing places to Walcheren and South Beveland made vulnerable targets for Allied aircraft. Of these there were four which were particularly important. Crossing the narrow channel which separated the mainland from South Beveland was a causeway carrying both a road and railway line; a similar type of crossing joined Beveland to Walcheren. Communication from the coastline due north of Bruges and Ghent to the islands was by ferry. One was located at Breskens crossing a channel over two miles wide to the port of Flushing on Walcheren Island and the second was about ten miles higher up the estuary at Neuzen opposite the small harbour of Ellewoutsdijk in South Beveland.

Pilots had already been well practised in the art of attacking ferries and river craft on the Seine and they hoped to re-enact those scenes of destruction on the Scheldt. In fact the claims of barges and vehicles destroyed were on a far more moderate scale than at Rouen for various reasons. In the first place the number of enemy troops involved in the crossings was far less, secondly the crossings were more limited than those along the Seine and the flak was as a result more concentrated. Finally the weather conditions were less favourable.

2nd T.A.F.
Daily Log
Sheets No.
1546 - 1551

The peak of the attacks in the Scheldt was reached on 12 September when fighter-bombers of both Groups flew 428 armed reconnaissances around the Dutch Islands. Probably of equal value were their attacks on sidings, troop trains and rail communications in general which extended from the left bank of the Maas as far as Zwolle, well east of the Rhine. Attacks were made along the Lower Rhine and strings of barges were shot up in the reaches between Arnhem, Emmerich and Wesel - an area which was to become well known to pilots during the coming months. A significant feature of these operations was the first sighting of the enemy jet fighter-bomber the Messerschmidt 262 by No.83 Group Spitfires on 9 September. On the following day a Messerschmidt 262 was shot down by an Army A.A. battery behind the British lines. For the time being these aircraft were only used experimentally on a small scale.

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

Medium bombers of No.2 Group were called in to deal with Fifteenth Army troops crossing the Scheldt as fighter-bombers frequently found the flak too intense to undertake low level attacks. The first large scale raid by the Mitchells and Bostons was made on 11 September when 72 aircraft attacked the Breskens ferry during the afternoon from 12,000 - 15,000 feet. Pilots saw large clouds of black smoke and a sheet of flame following upon the attack. For the next two days No.2 Group made large scale attacks on the Scheldt crossings. The heaviest was on the 12th when 144 sorties were flown against the causeways on Walcheren, South Beveland and the ferry at Neuzen. Good results were obtained although thick haze over the area made the identification of some of the targets difficult. Unfortunately the Group's Mosquitoes were unable, because of poor visibility, to maintain their usual harassing tactics

by night and during this period the number of sorties per night never rose higher than 72. Another target area which demanded attention was the railway network in the Metz - Nancy area and a number of missions were flown in response to requests from Twelfth Army Group. By 13 September movement over Holland as a whole appeared to have diminished which suggested that the enemy had succeeded in making his dispositions in that area for the next phase. Activity still continued on the Rhine in the neighbourhood of Emmerich.

Operations to clear the Channel Ports - the assault on Le Havre

While the Second Army was pursuing the enemy across France and Belgium the Canadian Army with I British Corps under command was given the important task of opening up the Channel ports and capturing the V. weapon sites along the coastline. The IIInd Canadian Corps advanced from its bridgehead at Rouen on 31 August with two infantry and two armoured divisions forward. Dieppe, already well known to Canadians by their raid on it in 1942 was quickly captured and armoured troops crossed the Somme on 2 September. Three days later enemy garrisons were cornered in Boulogne and Calais. The Canadians swept up the coast detaching a force to invest Dunkirk and by 9 September they had reached Ostend. The Canadian and the Polish Armoured Divisions then swung inland to take Bruges and Ghent relieving XII British Corps of the responsibility for holding this area. Other mobile elements continued the pursuit as far east as Zeebrugge.

In the meantime 49 Division of I Corps swung left from the Seine into the peninsula of Le Havre and soon was in contact with the outer perimeter of the port defences. The garrison Commander, although cut off, refused to surrender. The 51st Highland Division which had dashed forward from the Rouen bridgehead to avenge its comrades of 1940 at St. Valery en Caux was directed to bear down on Le Havre from the north and elaborate preparations were made for a two divisional assault upon the port (Operation Astonia).

In a few days detailed knowledge about the defences had accumulated both from extensive air reconnaissance and information divulged by a number of deserters. The town itself was in a position completely advantageous to the defenders who numbered about 8,000. On the western and southern sides it was protected not only by the sea and the wide estuary of the Seine but by steep cliffs and an escarpment rising to 300 feet which overlooked the dock yards. From the southeast it was guarded by the valley of the River Lezarde, a tributary of the Seine which had been flooded by the Germans. This valley was dominated by a plateau on its western side. From the north and northeast was the Foret de Montgeon and another high plateau. The enemy had wasted no time in improving these natural defences. Batteries of heavy guns were protected in steel and concrete casemates and infantry well equipped with machine guns and anti-tank artillery were ensconced in concrete pill-boxes. Before them were a series of barbed wire entanglements and minefields; on the northern approach an anti-tank ditch twenty feet wide and ten feet deep stretched from the coastline to the valley of the Lezarde.

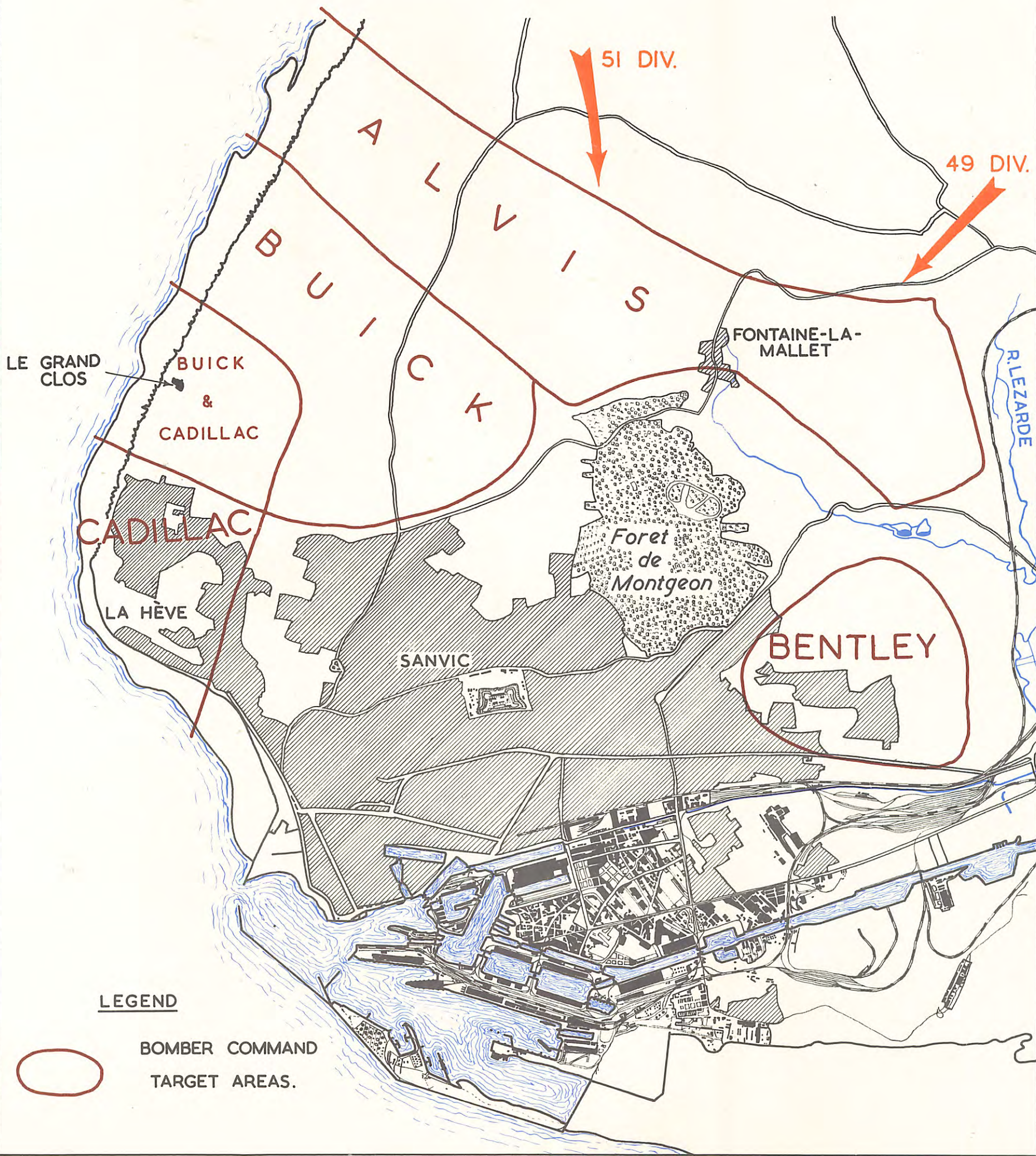
It was obvious that the only direction from which an assault could be made was from the north and I Corps decided to attack from that direction with 49 Division on the left and 51 Division on the right. After several postponements

See Map No.20

W.O.
Narrative of
Operation
Astonia

THE ASSAULT ON LE HAVRE

10-11 SEPT. 1944.



LEGEND



BOMBER COMMAND
TARGET AREAS.

the attack was planned to begin at 1745 hours on 10 September. The first task was to bridge the anti-tank ditch and make a passage through the minefields. The 49th Division was to open the assault by seizing the northern heights advancing afterward to take the southern plateau. The Highlanders were to stage their assault just before midnight, capture the high ground west of the Foret de Montgeon and then silence the batteries in that area. Finally a general advance towards the docks would be made by both divisions.

File
Bomber Cmd.
B.C/S. 30717/14

An operation such as this could not be launched without large scale preparation by aircraft and artillery. Preliminary attacks were therefore to be carried out by medium scale forces of bombers which would grind down the defences and lower the morale of the garrison. A direct radio link between Bomber Command and I Corps was established to simplify planning for the operations. The big attack was to take place over four areas. The first known by the code name Alvis included the northern plateau where the assault would go in and the ground north of the Foret de Montgeon. The second area known as Bentley covered the southern plateau and the third area called Buick was the western escarpment overlooking the docks. On D Day plus one the western area of the town (Cadillac) believed to contain the garrison headquarters was to be bombed in the early hours of the morning. In response to requests from the Army, Bomber Command decided to use bombs with instantaneous nose fuses which would avoid cratering the ground.

Bomber Cmd.
O.R.B. App. A.
Sept. 1944

Preliminary attacks by Bomber Command took place on 5, 6 and 8 September employing forces of just over 300 heavy bombers on each occasion. Weather conditions were far from satisfactory but did not seriously interfere with operations until the 8th when out of a force of 333 bombers only 109 bombed their objectives. On 9 September another attack was mounted but nearly all the bombers had to abandon the operation because visibility was so poor. But of the attacks that were carried out great precision was achieved and the air crews were obviously succeeding in shaking up the enemy.

Ibid

Bombardments were carried out from the Channel by the Monitor H.M.S. Erebus on 5 and 8 September but on both occasions she was hit by the battery at Le Grand Clos just north of the town and had to withdraw to base for repairs. Further naval action was planned to take place on the 10th but the Navy declined to participate unless this battery was destroyed. Early on the morning of 10 September Bomber Command dispatched a small force of 61 aircraft against Le Grand Clos. But when H.M.S. Erebus supported by the battleship H.M.S. Warspite arrived on the scene the enemy guns were still in action: they were eventually silenced by the Warspite's 15 inch guns. Shelling against the town continued until 1600 hours.

See Map No. 20

Bomber Cmd. Ops.
Narrative
No. 900

At that hour the first wave of heavy bombers arrived over Le Havre. There was no more than 3/10ths cloud and visibility was good. Arrangements had already been made with regard to the order of bombing and as the wind was blowing from an easterly direction the first target area to be attacked was the westerly one in order to prevent smoke blowing over the rest of the targets. This was deluged with high explosive for 30 minutes. At 1645 hours the next waves began to attack the northern area continuing for exactly one hour when the ground attack went in. After a pause for one and a half hours the southern plateau and its defences were bombed for 75 minutes. During the entire operation 899 out of 931 aircraft made

successful attacks and 4,880 tons of H.E. were dropped, this amount including the early morning attack on Le Grand Clos.

The troops of 49 Division moved forward in Kangaroos and Crocodiles (armoured carriers) and although the ground was heavy because of recent rain flail tanks and sappers cleared a path through the minefields. Before long a number of strong points soaked by flame throwers were assaulted and captured. The 51st Division completed their first phase ahead of schedule on the following morning and went on to capture their next objectives. Shortly after mid-day 49 Division took the southern plateau and by the evening both divisions had advanced well into the town.

The final phase of Bomber Command's operation (Cadillac) took place at 0730 hours on 11 September and continued for half an hour in which 857 tons of bombs were dropped. Several aiming points were covered by smoke and the Master Bomber decided to call off some of the aircraft. Hard fighting continued on the ground but during the morning of the 12th the garrison commander was captured and enemy resistance came to an end.

Ibid No.901

The part played by No.84 Group was only a minor one. In any case fighter-bombers would have made but little impression on the concrete and steel defences. The Group was also handicapped because on 8 September two of its Typhoon Squadrons had been forced to land in the U.K. after attacking Boulogne and two days later they were still grounded by weather on the far side of the Channel. On 10 September rocket firing Typhoons flew about 80 sorties against pill-boxes and gun positions and made diversionary attacks to distract the attention of the defenders. On the following day a small force attacked strong points in the dockyard area.

No.84 Group
O.R.B.
Sept. 1944

The speed with which this elaborate operation was conducted was largely due to the weighty support of Bomber Command and the excellent co-operation between the services. The confidence of the Army in heavy bombers used in a close support role, which had somewhat diminished since the unhappy incidents of July and August in Normandy, appeared to be fully restored. An inspection of batteries made by No.84 Group three days after the capture of the town revealed that near misses had frequently put guns out of action by the debris thrown up in the explosion. Out of twelve heavy guns all of which were in open emplacements four were badly damaged by air attack and three were temporarily put out of action. Five were damaged by counter-battery fire.

No.84 Group
O.R.B. App.20
of Sept. 1944

Although the Army was well satisfied with the support given by Bomber Command the civilian population of Le Havre was inclined to take a bitter view of what had happened. The heavy attack on 5 September had caused great devastation in the vicinity of the Town Hall and at least 2,000 French people had become casualties. Yet among the German garrison there were only a few killed as their deep underground shelters were proof against the bombs. The raid on the following day demolished another residential area and according to the report of a French witness about 100 people were killed in one shelter alone.

A.M.
File No.37
D. B.Ops.

At the end of August the Germans had issued a proclamation requesting the people to leave the town but the French, aware of the rapid advances that were being made by the Allies and seeing the poor morale of the garrison, thought their liberation would occur within a few days so the majority remained where they were. With one attack following upon

another they believed that their town was to be systematically devastated. The attacks on the 10th and 11th of September directed as they were mainly against the defences on the outskirts of the town, consequently did not cause many casualties to the French.

B.A.U.
Report
No.27

This opinion of the townspeople was still current in October when a mission from the Bombing Analysis Unit of S.H.A.E.F. visited Le Havre. It confirmed that the attack on 5 September had been of no military value but found that the bombing immediately preceding the assault had silenced about twenty per cent of the heavy calibre guns. The most striking damage in Le Havre was in the dockyard area. According to the French the attack on naval installations on the evening and night of 14/15 June by Bomber Command had done more to unnerve the defenders than any following raid(1). Over a thousand marines had been killed and about 80 vessels including a number of E Boats had been sunk during that night. From that time onwards the Germans took to their shelters whenever there was the slightest sign of Allied air activity over the town.

The Reduction of Boulogne and Calais

Operations against the fortresses of Boulogne and Calais did not proceed as swiftly as the combined air, ground and sea attack on Le Havre. The urgency to open up the channel ports was, nevertheless, great because although Le Havre had fallen it had been allocated to U.S. forces and so the British were still without the port they so badly needed. Thus the capture of Boulogne was the next major task for the Canadian Army. In the event of this fortress succumbing quickly the assault against Calais was to be mounted at once. But if the garrison proved to be determined it was to be merely invested and the main strength of the Canadian Army was to be employed in clearing from the Scheldt estuary. The IIInd Canadian Corps was made responsible for ousting the enemy and, with the example of Le Havre before him, the Corps Commander requested the fullest support from Bomber Command. A radio link was set up between the respective Headquarters of IIInd Canadian Corps in France and Bomber Command in the U.K.

Two Infantry Brigades supported by numerous artillery and tanks were detailed to capture Boulogne (Operation Wellhit). The garrison numbered some 8,700 troops, the majority of whom were middle aged men under the command of second-rate officers and had little enthusiasm for the battle. The only youthful element in the perimeter was a number of Luftwaffe flak troops. On the other hand, the defences were as strong and elaborate as those at Le Havre and well equipped with artillery. Full use was made of the high ground which covers Boulogne from the north and from the south. Concrete pill boxes, deep slit trenches and open gun emplacements crowned these heights; wire and minefields covered the approaches to the main defences.

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

Attacks by fighters and fighter bombers of No.84 Group to 'soften' the defences with rockets and bombs began on 6 September and continued daily until the launching of the ground assault. No preliminary attacks were made by Bomber Command but No.2 Group made four separate raids in some strength against the batteries and strong points.

(1) The first attack was in daylight before dusk and the second after dark.

File
B.C./30717/15

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

See Map
No. 21

The plan for employing aircraft of Bomber Command in the main attack was that five areas, of which two were to be bombed twice, should be attacked. The first area included the high ground with the following features, Mont St. Lambert, St. Martin de Boulogne and a position called Marlborough all lying northeast of the town. As soon as the bombing ceased the infantry were to go forward preceded by flail tanks clearing a path through the minefields. After capturing the strong points the troops were to cross the River Liane and force their way into the centre of the town. In this movement they were to be supported by an attack on the southern flank. This was to be preceded by further waves of heavy bombers attacking the fortifications south of the River Liane. The bombing operations were to be completed within three hours of the first attack.

Bomber Cmd.
O.R.B.
App.A
Sept. 1944

D Day was fixed for 17 September - the same day as the Airborne landings at Arnhem and Nijmegen. The first aircraft of a force of 721 bombers appeared over No.1 Target Area at 08.30 hours. Weather conditions were good and the bombing runs were uninterrupted by enemy fighters. The ground assault went in according to plan but the enemy batteries came to life directly the air attacks were over and fire was brought down on the foremost German localities. The Canadian rate of advance at once began to slow down. The only positions which were taken with anything like alacrity were at St. Martin de Boulogne where the infantry reached their objectives within a few hours. The remainder of the bombing attacks were carried out in fairly good visibility but the troops found such difficulty in penetrating the outermost skin that by the time they had reached the principal area of resistance the effects of the attack had worn off. In spite of this, localities which had escaped all bombing held out for a much longer time, some strong points resisting for as long as five days. At the conclusion of Bomber Command's attack 3,356 tons of high explosive had been released over the area.

No.2
O.R.S.
21st Army Group
Report No.16

Ibid

The Army soon found to their cost that a large proportion of the bombs and rockets of the Air Force had been sent down on dummy positions and empty gun emplacements. Investigators discovered after the battle that there were at least 14 dummy positions included in the pinpoint targets and about 12 batteries which had never been located. The struggle to reach the port continued bitterly for the next five days, each area having to be reduced methodically, and crossings over the River Liane were not made until 19 September.

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

Fighter-bomber attacks on 17 September were not on a large scale and in any case suitable targets did not exist. After this date poor weather restricted operations by 2nd T.A.F. and the assault on Calais which was due to begin immediately after the fall of Boulogne claimed the prior attention of No.84 Group. By 21 September troops had cleared the southern side of the river and operations began to subdue the last defended locality of the Fort de la Creche. This was preceded by a strong attack with No.2 Group medium bombers on the 20th and as a result the enemy within the strong point had little heart to withstand further bombing. At the same time other Canadian formations were closing in from the south and the enemy was at last induced to make a complete surrender late that afternoon.

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

The investigation carried out by No.2 Operational Research Section of Twenty First Army Group attributed the slow progress of the attackers to the effects of enemy artillery. This was mainly due to the failure of observation

THE REDUCTION OF BOULOGNE

17TH - 22ND SEPTEMBER 1944.

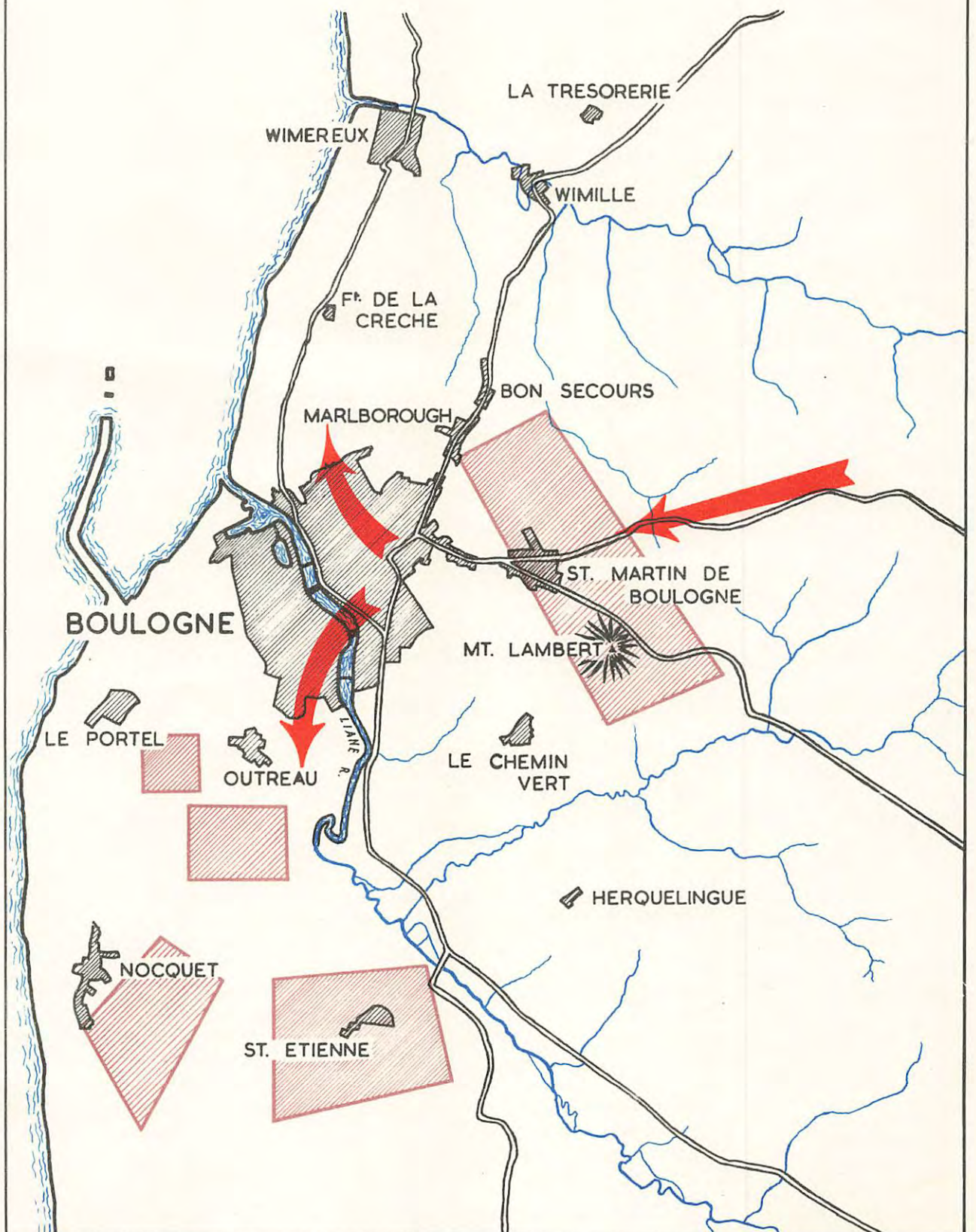
LEGEND



ADVANCE OF CANADIAN ARMY.



HEAVY BOMBER TARGETS.



No.2 O.R.S.
Report No.16

No.84 Group
O.R.B.
App.20
Sept. 1944

posts and reconnaissance aircraft to locate genuine battery positions. The report recommended that reconnaissance flights should be flown at lower altitudes and that attacks should be carried out only on guns which had definitely been located.⁽¹⁾ An officer from No.84 Group toured the area after the capture of the town and discovered that only one of the Bomber Command targets had contained heavy artillery. This was an 88 m.m. battery of six guns. One gun was badly damaged and another made temporarily unserviceable in this battery. The rest of the positions were either unoccupied or else were dummies. Yet, in spite of the evidence that although the bombers did not succeed in destroying guns, there is little doubt that the general effectiveness of the attacks convinced the enemy that to continue resistance was futile. This saved the lives of many Allied soldiers. On the other hand it must be remembered that many French civilians were trapped in the town with the enemy garrison and suffered a high number of casualties.

The Commander-in-Chief, Twenty First Army Group, was prepared to abandon active operations against Calais and Dunkirk in order to allow the Canadians to concentrate on clearing the enemy from the Scheldt estuary. But the Navy believed that it would be impossible for shipping to use Boulogne so long as the coastal batteries in that area were intact. Elaborate preparations for an assault, therefore, began in the first week of September.

At Calais, fortifications of the type similar to Le Havre and Boulogne surrounded the port and the troops forming the garrison were neither young nor enthusiastic, although the Allied reverse at Arnhem raised the spirits of some of them. In addition to the artillery within the town there were a number of long range batteries at Sangatte and Cap Gris Nez, some miles south which had shelled the southern coast of England for four years.

No.2 O.R.S.
Report No.16

Bomber Command was requested by the Army to repeat its mass attacks, but delay on the part of the Canadian troops to reach the starting line for the assault because of minefields and large scale inundations to the south of the town made by the enemy caused a lengthy postponement of the assault. Bomber Command aircraft were thus kept idle when they might have been profitably employed in harassing the German communication system.

No.84 Group
O.R.B.
24 Sept. 1944
File
B.C./30717/15
Ibid
20 Sept. 1944

Bomber Cmd.
O.R.B.
App.A
Sept. 1944

The assault on Calais (Operation Undergo) was to be carried out by two brigades of 3 Canadian Division which were to attack from the high ground southwest of the town. On 19 September the Headquarters of II Canadian Corps requested Bomber Command to bomb the strongpoint area overlooking the axis of advance of the troops who were to lead the assault. This request was made without the knowledge either of Canadian Army Headquarters or of No.84 Group. The mission was carried out on the following day by 646 aircraft which flew low beneath the cloud to make what appeared to be an accurate attack. A further operation was called for on 24 September - the day before the assault - but bad weather closed in over the Channel and only a small number of aircraft were able to press home their attack.

(1) In reply to this, 2nd T.A.F. O.R.S. pointed out that batteries never had been completely neutralised by air attack and that the precision required would entail visual methods being employed. This would be difficult to accomplish because of the smoke and dust and highly dangerous to aircrews because of flak. (Folder 2nd T.A.F./5/21/5 O.R.S.)

On 25 September which was D Day for the assault the weather was still far from perfect but the operation was ordered to go forward and 900 heavy bombers were dispatched to Calais. Five aiming points had been decided upon, beginning with the area (already attacked) south of the town. Although the position was drenched with bombs several pillboxes and other defences were untouched and came to life directly the infantry advanced; they had to be reduced methodically one at a time.

Ibid

No.84 Group
O.R.B.
App.21
Oct. 1944

The part played by 2nd Tactical Air Force up to this date was providing rocket and bomb attacks requested by the Army. These were begun in earnest on 12 September and continued throughout the assault operations. No.2 Group was called in and on 23 September made a powerful attack on strongpoints but as at Boulogne these did not make a great deal of impression on the defences. On the day of the assault No.84 Group was on call after the heavy bombers had completed their task. Only a few Typhoon sorties were flown but according to evidence from Army Officers they scared the enemy into surrender on at least one occasion.

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

No.84 Group
O.R.B.
Sept. 1944

After the 25th the attack on Calais degenerated into what amounted to a series of lengthy and often costly mopping up operations. Bomber Command remained on call and a further three attacks were made from 26-28 September during which 1,256 sorties were flown and 5,568 tons of bombs were unloaded on the defences. A further 3,600 tons were dropped in two attacks on the batteries at Cap Gris Nez which had carried on firing against the English Coast and Allied troops; the enemy capitulated there on 29 September.

Bomber Cmd.
O.R.B.
App.A
Sept. 1944

On 29 September an armistice was arranged with the German commander of Calais in order to evacuate civilians from the town. At the same time negotiations for the surrender of the garrison took place. These broke down, the garrison commander admitting that his position was hopeless, but as it was the Fuehrer's order he could only obey orders and fight on. On the 30th air and ground operations were resumed. A fairly large number of sorties were flown by Typhoons and Spitfires of No.84 Group and combined with the advances made on the ground organised resistance flickered out during the afternoon. After the surrender prisoners testified that the sight of Spitfires flying low over the town searching for targets on that morning did much to make them give up the struggle.

No.84 Group
O.R.B.
Sept. 1944

Ibid
App.21
Oct. 1944

Canadian forces had continued to invest Dunkirk but on 14 September Field Marshal Montgomery decided that the garrison should merely be invested as the opening of the port of Antwerp was then becoming imperative. A Special Service Brigade was entrusted with the task of containing the garrison while the Canadians undertook more important tasks in the Netherlands. Dunkirk remained in the enemy's hands until his surrender in May 1945.

The constant demands for air support made by the Canadians thus tied down Bomber Command throughout the month of September either to carrying out attacks on batteries and fortifications or else awaiting a favourable moment to bomb them. From the Army's point of view this type of support was most effective. A high number of casualties was prevented and artillery that was needed to assist the main advance was spared for that purpose.⁽¹⁾ At the same time the prolonged operations at Boulogne and Calais showed that it was essential to re-organise the methods of reconnaissance to distinguish between hostile and dummy batteries. Enemy artillery kept

(1) Another useful effect was the frequent cutting of land telephone lines by the bombs. This caused additional confusion.

the attackers at bay although the morale of the defenders was weak. In the second place it was essential that the infantry should follow closely upon the dropping of the last bomb otherwise the garrison would recover from the shock of the attack and emerge from shelter to man their defences. Difficulty was also experienced by armoured vehicles in negotiating the large bomb craters that scarred the ground and during all these assault operations there were instances of tanks becoming stuck. At the same time the craters afforded excellent cover to the infantry advancing to attack a strong point. The Army seemed prepared to accept cratering because of its destructive value, although fragmentation bombs were used on one target area at Calais.

From now onwards it was a tendency of the Army to expect heavy bomber support for even minor operations and this attitude met with disapproval from most senior R.A.F. officers. For example, in his despatch, Air Chief Marshal Leigh-Mallory pointed out that, although the lives of many troops were saved, the casualties to French civilians who had to suffer with the trapped garrisons were very high. It was his opinion that Bomber Command would have been more profitably employed in preventing the stabilisation of the enemy front in mid September by carrying out its primary role of attacking industries and transportation targets in Germany.

Air C. in C.'s
Despatch
Paras.304 to 307

Operations by Twelfth Army Group to reach the German frontier

The vigour of the drive made by the British and Canadian Armies during early September was paralleled by the American troops advancing on their right flank. The First U.S. Army wasted no time in pushing forward from its bridgehead at Mantes on the Seine for by 2 September it had reached Tournai on the Belgian frontier. Other troops advancing from south of Paris liberated Charleroi and Mons about the same time. A large pocket of the enemy was formed by this enveloping movement stretching from Mons to the Foret de Compeigne and about 25,000 prisoners were taken by the U.S. troops. General Hodge's forces then swung across South east Belgium with the object of isolating the Ruhr from the south. The Meuse was crossed on 4 September and the city of Liege fell four days later. The area south of Aachen on the German frontier was the next objective. On the 10th the First Army stood before Maastricht and Allied artillery fired into the Reich for the first time.

The Third U.S. Army, having crossed the River Marne at the end of August split into two columns both of which were to converge on the Saar. One, the XII U.S. Corps drove in a southerly direction to Commercy on the River Meuse and the other, the XX U.S. Corps advanced from Rheims on the important cities and fortresses of Verdun and Metz. The XX Corps captured Verdun with little difficulty on 1 September, crossed the Meuse and began to advance on Metz. At the same time XII Corps pressed on towards Nancy. Behind them the Third Army crossed the Meuse in force. By 7 September General Patton's spearheads had probed up to the Moselle where the enemy began to offer more stubborn resistance than hitherto. On 13 September Third Army troops had reached Thionville a few miles to the north of Metz but shortly after this they came to a halt. The enemy was determined to hold on to this area and he withdrew troops from the Italian front to reinforce his weakened Armies in the west. At the same time the Third Army like the other Allied forces had to cope with the formidable problem of maintaining a flow of fuel and ammunition and at

that moment it was impossible for it to undertake offensive operations on a large scale.

The Seventh U.S. Army advancing up the Rhone first made contact with the Third Army on 11 September near Dijon and a column driving north eastwards towards Epinal joined up in force with the right flank of the A.E.F. on 21 September. A front was now formed which stretched from Antwerp along the Albert Canal to a point just east of Liege and from there to Metz. From there the line extended through Epinal to the Swiss frontier. It was hoped that the enemy would put up a stubborn defence in the south as it might prevent their reinforcements reaching the important sector of the lower Rhine.

Air Operations against Brest

While these stirring advances towards the east were taking place the steady battering of the defences of Brest port continued to be a major commitment. Operations to clear this 'fortress' of the enemy began on 25 August when the VIII U.S. Corps, which, as already explained, had been detached by the Third U.S. Army to open up the Brittany ports, began its assault. Three divisions took part in the attack which began shortly after midday. Air support was provided by the IXth Air Force which despatched a large force of medium bombers to attack strongpoints and gun positions and a number of fighter-bombers were available to answer close support calls from the ground. Naval bombardment was provided in the form of the 15" guns of H.M.S. Warspite. During the night of 25/26 August a force of over 300 heavy bombers from Bomber Command dropped 1183 tons of high explosive on eight coastal batteries in and around Brest. Weather conditions were favourable and it was believed that much damage had been done. The air attack continued on the following day and on this occasion VIIIth Air Force Fortresses and Liberators made a heavy attack on the defences.

On the ground the troops did not make much headway. The enemy garrison was composed of tenacious troops with a number of S.S. personnel sprinkled among them to ensure that there was no surrender. They were installed in the usual 'Atlantic Wall' type of fortifications containing concrete pillboxes and heavy guns installed in casemates. At the beginning of September the port was urgently needed by the Allied Expeditionary Force as the entire American force on the continent was still being maintained through Cherbourg.

It will be recalled from the beginning of this chapter that in General Eisenhower's directive of 5 September he laid down that the primary task of the Twelfth Army Group was to capture Brest as quickly as possible. On 1 September the Supreme Commander instructed General Vandenberg (IXth Air Force) that a maximum air effort should be made to support the Brest operation. This order was somewhat qualified on 5 September when the Air Commander in Chief limited the amount of effort to the number of sorties which could be effectively employed against the port's defences. General Vandenberg at this time naturally wanted to unleash the mass of his fighter-bombers against the retreating Germans east of the Seine and he found it irksome to retain so many squadrons on the Cotentin peninsula. There were, however, occasions when he took advantage of a lull in the operations at Brest to divert more fighter-bombers over eastern France.

From 3-6 September a series of fighter and medium bomber attacks were carried out by the IXth Air Force in support of

Bomber Command
Night Raid
Report No.697

VIII Air Force
Summary of Ops.
Aug. 1944

File Adv.
AEAF/24412

Adv. AEAF
ORB p.7.
Sept. 1944

AEAF Daily Int/Ops
Summaries
September 1944

VIII Air Force
Summary of Ops
Sept. 1944

the VIIIth U.S. Corps. Two more large scale operations were undertaken by the VIIIth Air Force against hostile batteries in which 1467 tons of H.E. were dropped alone. But the Army was still unable to force a way into the port area and house to house fighting developed during which strongpoints had to be reduced methodically one at a time. Fighter-bomber missions were constantly requested by the attacking divisions and their efforts against fortified houses were largely successful. Final ground operations began on 14 September and the garrison at last capitulated on the 18th. By this date it was impracticable to have a base on the Atlantic so far from the principal theatre of operations while many weeks were to elapse before the harbour was in a fit state for use.

USAAF
Evaluation
Board Tac Ops
in European
Theatre
pp.113-118

This great expenditure of bombs had done little to ease the progress of the advance into the town and the whole operation had taken three weeks before it was brought to an end. The lessons learned in the air operations against the Channel ports applied equally to Brest. The concrete emplacements were unaffected by heavy bombs and it was only in the dockyard and the centre of the town that severe destruction was caused. It also appears that there was a lack of liaison between VIII U.S. Corps and the IXth Air Force over the planning of air operations. The Army failed to indicate the nature of the targets so that on many occasions the wrong type of bomb was used.

Reduction of IXth Air Force effort

AEAF Daily
Int/Ops
Summary
No. 235

Ibid No. 236

Ibid
No. 241

As both General Eisenhower and General Bradley insisted on making the Brest operation a first priority at the beginning of September, the fighter-bomber cover over the First and Third U.S. Armies was drastically reduced. Nevertheless missions to cover the advance of the Third Army were flown from the Cotentin peninsula over a distance of some 500 miles to the German frontier. The medium bombers were not able to devote themselves to their normal task of disrupting communications and it was not until 10 September that attacks were made on the Moselle bridges where the enemy was forming a line of defence. On the following day strong points in the Siegfried line were attacked by IXth Bomber Command. The 2nd Tactical Air Force, fully occupied at this time with operations against the Channel ports and the impending Airborne operation to secure a bridgehead across the lower Rhine, also required assistance from the IXth Air Force to harass the enemy withdrawal into the Dutch Islands, but this was not given until 16 September when aircraft from IXth Bomber Command attacked the causeway at Walcheren.

Adv. AEAF
ORB pp. 31-33
Sept. 1944

Another factor which delayed the advance of the IXth Air Force east of the Seine was a severe reduction of its transport which occurred at the end of the second week in September. The demand made by Field Marshal Montgomery to the Supreme Commander for an additional 1000 tons of supplies per day of which 50 per cent was to be carried by air transport has already been related. The remainder was to be brought forward in U.S. Army transport thereby immobilising three U.S. divisions. The Chief of Staff, S.H.A.E.F. decided to requisition 660 trucks from the IXth Air Force. At that moment its transport was engaged in moving fighter-bomber squadrons to airfields near Paris. General Vandenberg complained to S.H.A.E.F. that this decision would cause a serious reduction of the IXth Air Force effort at a time when it was required to deliver attacks on the Siegfried line in the south and to support operations on the Lower Rhine in the

north. (1) After General Bedell-Smith and his colleagues at S.H.A.E.F. had discussed the matter on 16 September 160 trucks were retained by the IXth Air Force but the remaining 500 vehicles continued to maintain Twenty One Army Group in its advance to the Rhine.

State of the German Air Force during the retreat

During the early part of September Luftflotte 3 found itself engulfed in the general withdrawal towards Germany. A very temporary halting place was found on airfields in Belgium but by the end of the first week in September squadrons were being established on the airfields round Strasbourg in central Germany and on the plains north of the Ruhr. The Headquarters of Luftflotte 3 which had moved back to Luxemburg at the end of August was compelled to retire to Mayen west of Coblenz on 1 September.

A.H.B. 6
Trans No.VII/89
War Diary
Luftflotte 3
Sept. 1944 p.2

The withdrawal into the Reich inevitably caused much administrative and operational reorganisation. The daily effort of the G.A.F. against the Allied Armies was, for the time being, negligible. There were many problems which the Luftwaffe commanders had to solve. The airfields in northern Germany, originally built as bases for long-range bomber operations against the U.K. were not in a fit state for use and their flak protection was inadequate. Pilots were raw and lacked battle experience, a fact which was proved by the losses suffered by the G.A.F. during the air battles near Falaise at the end of August. As a result of these misfortunes Goering issued an order that German fighters were not to operate in less than squadron strength on the western front.

Ibid p.18

Worst of all was the shortage of fuel. On 5 September the Headquarters of Luftflotte 3 instructed its subordinate Command, Jagdkorps II to economise in the use of fighter aircraft and three days later a further instruction was issued with effect that all air operations must be restricted owing to the 'acute fuel situation'. There seems to be no question that these were merely routine orders for on 8 September out of 323 aircraft available in Jagdkorps II only 56 were able to fly on operations. On 13 September Luftflotte 3 reported to Field Marshal Von Runstedt that it was unable to supply the garrison of Dunkirk by air because of the fuel shortage.

Ibid p.7

Ibid p.17

The German Air Force, did, however, have one new weapon to bring out. This was the jet aircraft - the Messerschmidt 262 - which came into operational use about 9 September. It was a twin-engined monoplane which when used as a fighter had a speed of about 325 miles per hour and a range of 730 miles. A controversy between Luftwaffe officers and the Fuehrer over the employment of the jet fighter had been going on for nearly a year. Hitler wanted to turn it into a fighter-bomber while the Luftwaffe considered that it was better employed as a fighter defending the Reich against the Allied heavy bomber offensive. The Fuehrer's opinion inevitably won the day and the Messerschmidt 262 when it appeared over the Western Front was used as a fighter-bomber to attack troop concentrations and defended localities. The German Air Force decided to use this aircraft on a large scale and on 6 September two Geschwaders from Luftflotte 3 (corresponding to two R.A.F. Groups) were sent back across the Rhine to be converted into

Rise and Fall
of the G.A.F.
prepared by
A.C.A.S. (1)
p.313

A.H.B. 6
Trans. No.VII/89
p.9

(1) He estimated that the IXth Air Force would be only able to fly 320 sorties per day during the 10 days following 15 September.

Ibid
pp.14,17

jet fighter units. At the moment the jet fighter was still undergoing teething troubles with regard to its equipment while the total number of Messerschmidt 262's operational in Luftflotte 3 on 13 September was not more than seven.

Ibid p.4

On 3 September new zones for Luftwaffe operations in the west were established. Luftflotte Reich was to be responsible for defensive operations over the central and southern regions of Germany while Luftflotte 3 was to operate west of the Rhine and over the Netherlands. The operational strength of Luftflotte 3 was still low but as the month wore on it began to increase in size. On 2 September, for example, there were no more than 94 day fighters operational; by the 12th this number had been increased to 151 and by 17 September there were 297 operational day-fighters. Fliegerkorps IX, the long range bomber force attached to Luftflotte 3, had been transferred by this date to Germany where it was converted into training units.

Ibid pp.2,15
and 21

The tasks of the Luftwaffe in the west were in general to maintain armed reconnaissances over the battle area while a few ground-attack missions were flown against Allied troop concentrations at night. Transport aircraft undertook on infrequent occasions to fly in food supplies to Brest, Dunkirk and the other beleaguered garrisons. Requests for close support to the Army were hence forward made direct to the Commander-in-Chief West (Rundstedt). This change in procedure shows how carefully the ailing strength of the Luftwaffe had to be husbanded.

Ibid p.13

CHAPTER 7

THE ADVANCE TO THE MEUSE AND THE RHINE

Joint Air-Ground Operations

Events preceding Operation Market-Garden

The Second Army continued to advance from the line Brussels - Antwerp without a halt. In its path lay the two obstacles of the Albert and Meuse-Escaut Canals which roughly encircle the town of Bourg-Leopold about 36 miles east of Antwerp. The enemy was determined to defend both these waterways resolutely. In the van 11th Armoured Division headed towards Turnhout and the Guards Armoured Division made for Eindhoven. The Guards secured a footing across the Albert Canal on 8 September between Gheel and Beerlinghen and, after some heavy fighting gained the north bank of the other Canal at the De Groot bridge about nine miles south of Eindhoven. On their left 50th Division crossed the Albert Canal near Gheel on the same day. The 11th Armoured Division met strong opposition and was then ordered to side-step eastwards and protect the right flank of the column trying to reach Eindhoven.

At the same time the Canadian Army began to relieve XII Corps which formed the left flank of Second Army southwest of Antwerp. This Corps took up positions west of the De Groot bridge and on 13 September crossed the Escaut Canal south of Rethy. Enemy opposition was vigorous throughout all these operations. A pause then took place all along the front whilst the administrative services of Second Army built up supply dumps and brought forward bridging material to enable the fighting troops to spring forward across the Rhine.

On 13 September General Eisenhower issued a new directive to his Army Group Commanders. He re-affirmed his belief that a deep-water port at Antwerp or Rotterdam must be opened before the all-out advance into Germany could take place. As he said 'Our port position to-day is such that any stretch of a week or ten days of bad Channel weather would paralyze our activities and make the maintenance of our forces even in defensive roles exceedingly difficult.' Furthermore the railway system on the Continent was in a far from perfect condition as it was still recovering from the effects of the methodical Allied bombing before and after D-Day, 6 June.

SCAF 81
13 Sept. 44

The general plan of operations was similar to the directive of 4 September with the exception that more emphasis was given to the importance of the thrust across the Rhine north of the Ruhr. This was to be undertaken by the Northern Group of Armies together with the First U.S. Army which would envelop the southern face of the Ruhr after crossing the Rhine in the area of Bonn and Cologne. The First Allied Airborne Army was to assist the attack in the north seizing crossings over the lower Rhine. Additional maintenance facilities, described in the last chapter, were to give added impetus to the advance.

The remaining Armies of the Central Group were to play a static role. They were to hold the bridgeheads already won east of the Moselle and so distract the enemy's attention from the north. Secondly they were to assist as far as possible the First U.S. Army's operations. Finally, after

crossings over the lower Rhine had been accomplished they were to advance through the Saar and seize bridgeheads across the upper reaches of the Rhine.

Field Marshal Montgomery issued his orders to Twenty First Army Group on the following day. The Second Army was to make a vigorous thrust to the north accompanied by landings of three airborne divisions which were to seize crossings over the lower Rhine, Meuse and Waal. It was then to establish itself in the low-lying country south of the Zuider Zee with bridgeheads across the River Ijssel (a tributary of the Rhine) from where it could debouch into the northern plains of Germany. The earliest possible date was chosen for the airborne landings. This was to be Sunday, 17 September.

21 Army Group
Directive.
M525
14 Sept. 1944

The task for the Canadian Army was no less important, for having completed the capture of Boulogne and Calais it was to undertake the clearance of the Scheldt estuary. The opening of the port of Antwerp depended entirely upon the success of this operation. The island of Walcheren, which effectively covered the mouth of the estuary was the keypoint in the enemy's defence system and its reduction was essential to the Allied success. The Canadians were then to advance on Utrecht and Rotterdam and subsequently to take their place on the left of Second Army as it moved across Germany.

Plans for Operation Market-Garden

The axis of advance chosen by Field Marshal Montgomery was not entirely satisfactory. One disadvantage was that the Second Army would arrive too far north of its first objective - the Ruhr. In the second place the ground which the Army would cover did not lend itself to a swift advance. There were four wide waterways which had to be crossed. Farthest north was the Lower Rhine where there were three bridges at Arnhem and a few miles to the south was the River Waal with both road and railway bridges at Nijmegen. Next was the River Maas crossed by a road bridge at Grave. Between that point and the Allied bridgehead over the Meuse-Escout Canal there were the Zuid Willemsvaart and Wilhemina Canals, both crossing the Eindhoven - Nijmegen road. But there were a number of advantages to this scheme: the chances of gaining surprise were estimated to be far greater: the defences of the Siegfried Line would be outflanked and finally the airborne forces based in the United Kingdom would be within closer range of the landing dropping zones.

Planning for Operation Market - the code name for the airborne landings began on the evening of 10 September and was carried out by the First Allied Airborne Army under Lieutenant General Brereton in England. The 1st British Airborne Corps commanded by Lieutenant General Browning was to carry out the operation. Under his command were the 1st British Airborne Division, the 82nd and 101st U.S. Airborne Divisions and the 1st Polish Independent Parachute Brigade, the latter which was to operate with the British. Troop carrying was to be undertaken by Nos. 38 and 46 Groups R.A.F. and the U.S. IXth Troop Carrier Command while A.E.A.F. together with Bomber Command, the VIIIth U.S. Air Force and Coastal Command were to carry out supporting operations.

A.H.B.1.
The History of
Airborne Forces
Chap. 8
pp. 151 - 2

The principal feature of the airborne plan was the capture of each of the major river crossings. The airborne troops would thus lay a 'carpet', as Field Marshal Montgomery termed it, along which the ground forces would pass into

Holland. The 1st British Airborne Division was given the most difficult task - that of capturing and holding the bridges at Arnhem. The 82nd U.S. Airborne Division was to seize the bridges across the Waal at Nijmegen and the Maas at Grave and secondly was to dominate the high ground immediately west of Nijmegen around the village of Groesbeek. The 101st U.S. Airborne Division was responsible for holding the bridges across the two canals between Eindhoven and Grave. In the Arnhem area the initial landings were to be backed up by an American engineer battalion which, together with a light anti-aircraft battery, would build and protect landing strips. Then, provided that all went according to plan, the 52nd (Lowland Division) was to be landed at Arnhem in Dakotas.

It was most unfortunate that the available intelligence about the German divisions in the Arnhem area was far from accurate, although it purported to come from reliable Dutch sources. At the time of the landings, the Army estimated that there might be 15,000 troops in the Lower Rhine area, over half of which might be expected to be found in the neighbourhood of Arnhem, which was a recognised training ground for Panzer formations. Events were to prove that this estimate of enemy strength was sadly in error.

Ibid p.152

A limited number of tactical air reconnaissances were carried out over the proposed airborne landing zones but they appear to have yielded little, if any, useful information about the movements of the enemy. The Reconnaissance Wing operating with No.83 Group was somewhat hampered during this period by being unable to fly from advanced landing grounds and only one squadron was sent forward and located in the forward area (at Brussels/Evere). The remainder of the wing remained south of the Seine at Avrilly, about 60 miles from Paris. On the other hand the Reconnaissance Wing of No.84 Group was stationed near St. Omer and was well within range of the Lower Rhine. Another factor which prevented good reconnaissance was the weather which, during the week before the airborne landings was often misty causing a number of reconnaissance missions to be abandoned. Lastly, the enemy exploited to the utmost his ability to camouflage himself and he was fortunate in being able to conceal his movements in the well wooded countryside around Arnhem. The other reconnaissance squadrons of 2nd Tactical Air Force at this time were active over the mouth of the Scheldt, along the Lower Rhine, while further north a search was being made for rocket launching sites on the Island of Schouwen.

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

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

The duties of the two squadrons detailed to provide information for the Second British Army were as follows. One squadron operating from Brussels carried out tactical reconnaissances over the roads north of Antwerp and reported on the state of the bridges over the numerous canals and rivers from Turnhout to the banks of the river Maas. Tactical reconnaissances were also made over the region of Eindhoven. Back at Avrilly, a Mustang squadron was despatched to cover the neighbourhood of Arnhem on 12, 15 and 16 September. The second of these missions had to be abandoned because of poor visibility, but on the other two occasions pilots reported that they had observed no movement in the area. No more than eight Mustangs were employed for the missions over Arnhem and it is felt that in view of the great importance of securing information of enemy dispositions around the proposed dropping/landing zones a greater effort should surely have been made.

No.414 Squadron
O.R.B.
Sept. 1944

No.430 Squadron
O.R.B.
Sept. 1944

As there were insufficient aircraft to carry in an entire force on one day the lifts were spread over a period of three days. The plans for the air lift on 17 September (D Day) were briefly as follows.(1) A parachute brigade of First Airborne Division carried by aircraft of the IXth U.S. Troop Carrier Command and two thirds of the air landing brigade towed by aircraft of Nos.38 and 46 Groups were to drop in two dropping and four landing zones to the west of Arnhem. In the U.S. dropping/landing zones, three Regimental Combat teams were to be dropped or landed by the IXth U.S. Troop Carrier Command. The Headquarters 1st British Airborne Corps was to be landed in the Nijmegen area. The entire operation was to take place in the hours of daylight.

A.H.B.1
History of
Airborne Forces
Pp.151 and 152

On the second day (D + 1) the remainder of 1st Airborne Division was to be flown in in company with more groups of the U.S. Airborne Divisions. The landings were to be concluded on the third day (D + 2) when the Independent Polish Parachute Brigade was to be dropped south of the Lower Rhine at Arnhem; final detachments of U.S. glider troops were to arrive in the southern sectors. In addition Nos.38 and 46 Groups were to stage a large supply drop at Arnhem.

The planners of the operation found difficulty in selecting suitable areas for the 1st Airborne Division landings. West of the town on the northern bank of the river there was heathland rising to a height of about 100 feet above sea level with dry and sandy soil covered by large stretches of thick pine woods. The wide clearings were ideal for parachute and glider troops. On the south bank of the river low-lying marshy ground extended up to the Arnhem railway bridge. It was intersected by ditches and extremely liable to flooding if the waters of the Rhine should rise. These factors led to the choice of the main dropping/landing zones on the north bank although aerial reconnaissance showed that a number of troops were in the area well protected by flak. But although these assembly areas appeared to be the most suitable, the airborne troops were placed at five to eight miles distance from their objective - the Arnhem bridges and the country lying in between, although good for concentrating scattered formations, was just as ideal for the purposes of the enemy defence.

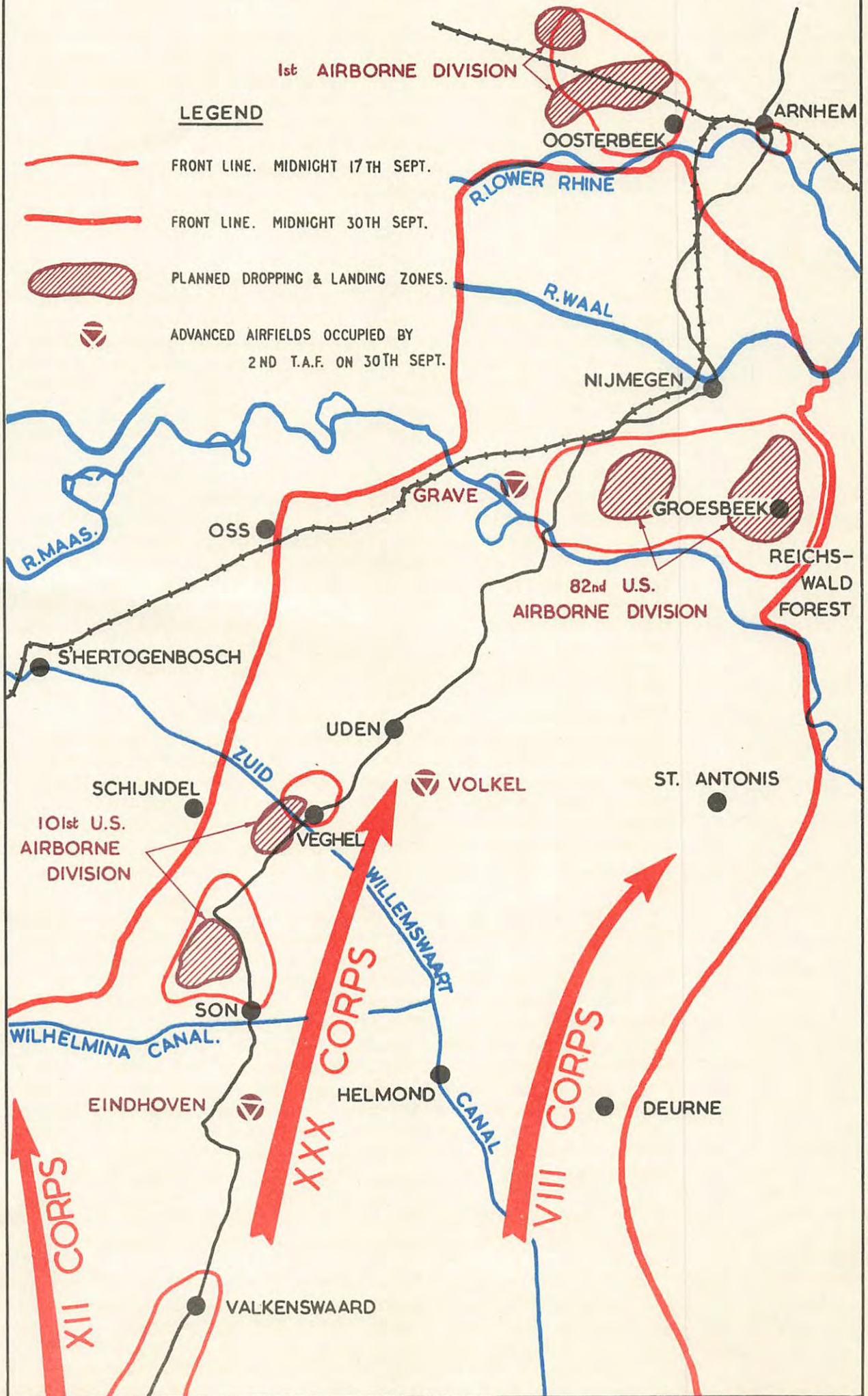
Ibid
Pp.151 - 2

The advance by Second Army to link up with the paratroops was called Operation Garden and XXX Corps was to play the leading role. Once the paratroops had begun to land the Guards Armoured Division was to advance towards them from the line of the Meuse-Escaut Canal with two infantry divisions following up behind. The principal task of the latter troops was to construct bridges and hold the river banks in the event of the key bridges being blown by the enemy. On the right flank of the Eindhoven-Nijmegen corridor VIII Corps was to give protection and XII Corps was to cover the left flank. All this regrouping was carried out at great speed and large dumps of bridging material were assembled for the advance across the canal intersected stretches of southern Holland.

Plans for air support to Operation Market were discussed first of all on 12 September at A.E.A.F. Rear Headquarters in

(1) A more detailed account of the air lift together with the Flight Plan, Routes, the Order of Battle, Navigational Aids etc., will be found in A.H.B.1 Monograph "The History of Airborne Forces, Chapter 8".

THE ADVANCE TO THE RHINE AND MEUSE.



File
AEAF/T.S.
22650

England and a broad outline of the tasks to be carried out by the Air Forces was drawn up. A further conference was held at the same place on the 15th which was attended by representatives from Air Defence, Great Britain, Bomber and Coastal Commands and the VIIIth and IXth U.S. Air Forces. Yet no one from the headquarters of the 2nd Tactical Air Force, in whose area the operation was to take place, was present although a member had attended the first meeting.(1)

After the conference, details of the air support plan became known. On D day minus one Bomber Command was to attack Luftwaffe day fighter airfields and flak positions. On D Day the VIIIth Fighter Command and Air Defence Great Britain were to attack all the known flak positions along the route taken by the airborne streams before and during the operation. The VIIIth Air Force was also to provide cover over the route during the flight to and from the dropping zones. A high proportion of this effort was to be allotted to the north eastern area. No.2 Group was to attack enemy barracks in Arnhem and Ede (a few miles to the north of Arnhem): these attacks were to end half an hour before the arrival of the paratroops. After the landings the IXth Air Force was to maintain a fighter 'umbrella' over the landing areas by day and Air Defence Great Britain was to cover them by night. During D Day 2nd Tactical Air Force was to carry out armed reconnaissances over the battle area. Coastal Command was to carry out diversionary operations along the enemy-occupied coastline during the day and finally Bomber Command was to drop dummy parachutists along the Rhine east of Arnhem during the night following the first landings.

By the evening of 16 September all the plans for Market were complete and the aircrews involved in the operation had been briefed. As the weather forecast was good Lieutenant General Brereton ordered that the landings in Holland should begin on the next day.

Air Support to Operation Market-Garden 16/17-26 September(2)

Bomber Cmd.
O.R.B.
App.A.
Sept. 1944

A.H.B.6
Trans. No.VII/89
p. 21

The air operations in support of the initial landings went according to plan. On the night 16/17 September a force of 223 heavy bombers of Bomber Command attacked the airfields at Leeuwarden and Steenwijk-Havelte in eastern Holland and Hopsten and Rheine in north-west Germany. From the account of Luftflotte 3 it appears that most damage was caused at Rheine where the airfield was put out of action for the next 24 hours. A smaller force of bombers attacked flak positions at the Moerdijk bridge which crosses the Mass near its mouth.

On 17 September the total effort made by the Allied Air Forces was second only to that made on D-Day, 6 June and some 4,500 sorties were flown by bombers, fighter and transport aircraft. During the morning Liberators and Fortresses

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- (1) A signal from A.E.A.F. Rear was, however, sent to 2nd T.A.F. requesting a representative to attend the conference on 15 Sept. (AEAF/T.S. 22650 Encl. 4A).
 - (2) The following section is a survey of air operations carried out by the Strategic and Tactical Air Forces in support of the operations in southern Holland and the enemy's reaction to them. Part II of this chapter has been taken from R.A.F. Monograph 'History of Airborne Forces' and describes in detail the Arnhem operation.

VIIIth Air Force
Monthly Summary
of Ops. Sept. 1944

The effectiveness of
3rd phase Tactical
Air Ops. in European
Theatre p. 152 Bomber
Cmd. O.R.B. App.A
Sept. 1944

of the VIIIth Air Force prepared the way for the troop-carrier aircraft by bombing 117 flak positions along the route to the landing-dropping zones. A small force attacked the airfield at Eindhoven. Results were unsatisfactory as it was reckoned that only 43 gun positions were seriously affected. At the same time Bomber Command dispatched a small force to attack coastal batteries on Walcheren. Good results were achieved. These were the first of a series of heavy bomber attacks which were made intermittently until the end of October.

The troop-carrier aircraft began to take off from their bases in England about 1030 hours and throughout their journey to the landing-dropping zones were strongly protected by the fighters and fighter-bombers of Air Defence Great Britain, the VIIIth Fighter Command and the IXth Air Force. The British airborne force landed intact but IXth Troop Carrier Command lost 35 aircraft and 13 gliders to flak. The fighter escort carried out their task uneventfully as the enemy did not appear in any great numbers. Luftflotte 3 had 150 aircraft available to oppose the landings but only 75 were actually dispatched to the Arnhem-Nijmegen area. According to the war diary of Luftflotte 3 approaching bad weather kept the remainder on the ground. No.83 Group dispatched 107 Typhoons to strafe gun positions in the Arnhem area just before the airborne echelons arrived and pilots claimed to have put three guns out of action. While fighters and fighter-bombers were fully employed 115 Mosquitoes, Bostons and Mitchells made a series of attacks on Army barracks at Arnhem, Nijmegen and Ede to dislocate the enemy's preparations for a counter-attack. At Arnhem large fires arose but elsewhere visibility was so poor that no results were seen.

During the landings which took place from 1300 to 1400 hours 2nd Tactical Air Force attacked railway traffic in north-western Holland and a large force of Spitfires and Mustangs patrolled over Arnhem and Nijmegen. Pilots claimed to have spotted 56 enemy aircraft but these were unable to pierce the Allied fighter ring. Further south No.83 Group provided valuable support to the Guards Armoured Division which began to advance shortly after the first parachute drops. The enemy dug in astride the road to Eindhoven made unexpectedly stubborn resistance and 116 Typhoon sorties were flown against their gun positions and defended localities. As a result of the combined ground and air effort the Guards reached the village of Valkenswaard, about five miles south of Eindhoven, by night fall. The Commander of XXXth Corps signalled his gratitude to No.83 Group for its part in the days work.

The last air operation in support of the initial landings was made shortly after dusk when Bomber Command Lancasters dropped dummy paratroops in the region of Emmerich. At the end of the day the total effort made by each Air Force was as follows:

| | | |
|---------------------------|--------------|----------|
| Bomber Command | 172 | sorties |
| VIIIth Air Force Bombers | 863 | " |
| VIIIth Air Force Fighters | 737 | " |
| The IXth Air Force | 178 | " |
| Air Defence Great Britain | 438 | " |
| 2nd T.A.F. | 550 | " |
| Coastal Command | 29 | " |
| Total | 2,967 | " |

A.H.B.6
Trans. No.VII/89
p. 20

2nd T.A.F.
Daily Log
Sheet No. 1590

Ibid Sheet
No.1599 :

Ibid and Sheets
No.1588 - 1595

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

Bomber Cmd.
O.R.B. App.A
Sept. 1944

See Chap. 6

The number of transport aircraft which took part amounted to 1,534 British - U.S. troop-carrying and tug aircraft and 500 gliders. It should also be borne in mind that on the same day a major air operation was undertaken against the defences of Boulogne in which a large force from Bomber Command and a number of fighter-bombers from 2nd Tactical Air Force took part. The latter Air Force was also engaged in operations round Antwerp and Walcheren.

2nd T.A.F.
Daily Log
Sheet No. 1602

On the following day the position of the British airborne troops at Arnhem had already become insecure and in the Nijmegen area enemy counter attacks developed from the Reichswald Forest where the troops could form up under cover. Shortly after the U.S. glider landings there, Typhoons of 2nd Tactical Air Force were called in to silence batteries in the area between the Waal and the Rhine. They also had been instructed to break up a counter attack developing against the 82nd U.S. Airborne Division east of Groesbeek but the Typhoon pilots were unable to find any signs of enemy activity and looked elsewhere for a target. Meanwhile to the south 101st U.S. Airborne Division had captured Eindhoven and the Guards linked up with them on the same evening. During the afternoon a force of VIIIth Air Force heavy bombers dropped supplies to the U.S. Airborne Divisions and a total of 246 aircraft accomplished their mission successfully.

It should be noted here that 2nd Tactical Air Force was not able to give the maximum amount of support to the airborne troops, because in complying with the air plan it was not permitted to operate over the landing-dropping zone areas while troop-carrier aircraft and gliders were in the vicinity. Thus opportunities to strike at the enemy were missed especially when poor weather delayed the arrival of the troop-carrier formations.

A.H.B.6
Trans. No.
VII/89 p. 22

On 18 September the enemy made his biggest air effort to thwart the landings. Over 300 sorties were flown, these consisting of a few low level attacks on landing-dropping zones by fighter-bombers while the remainder were attempts to break up the troop-carrier aircraft and glider columns. The Allied fighter screen was too powerful for many of the hostile fighters to break through and the diarist of Luftflotte 3 was forced to admit this fact in the course of his report on the day's activities.

2nd T.A.F.
Daily Log
Sheets No.
1606-1607

A.E.A.F. Daily
Int/Ops.
Summary No. 244

A.H.B.6 Trans.
No. VII/89
p. 23

On 19 September the bad weather was a determining factor in the battle and both Allied and enemy air activity was on a very small scale. The 2nd Tactical Air Force, for example, only made 102 sorties of which 59 were in support of Market; the IXth Air Force dispatched 139 aircraft to the Arnhem-Nijmegen area but out of this number 115 were abortive. The enemy air effort dropped from 300 sorties made on the previous day to 200 sorties. More serious was the fact that the glider and parachute troops were unable to be brought in to reinforce their comrades at Arnhem and Nijmegen. In the latter sector this accounted for the failure of 82nd U.S. Airborne Division to capture the vital Nijmegen bridge. The Guards Armoured Division which had arrived in Nijmegen that day were in time to take part in the attack. On the next day the bridge was captured in a brilliant operation by the two divisions. The U.S. Airborne troops, after being instructed in the use of the Guard's assault boats, paddled their way across the Waal and made for the northern approach of the bridge. On this side there was nothing to afford them cover but they gained their objective

and hoisted the U.S. flag, whereupon the Guard's tanks charged the southern approaches and after some fierce hand to hand encounters joined up with the Americans on the far side.

In the meantime the position at Arnhem had become increasingly serious. The party which held the northern approach of the bridge was dwindling in size and no supplies were reaching it; the remainder of the division was trying to concentrate on the west side of the town. On the north bank of the Waal the Guards were making little headway against determined enemy troops who held the southern approach to the Lower Rhine bridges.

On 20 September the support of ground operations by 2nd Tactical Air Force was again on a small scale and only 40 Typhoon sorties were flown in the Arnhem - Nijmegen sector when the troop-carrier aircraft were not operating. Another dangerous threat came from south of Nijmegen. The enemy was making vigorous counter attacks from the area of Schijndel towards the vulnerable bridges over the Zuid Willemsvaart and Wilhemina Canals. Troops of XXXth Corps and 101st U.S. Airborne Division made strenuous efforts to clear the area. On 22 September the narrow corridor between Eindhoven and the River Waal, which formed the solitary line of communication to the Allied troops north of the Maas, was cut. A brigade from the Guards Armoured Division was at once dispatched to the threatened area from Nijmegen and with other troops of XXXth Corps advancing northwards pinched out the enemy astride the road. During this operation 2nd Tactical Air Force provided valuable support and 115 sorties were flown by Typhoons in the area south of S'Hertogenbosch and Uden against gun positions, tanks and troop movement. They also flew patrols over the Waal and Maas bridges. On the next day the road was cleared, but only temporarily and the line of communication was not completely secure until 25 September.

The weather improved on 23 September and the largest airlift since the 18th took place. The bulk of the Polish Parachute Brigade was dropped on the south bank of the Rhine and the Glider Regiment of 82nd U.S. Airborne Division was landed at Nijmegen. A resupply mission was flown to Arnhem but the men of 1st Airborne Division were compelled to watch their rations being dropped into the enemy's lines. Only a few close support sorties were flown by 2nd Tactical Air Force around Arnhem. After seven days of bitter fighting in the Arnhem bridgehead the situation for these troops seemed to be hopeless. The gallant party holding out at the Arnhem bridge had been overcome on 21 September and the remainder were hemmed into a small perimeter west of the town. During the night of 23/24 September a number of Polish paratroops were ferried across to the northern bank but they failed to contact 1st Airborne Division. The 43rd British Division which had reinforced the Guards across the Waal were ordered to make every effort possible to secure a crossing over the Lower Rhine but they encountered strong enemy battle groups equipped with anti-tank weapons astride the road to the river.

The main air cover during the period from the initial landings to 23 September was given by Air Defence Great Britain and VIIIth U.S. Fighter Command. The latter flew sorties over a wide area of north-west Germany. It was most active on the 19th (463 sorties) the 20th (645 sorties) and 23 September (499 sorties). Claims were made for a large number of enemy aircraft shot down but German records do not substantiate them. There were occasions during the bad weather when enemy fighters were able to slip through the

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screen and attack the vulnerable transport aircraft. This happened for example on 21 September but usually the Luftwaffe's attempts to shoot down troop-carriers and gliders were frustrated. Operations by IXth Air Force in this battle area were on a very small scale. Squadrons were moving to airfields east of the Seine and those that were already established behind the front line had to provide cover to the First U.S. Army in the Aachen area and the Third U.S. Army which was trying to break through to Metz.

2nd T.A.F.
O.R.B. Air Staff
Apps. No.84
et seq.

In view of the powerful enemy reinforcements being rushed into the area between Arnhem and Eindhoven 2nd Tactical Air Force was instructed to make pre-arranged attacks on the elaborate railway system in southern Holland and the network of lines on the German frontier particularly around Goch and Cleve.⁽¹⁾ These cuts by fighter bombers begun on 24 September could only be of a very temporary nature but it was thought that at least they might delay the arrival of enemy reinforcements in the threatened area. For the following week or so this type of mission was the principal contribution of 2nd Tactical Air Force in support of the Army. It appears from enemy records that Rundstedt and Model were constantly demanding reinforcements during this period and the dislocation of railways west of the Rhine delayed their arrival on at least one occasion.

A.H.B.6
Trans. No.VII/73
p.75

On 21 September Air Commodore Darval, the Air Officer Commanding No.46 Group decided to visit the battlefield and see what the situation was for himself as so little accurate information had reached the U.K. As a result of visits to Air Marshal Coningham and his Senior Air Staff Officer an airfield was placed at No.46 Group's disposal at Brussels and on 24 September a number of aircraft flew in supplies from there to the Arnhem - Nijmegen sectors. The last resupply mission to the airborne troops was flown from Brussels on the following day.

IXth T.C.C.
Air Invasion
of Holland
Annex 6

Some reference should be made here to the 1st British Airborne Corps Report on Arnhem which put on record the opinion that it would have been possible to make airstrips for fighter-bombers and transport aircraft respectively. On the other hand the Senior Air Staff Officer of 2nd Tactical Air Force had protested that the operational efficiency of this force was being impaired by transport aircraft using advanced landing grounds.⁽²⁾ In view of the resurgence of the Luftwaffe at the end of September and the need to give close air support to the Army his argument appears to be well justified. Another factor was that there then were only two airfields with concrete runways at Brussels and Lille and they were essential for operations in the wet weather when ordinary landing strips would become bogged.

Minutes
97th Air Cmdrs.
Meeting

On the morning of 25 September Field Marshal Montgomery decided to withdraw 1st Airborne Division from Arnhem. The

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- (1) Up to this date Twenty First Army Group had requested that railway communications should be kept intact because of the rapid advances being made on the ground. Twelfth Army Group, on the other hand, demanded rail interdiction on several occasions. (96th Air Cmdrs. Meeting para. 6 and A.E.A.F. Staff Conference para. 5 20 Sept. 1944 - File TLM/F/S34.
 - (2) Dakotas of No.46 Group had been flying in supplies to the Brussels airfields during the week before operation Market Garden.

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enemy then held the northern bank of the Lower Rhine in strength and it was obvious that in order to make a successful crossing of this river a major operation would be required. As the airborne troops waited for night-fall inside their narrow perimeter No.2 Group made a strong attack against artillery and mortar positions which had been harassing them from north of Arnhem. Parties of 43rd Division in the meantime had crossed the Lower Rhine and that night covered the battle-weary airborne troops as they withdrew across the river in assault boats.

2nd T.A.F.
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Sheets No.
1653 - 1660

Further attacks against rail communications to disrupt the arrival of reinforcements west of the Rhine were carried out by 2nd Tactical Air Force on 26 September; fighter bombers made rail cuts around Krefeld, Venlo, Wesel, and Goch and mediums of No.2 Group attacked bridges and road junctions at Cleve. A large fighter screen was also put up over the Waal and the Rhine.

With the link-up of 1st Airborne Division and Second Army Operation Market was concluded. The part played by the Tactical and Strategic Air Forces was considerable bearing in mind the other important commitments at Calais, Boulogne and Brest and the bad weather conditions which persisted throughout the battle. Below is a table showing the daily number of sorties flown by A.E.A.F. R.A.F. Bomber Command and the fighters and heavy bombers of the VIIIth U.S. Air Force in support of Operation Market-Garden from 16/17 - 26 September. The types of task included are fighter cover and escort, close support and armed reconnaissance in the vicinity of the battle area.

| <u>Date</u> | <u>2nd TAF</u> | <u>ADGB</u> | <u>IXth A.F.</u> | <u>Bomber Cmd.</u> | <u>VIIIth AF</u> | <u>VIIIth F.C.</u> | <u>Total per day</u> |
|-------------|--------------------|-------------|----------------------|------------------------|----------------------|------------------------|------------------------------|
| 16/17 Sept. | | | | 282 | | | 282 |
| 17 Sept. | 550 | 438 | 178 | 172 | 863 | 737 | 2,938 |
| 18 " | 209 | 241 | - | - | 252 | 582 | 1,284 |
| 19 " | 59 | 125 | 139 | - | - | 463 | 786 |
| 20 " | 215 | 243 | 45 | - | - | 645 | 1,148 |
| 21 " | 308 | 123 | - | - | - | 70 | 501 |
| 22 " | 459 | - | - | - | - | 77 | 536 |
| 23 " | 165 | 237 | - | - | - | 499 | 901 |
| 24 " | 414 | - | - | - | - | - | 414 |
| 25 " | 477 | 120 | - | - | - | - | 597 |
| 26 " | 691 | 275 | - | - | - | 258 | 1,224 |

The defence of the Nijmegen bridgehead

Although the north bank of the Lower Rhine had been lost, the Allies still held a fairly wide bridgehead north of the Waal and the next task was to consolidate this area. In the meantime the enemy commanders were in a far from optimistic mood. Field Marshal Model (Army Group B) had shown considerable anxiety over the large scale airborne landings which took place on 23 September to reinforce the divisions at Arnhem and Nijmegen, and in a report to his immediate superior Rundstedt, confessed that the situation on his northern flank had grown steadily worse since the beginning of the airborne operations on the 17th. Moreover these landings could be continued 'at any time'. He stressed the need for reinforcements of fresh infantry, Panzer troops and ammunition. On 27 September in a further report on the situation Model gave as reasons for the failure of his Army Group, the Allie's 'unlimited' superiority

A.H.B.6
Trans. No.
VII/73
pp. 70-71

Ibid p. 72

in the air and in artillery and tanks while the Germans for their part lacked sufficient reserves to make decisive counter attacks.⁽¹⁾ He fully realised the threat which the Nijmegen bridgehead constituted to north-west Germany, in particular the Ruhr, and for that reason saw the necessity both to hold on to Arnhem and to launch counter attacks west of the Meuse. But he pointed out that this could not be accomplished unless reinforcements were quickly brought up from Germany or from other sectors of the western front.

A.H.B.6
Trans. No.
VII/89
pp. 31 - 33

While the enemy ground forces tried to cut the Eindhoven-Nijmegen corridor the Luftwaffe was directed to destroy the bridges at Nijmegen. Their biggest attack was on 26/27 and on 27 September when a large force consisting of fighter-bombers, a few J.U.'s 87 and 88 and four pick-a-back aircraft (Me.109's riding J.U.88's) was sent to bomb the bridge. These attacks were completely frustrated by the Spitfires of 2nd Tactical Air Force which flew over 520 defensive sorties during the day and claimed to have destroyed 46 hostile aircraft. This was the largest enemy air effort since 19 September and some 256 sorties were flown. After this date the number of sorties decreased and the enemy command resorted to other methods of destroying the bridges. On 28/29 September German frogmen equipped with demolition charges swam down the Waal. They succeeded in temporarily putting both bridges at Nijmegen out of action but a Bailey bridge hastily erected by the Sappers maintained the Allied forces north of the river while repairs were in progress.

For the following six days Second Army and the two U.S. Airborne Divisions withstood the counter-offensive made by elements of three S.S. Panzer Divisions and one Panzer Division then in the area. The fiercest of these attacks were on 28 September and 1 October. But all of them were beaten off after heavy fighting and by the beginning of the first week in October, the Second Army controlled the situation, although the corridor was still dangerously narrow at certain points.

See Map No.21

The two Corps operating on the flanks had been able to make some progress despite initial delays due to the difficult nature of the country and the stiff opposition of the enemy. The VIIIth Corps linked up with XXXth Corps at the village of St. Anthonis east of Veghel on 25 September. Its task was then to protect the right flank of Second Army and a line was held west of the Maas extending from the Meuse-Escaut Canal to a point south of Nijmegen. The XXXth Corps held on to the Nijmegen bridgehead and repulsed enemy attacks made across the Lower Rhine while to the west it held a ten mile stretch along that river. From there the front swung southwards to OSs west of Nijmegen. On the left flank XIIth Corps and 101st U.S. Airborne Division experienced difficulty in expelling the enemy from the area between the Zuid Willemsvaart and Wilhemina Canals and at the end of the month the latter was still endeavouring to destroy the bridges at Veghel and Son. To the north of Schijndel XXXth Corps struck out towards the line of the Oss - S'Hertogenbosch railway.

The Luftwaffe unable to maintain a prolonged offensive

(1) He gave the losses of Army Group B as about 75,000 men from 1-25 September; in the same period only 6,500 reinforcements had arrived. There were only 239 tanks and assault guns available.

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

could do little to assist their comrades on the ground. On the other hand 2nd Tactical Air Force was, by the beginning of October, in a most favourable position to strike into Germany. Airfields had been established in the Nijmegen corridor itself at Eindhoven, Volkel and Grave in close proximity to the enemy. A large number of sorties were flown by fighter-bombers in support of Second Army south of S'Hertogenbosch and the interdiction of railways in the Rhineland and southern Holland was continued. More weighty attacks were made by medium bombers of No.2 Group which attacked communications targets in the Geldern area and bridges over the Rhine at Emmerich.

Ibid

One event of interest during the last week of September was that seven Mustang and Spitfire squadrons of No.83 Group were flown back to the U.K. and detailed for duty to Air Defence Great Britain. These later escorted Bomber Command's long-range daylight penetrations into the Reich. They were replaced by five squadrons of Tempests and three squadrons of Spitfires XIV. The Tempests began to operate as fighters from Volkel (south of Nijmegen) on 28 September.(1) With these longer-ranged aircraft the striking power of 2nd Tactical Air Force was considerably extended.(2) It was only unfortunate that they were not available for the advance into Belgium when Spitfires and Typhoons were unable to keep up with the ground forces through lack of range and fuel.

By night the Mosquito squadrons of No.2 Group continued to attack communications between the Rhine and the Maas and harassed the enemy ferries still operating in the mouth of the Scheldt. During the airborne operations their attacks were constantly hindered by bad weather.

With the approach of longer hours of darkness the night fighter system of 2nd Tactical Air Force became more prominent. No.85 Group (A.V.M. Steele) which was controlled by Air Officer Commanding No.11 Group Air Defence Great Britain during the early stages of Overlord(3) came under command of Air Marshal Commanding 2nd Tactical Air Force when its Main Headquarters moved to Normandy on 17 August. Squadrons played a notable part in the flying bomb campaign and in Normandy provided protection by night to the Allied Expeditionary Force and its port facilities. During the advance into Belgium an Air-Sea Rescue service was established by the Group. Later Main Headquarters and a Fighter Operations Room was set up at Ghent, their main tasks being the night defence of Twenty First Army Group area, Antwerp and the Channel ports. At the same time two Wings of Mosquitoes were established at Achiet and Amiens - Glisy. During the Battle of Arnhem these aircraft flew a small number of sorties each night over Belgium and Holland and claimed to have destroyed a few enemy aircraft but again the weather was prohibitive to night interception.

No.85 Group
O.R.B. Aug.-
Sept. 1944

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- (1) Air Marshal Commanding 2nd Tactical Air Force had requested for his Command two Wings of Tempests, a Squadron of Meteors and the Mustang Wing which had been lent to A.D.G.B. to deal with the flying bomb menace. These aircraft would be used to counter the enemy's jet fighters and the long nosed F.W.190 (2nd T.A.F. Air Staff App. No.12 dated 9 Sept. 1944).
 - (2) No.84 Group was to exchange two Spitfire IX Squadrons for two Spitfire XIV Squadrons from A.D.G.B. and in addition was to take over a Wing of Spitfires IX from No.85 Group.
 - (3) See Liberation of North West Europe Vol.III p.162.

Supplies carried by Bomber Command to Twenty-First Army Group

Bomber Cmd.
O.R.B.
App. A Sept. and
Oct. 1944

Minutes
101st Air Cmdrs.
Meeting para. 6

These operations were also indirectly concerned with the activities of 2nd Tactical Air Force. It will be remembered from Chapter 6 that the Commander-in-Chief Bomber Command offered to fly in fuel to the Army during the advance across France following the example of the VIIIth Air Force. On 27 September while British and U.S. transport aircraft were reorganizing after Operation Market, seventy-four Halifaxes flew to one of the Brussels airfields with petrol for Twenty-First Army Group. During the next five days 365 heavy bombers of this Command landed on the Continent with a similar cargo. But this sort of operation was not regarded favourably by the Air Marshal Commanding 2nd Tactical Air Force who reported at an Air Commanders Meeting that the heavy bombers were not only hampering tactical air operations by using forward airfields but were also destroying the concrete runways at Lille and Brussels. The Air Commander-in-Chief suspended this type of mission and Bomber Command ceased to carry petrol supplies after 2 October.

Operation Market - The Airborne Landings⁽¹⁾

The First Lift. 17 September, 1944

Early morning fog which had been forecast for D day did not delay the take off of the 358 tug glider combinations comprising the first lift of what proved to be the most historic of all airborne operations. The weather, however, was not ideal during the first two hours; many combinations encountered low cloud before reaching the English coast and this was mainly responsible for 24 gliders being compelled to force land in various parts of the countryside. However, the loads of 22 of these were recovered intact and transferred to the second lift. Visibility over the sea improved and apart from five gliders being forced down due to tow rope and tug engine failure four of which ditched but whose crews were subsequently rescued, the great stream of aircraft moved smoothly towards its destination.

Only slight opposition was encountered over Holland - a light flak barrage was soon silenced by fighter aircraft and no enemy fighters troubled the airborne formations - but eight more gliders were lost on the way across Holland probably due to difficulties caused by the slip stream of the aircraft ahead.

Meanwhile the Stirling Pathfinder aircraft who had taken off from Fairford 20 minutes before the main force, had easily located the Dropping Zones and six aircraft each on zones

(1) The whole of this section has been extracted from R.A.F. Monograph "AIRBORNE FORCES" - Chapter 9.
N.B. The following principal sources were used in compiling this account of Operation Market:-
No. 38 Group Report on Operation Market (38G/10/80/Air).
1st Allied Airborne Army Report on Operations in Holland (Air Ministry file C.32058/46).
1 Airborne Division Report.
War Office Narratives
A.E.A.F. Files TS.22650 and 35108.
No. 46 Group Unofficial History.
Nos. 38 and 46 Group and Squadron O.R.B's.

'S' and 'X' successfully dropped elements of 21 Independent Parachute Company. Only one aircraft was damaged by flak and the ground signals were all displayed and working by the time the main force arrived.

Heavy and light flak was encountered near the dropping zones but although six aircraft were damaged none were lost and the landing took place without any serious mishap. There was a tendency for the gliders to overshoot in the light wind causing close concentrations on the north end of landing zone 'Z' and the west end of landing zone 'S'. A few gliders were damaged including two Hamilcars which overturned on zone 'Z' due to the soft ground involving loss of two 17 lbr. guns.

Apart from scattered rifle and machine gun fire the unloading of the gliders met with little interference from the enemy. There were however, some mechanical difficulties and the average time for unloading was about thirty minutes.

Apart from 38 aircraft which towed gliders to landing zone 'N' in the Nijmegen sector the remainder of the glider force towed by Royal Air Force aircraft landed on zones 'S' and 'Z' lying north and south respectively of the railway running west, northwest from Arnhem.

Landing Zone 'S'

153 gliders including a complete No. 46 Group effort of 130 Dakota/Horsa combinations were detailed to land on this zone and 132 landed either on or very near it.

Landing Zone 'Z'

152 gliders of 167 originally detailed made successful releases: 116 landed on the zone and 27 very close to it. In fact 25 of the near misses landed on the immediately adjoining zone at 'X'.

Dropping Zone 'X'

The main body of 1st Parachute Group were transported in Dakotas of the U.S. IX Troop Carrier Command and dropped successfully.

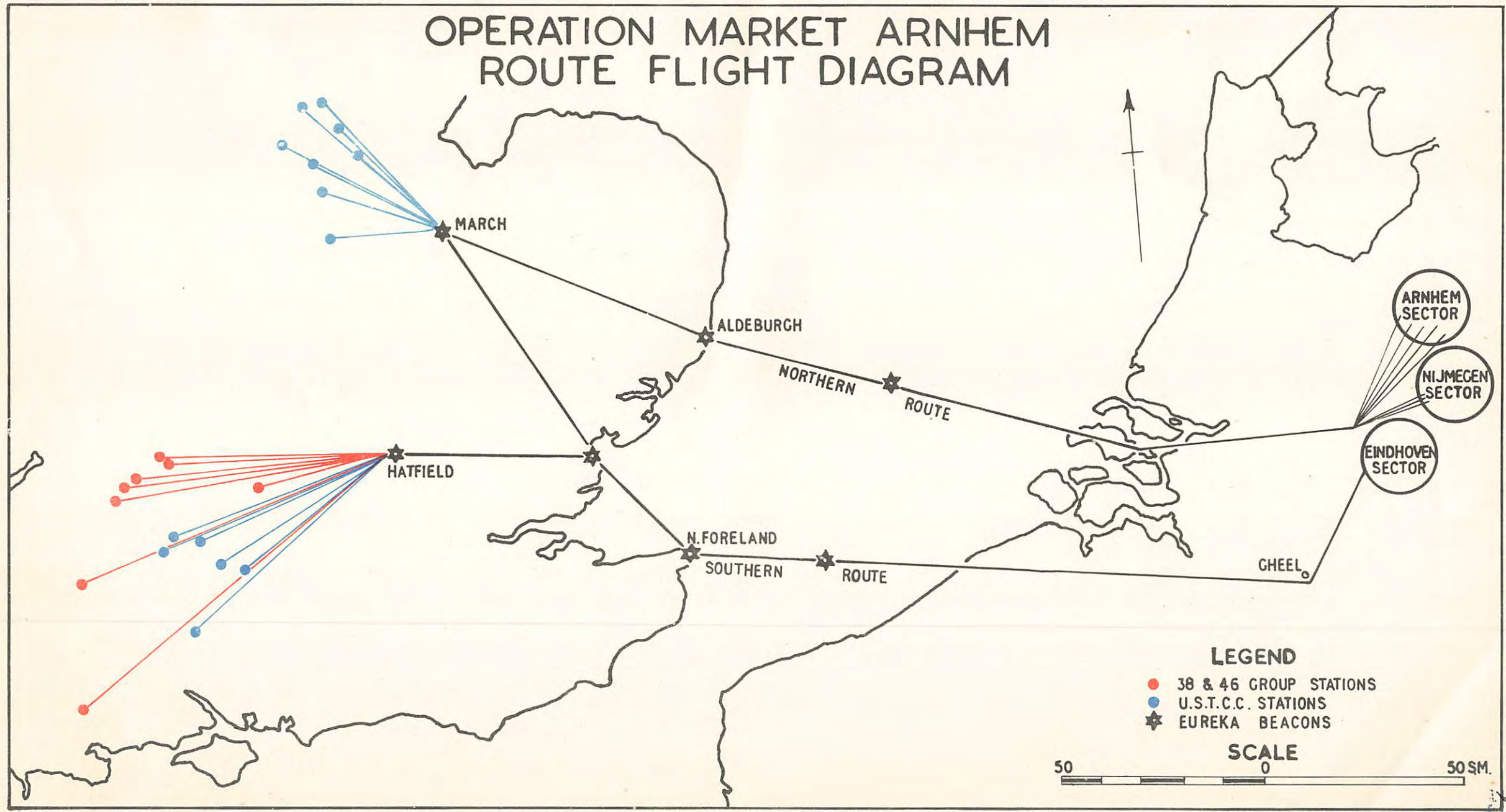
Landing Zone 'N'

Only three of the 38 gliders destined for this zone and carrying Headquarters 1st Airborne Corps failed to reach their objective - one was lost over England; one over the sea and one over Holland. Of the remainder it was definitely established that 28 of the 32 Horsas towed by No. 38 Group landed on the zone and that the six Hadrian gliders all landed successfully.

This first day of operation Market involved the largest number of aircraft ever to take part in any one operation with the single exception of 'D' Day Normandy. No less than 3,887 aircraft and 500 gliders became airborne during the morning of 17 September. In addition to the 1534 transport and tug aircraft of Nos. 38 and 46 Groups and U.S. IXth Troop Carrier Command who towed the gliders and dropped the paratroops, 1240 fighters and 1113 bombers were used in support.

The tasks of the air efforts supporting the operation were as follows:-

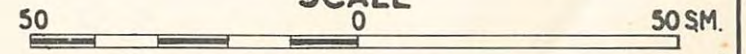
OPERATION MARKET ARNHEM ROUTE FLIGHT DIAGRAM



LEGEND

- 38 & 46 GROUP STATIONS
- U.S.T.C.C. STATIONS
- ★ EUREKA BEACONS

SCALE



Air Defence of Great Britain and VIIIth U.S. Air Force Squadrons were to attack flak positions before and during the operation as well as providing light escort over the North Sea and the heaviest possible escort on the route from the coast to and over the Dropping Zones. The IXth U.S. Air Force also maintained cover over the Landing Area by day and Air Defence of Great Britain by night.

During the night and morning of 16/17 September, British and American bomber aircraft undertook tactical missions on the route from the coast of Holland inwards, attacking flak positions and enemy fighter airfields from which defensive patrols might be expected. The decision to soften flak positions on the route was justified by the lack of effective ground air interference experienced by the invading force.

Dummy parachutes were dropped West of Utrecht, East of Arnhem and at Emmerich on the night of D/D + 1. Other diversionary missions were undertaken by aircraft of Coastal Command, whilst 2nd Tactical Air Force carried out armed reconnaissance in the Landing Area.

The fighter cover for the airborne force was provided by 371 Tempests, Spitfires and Mosquitoes from 33 Air Defence of Great Britain squadrons and 166 fighters of the IX U.S. Air Force. This fighter support was undoubtedly a deterrent to the enemy fighters for comparatively few were seen or engaged and none of these attacked the airborne formations.

The American Operations

In the Nijmegen area, the landing and dropping was carried out with a similar degree of success to that at Arnhem. The 101st U.S. Airborne Division were transported to their zones by 424 U.S. aircraft and 70 gliders using the southern route. The 82nd Airborne Division were carried by 480 Aircraft and 50 gliders using the northern route with the British. In all 106 gliders and over a thousand American aircraft reached their objective.

The Ground Situation

Arnhem

The position of the troops after landing soon became difficult, enemy resistance was stronger than anticipated and soon developed with the arrival of German re-inforcements from the east, who before night fall, were already attacking the airlanding brigade defending the zone. Probably the most serious feature of the day's operations was the cutting off from the main body of the majority of the 2nd Parachute Battalion who had reached the approaches of the main bridge across the river.

Nijmegen/Eindhoven

As at Arnhem enemy resistance was considerable and the disadvantage of having a fair sized defended town lying between landing zones and the objective was at once apparent. However, the Americans took the bridges at Grave and Veghel near Eindhoven but could not prevent the Germans cutting the line of the advance in three places during the night. An attack towards the bridge at Nijmegen was stopped outside the town and generally the schedule of the whole advance was retarded.

The Second Lift. 18 September, 1944.

The fact that bad weather delayed the take off of the second lift for five hours was one of the major contributory causes of the failure at Arnhem. During this vital gap the position on the ground deteriorated to such an extent that it could not be redeemed.

The Meteorological report for the morning of D + 1 caused a change in plan. It had originally been intended to use both routes but the rain and low cloud which was predicted would affect the southern route so it was decided by 1st Allied Airborne Army to send all troop carriers by the northern route.

By 11.00 hours the weather was fit for the take-off to begin but there were still patches of low cloud in eastern England and this caused seven gliders to force land before reaching the coast. The crews, however, were alright and took off in the next lift. Weather conditions improved over the North Sea but two gliders were forced to ditch. Over Holland visibility was good and generally better than forecast; to the south could be seen low cloud over the southern route as had been predicted.

Opposition along the route was heavier than on the previous day - more light flak being active as well as heavier guns at Hertogenbosch where several gliders were damaged. In all 15 gliders were lost over Holland. Only one tug aircraft was missing. Another from No. 575 squadron had an extraordinary escape. The Pilot was killed and the navigator wounded but the second navigator, after an attempt to complete the mission had been abandoned and the glider forced to cast off due to its ailerons being shot away, managed to fly the aircraft back to England and make his first ever landing a safe one.

The fighter cover was again provided by Air Defence of Great Britain and the U.S. Eighth Air Force. Nineteen Spitfire, five Tempest and three Mustang Squadrons were used. Losses were light - two Tempests and four Spitfires.

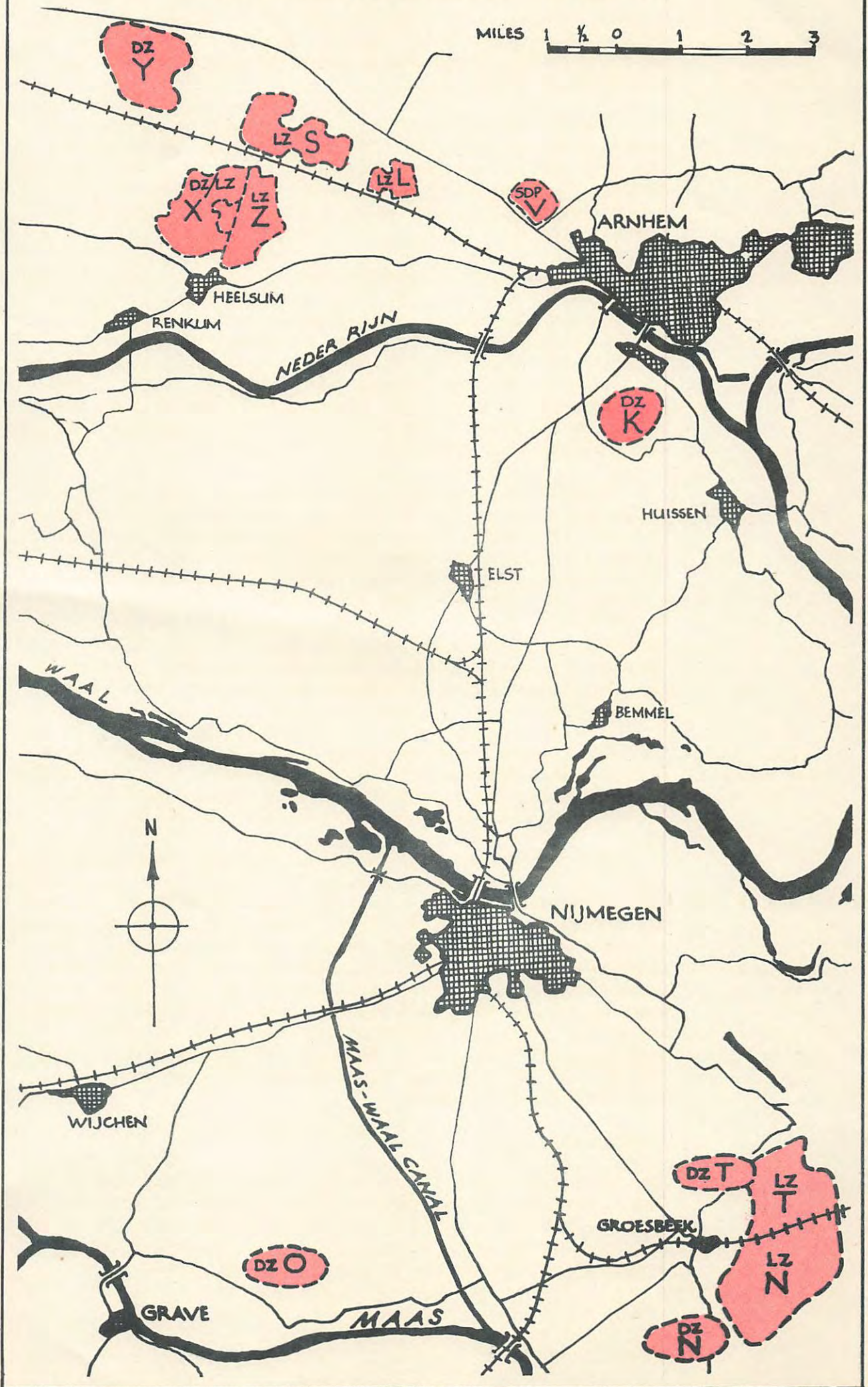
The weather was fair in the area of the dropping/landing zones and despite some opposition the pathfinders set up all the ground aids. They also laid out "T's" to mark the landing direction as being different from the previous day and to utilise the remainder clear spaces. However, most of the gliders landed in the original direction but very few were damaged although there was some congestion. Trouble was experienced on the ground from the enemy using machine guns and mortar fire and thus rendering the glider unloading dangerous and difficult. Some of the gliders were damaged and some of the loads had to be destroyed to prevent them falling into enemy hands.

Landing Zone 'X'

This zone had not been used on the first day and of 223 gliders despatched 189 landed on or near the zone and 12 on the adjoining zone 'Z'. These two zones suffered the most from opposition after landing and almost 50 gliders were burned out although some of the loads were saved.

OPERATION MARKET ARNHEM

DROPPING / LANDING ZONES.



Landing Zone 'S'

Seventy-three gliders carrying elements of 1st Air Landing Brigade were despatched to this zone on the other side of the railway. This number included 11 of those who had failed to leave England on the first day. Sixty-nine aircraft successfully released their gliders and photographic reconnaissance shows that out of 215 gliders despatched to this zone, 189 were actually on it and 13 very near.

Dropping Zone 'L'

The first re-supply mission of operation Market was undertaken by 35 Stirlings from Harwell (No. 38 Group) who were detailed to drop on 'L'. Approximately 85% of the supplies were dropped on the zone - the remainder drifted into enemy territory. The drop was carried out at 500 feet and of 920 panniers and containers carried, 803 were dropped. One crew dropped on zone 'S' and four others failed to drop.

Dropping Zone 'Y'

The main drop of 4th Parachute Brigade was successfully carried out by 127 American aircraft of IXth U.S. Troop Carrier Command.

The Ground Situation
Arnhem Sector

The delay in landing reinforcements, owing to bad weather in England, allowed the Germans valuable time to build up their defence forces and thwart the attempt by the 4th Parachute Brigade to reach the high ground northwest of Arnhem and thus gain a dominating position. During the day the 1st Airborne Division was split into three parts - one at the northern end of the bridge - one on the western edge of Arnhem and one west of Oosterbeek.

The situation, therefore, was worsening at Arnhem and, although fierce fighting continued during the next few days, 1st Airborne Division were in a desperate situation before the British forces were able to reach the lower Rhine and assist them with artillery fire on 23 September.

Nijmegen/Eindhoven Sector

By 13.00 hours on 18 September the 101 U.S. Airborne Division had captured Eindhoven and made firm contact with the British Guards Armoured Division which had advanced north to Grave. The 82nd U.S. Airborne Division captured Grave and held the area between it and Nijmegen although the latter itself was held by the enemy. The important road bridge across the Waal was also held by the Germans until taken by the 82nd U.S. Airborne Division and British Units on 19 September.

The Third Lift. 19 September, 1944

The situation on the third day was extremely serious and enemy resistance was increasing. It was decided to postpone the dropping of the Polish Parachute Brigade on zone 'K', south east of the bridge. Apart from 35 gliders carrying equipment and elements of the Polish Independent Parachute Brigade Group the day's air activity was devoted to resupply. Although weather reports indicated that conditions might be

better on the northern route it was decided to use the southern route in order to avoid using the same one on three successive days. Over England the weather was unfavourable with extensive areas of low cloud which grounded gliders detailed for the transport of the Polish units from the Grantham area by U.S. aircraft.

The take off was again delayed until after noon, and of the glider mission, seven broke from tow ropes - two in cloud over the sea. Although flak opposition was not severe, probably owing to weather, one glider was forced to ditch with a shot away tow rope and another was shot down, while both pilots of a third aircraft were hit but managed to reach the landing zones where they landed successfully. In the area of the landing zone, flak was much heavier.

Because communications were so inadequate with fighter bases on the continent an error was made in the timing at the rendezvous, consequently there was no escort for the airborne missions. One hundred and twenty-seven Spitfires of Air Defence of Great Britain and one Mustang squadron of the U.S. VIII Air Force arrived at the rendezvous but, meeting no transport aircraft, assumed that the operation had been cancelled and returned to base.

Landing/Dropping Zone "L"

The last of the glider operations transported the Polish Independent Parachute Brigade Group in 35 Horsas to Zone "L" and 28 released successfully. The area on the ground was heavily covered by enemy fire and some of the loads were lost when the gliders burned out. Two parachute aircraft of No. 38 Group both successfully dropped supplies on this zone.

Landing Zone "X"

Seven glider missions in addition to those already planned were flown, but only two reached the zone. Three of these gliders became available owing to failures on previous missions.

Supply Dropping Point "V"

During the afternoon of 19 September, 163 aircraft from Nos. 38 and 46 Groups flew into the area, using the southern route, on the first large scale re-supply mission. Despite intense and accurate flak they carried out the drop with commendable accuracy. 145 aircraft dropped their loads on the supply dropping point and five on Zone "S". The remaining thirteen aircraft were lost and no fewer than 97 others were damaged by flak.

The courage and devotion to duty of the crews of these aircraft was remarkable. They flew into the deadly zone of anti-aircraft fire at a thousand feet and, without exception, maintained accurate courses until their loads were safely released. Communication with base was impossible. There were several reasons for the sometimes partial and often total failure of communications with base. The radio frequency

First Airborne
Division
Signals Report,
Annexure T,
Part 5

chosen was unsatisfactory, clashing with that of a powerful British station. Early, on the first day of the operation, heavy interference as well as technical failures caused difficulty in communications. On D + 3 it was possible to receive but not to transmit, owing to the sets being surrounded by woods. This created physical interference and screening and all the low-powered sets became unserviceable. As the battle increased in intensity on subsequent days, the injuries to W/T personnel, the effect of blast and the destruction of battery charging sets, thoroughly disrupted all communications. The only method left to avert a useless sacrifice was to attempt to attract the attention of the aircraft to a new zone. This was marked with ground strips and a Eureka beacon was set up on a tower nearby but, owing to the weather, the exact time of the drop was uncertain and during this interval the enemy "strafed" the area where the ground signals were displayed. The Eureka beacon could not be left on indefinitely or the batteries would have been exhausted and although Verey lights were fired the attempt was in vain. The new supply dropping point was not distinctive from the air, being obscured by trees, and those on the ground had the mortifying experience of watching nearly all the supplies fall to the enemy.

The Fourth Lift (D + 3) 20 September, 1944

During the late afternoon of 19 September, news of the ground situation at Arnhem was received at the Command Post at Eastcote. It was then known that supply dropping point "V" was in enemy hands and the 1st Airborne Division would require re-supply for several more days. A new supply dropping point was therefore chosen, the location of which had been signalled through during the night from Arnhem. It consisted of small fields about one mile South South East of landing zone "L".

In the American sectors of Nijmegen and Eindhoven little progress had been made; it was not until late on 20 September that the bridge at Nijmegen was captured by a brilliant feat of arms of American and British troops. The whole advance was well behind schedule and it became obvious that the problem of re-supplying and relieving 1st Airborne Division was becoming hourly more urgent.

The Airborne message of the 19 September also stated that landing zone "Z" was still being held and so it was arranged for a supply drop to take place there in addition to that on the new supply dropping point 691785.

Similar weather conditions persisted over England to those of the previous day, whilst over the sea visibility was down to one to two miles with six to eight-tenths cloud and haze which increased in the afternoon.

Fighter cover was again provided by Air Defence of Great Britain Squadrons and U.S. VIIIth Air Force and no enemy fighters were encountered.

The southern route was used for the fly-in in order to fly over the area of Eindhoven and Nijmegen which was occupied by the Allies.

Dropping Zone "Z"

Thirty-three Stirling aircraft of No. 38 Group were

detailed to drop supplies on this zone and all but three found the zone and dropped successfully. Once again the supplies fell into enemy hands because in the eighteen hours elapsing since the message had been sent to England concerning the tenure of the zone it had been re-taken by the Germans.

Supply Dropping Point 691785

One hundred and twenty-two out of 131 aircraft dropped their supplies successfully but, unfortunately, in vain. Seven aircraft were lost. The enemy soon realised the location of this new zone and attacked, with the result that the Divisional line was pushed back and many of the supplies failed to reach the British although a certain amount was salvaged after dark. Flak in the target area was again severe and great difficulty was experienced on the ground in marking out the new zone. Each time a ground signal was laid out it attracted heavy mortar fire and the men were fired upon by snipers. Despite the bad visibility, fierce opposition from the ground and lack of aids, the drop was reasonably accurate but in the day's operations nine aircraft were lost and 62 damaged.

The Fifth Lift (D + 4) 21 September, 1944

In the early hours of 21 September, the portion of the 1st Parachute Brigade (Lieutenant-Colonel Frost) who had been holding out on the northern approaches to the bridge at Arnhem against strong opposition and without any re-supply, were finally overcome. All were either captured or casualties. Further to the west the remainder of 1st Airborne Division was being forced into an ever diminishing area and their plight was desperate. It was hoped that the Polish Parachute Brigade might be dropped south of the river and thus help to relieve the situation but, although about a quarter of the force were successfully dropped by U.S. IXth Troop Carrier Command, they were unable to break through to the Rhine. Meanwhile, further south, the Guards Armoured Division endeavoured to advance along the nine-mile road from Nijmegen to Arnhem but were held up by strong enemy anti-tank defences. The country adjacent to the road was not suitable for the passage of armour.

A variation in the flight plan for the re-supply was introduced; instead of one long wave the 117 aircraft were despatched in four waves in the hope of reducing flak damage to the aircraft. The southern route was used. Weather conditions were still unfavourable, with haze and low cloud over England. U.S. aircraft in the Grantham area were again delayed, but the R.A.F. transports were able to take off on time.

For the first time weather adversely affected the fighter force and, although the first wave of transports was covered and the second partly so, the last two were not and the enemy took full advantage. No less than seven out of ten aircraft of No. 190 Squadron and 23 transports altogether were lost. This was the first time the enemy fighter force had really been in evidence.

Supply Dropping Point 693785

This new point was selected 200 yards east of the one in use on the previous day, making the task of recognising it even more difficult for the aircraft. On the ground, it

became impossible to put out markers and, although the Eureka beacon was still functioning and Aldis lamps were used, they proved of little assistance to the aircrews, few of whom reported seeing them.

Ninety-one aircraft reported successful drops, but few of the supplies reached the desperate men on the ground. In all 61 re-supply aircraft (52%) were lost or damaged in yet another vain effort.

When considering the results of these three days' re-supply operations, two outstanding conclusions became apparent. Firstly - lack of communications - resulting in inability to obtain up-to-date tactical information of the ground situation at Arnhem. Secondly, the high rate of casualties to aircraft caused by transport aircraft and fighter cover not flying from within the same weather zone. With these two problems in mind, Air Commodore Darvall, Air Officer Commanding No. 46 Group, who had witnessed part of the unfortunate re-supply effort on D + 4, conferred with the Air Officer Commanding No. 38 Group and then flew to Europe. After visiting the Air Marshal Commanding 2nd Tactical Air Force, and No. 83 Fighter Group, he went to Nijmegen to consult with the Commanders of the Airborne Corps and XXXth Corps. As a result of these meetings No. 575 Squadron, No. 46 Group was sent to Brussels to undertake re-supply operations under control of No. 83 Group. This plan had the following advantages:-

- (a) The latest information regarding the tactical situation would be available.
- (b) Close support by fighters and fighter bombers would be possible.
- (c) Shorter flights would enable a quicker turn-around and therefore more sorties to be made.
- (d) Last-minute alterations to the supplies carried could be effected.

No. 575 Squadron arrived in Brussels on 23 September and carried out the remaining re-supply operations for Arnhem on the two following days.

The Sixth Lift (D + 6) 23 September, 1944

The weather on 22 September (D + 5) had been so bad with very low stratus cloud over England, most of the route and the target area that no transport operations were possible. There was little change in the ground situation at Arnhem - the weary troops fought on bravely with the Germans calling for surrender over loudspeakers.

Favourable progress had been made between the Waal and lower Rhine on the previous night, and during the day a Guards Brigade, with assault boats, fought its way to the Rhine. Although the line was at first cut, by nightfall contact had been made south of the Rhine with units of 1st Polish Parachute Brigade which had been dropped on the previous day. At 20.20 hours the Second Army gave permission to withdraw the 1st Airborne Division from Arnhem if conditions permitted.

Meanwhile, in England, preparations for the last re-supply from the United Kingdom were being made. The weather

forecast was more promising and better conditions were expected over the target area in the afternoon. For the first time since 19 September, gliders of the IXth U.S. Troop Carrier Command were able to take off for the Nijmegen and Eindhoven sectors.

The R.A.F. re-supply mission flew over the southern route in column with U.S. aircraft, giving a time-length of one and a half hours. A very large fighter escort of 854 aircraft provided an effective cover and very little fighter opposition was encountered in the area. Flak, however, was again very severe and more than half of the R.A.F. transports were damaged or lost.

The Drop

One hundred and twenty-three aircraft were despatched with the difficult task of dropping the supplies in the right place. By then the situation on the ground was such that it was no longer possible to use Eureka beacons, as the batteries were dry, or to lay out ground signals. The only method of identifying the zone was by visual signals and, as the enemy were aware of this and also used similar signals to confuse the issue, it was not surprising that the dropping was inaccurate and most of the supplies fell into enemy hands. Sixty-three aircraft were damaged by flak and six lost.

The Seventh Lift (D + 7) 24 September, 1944

No re-supply operations were flown from England, but 21 aircraft based at Brussels were despatched to the Arnhem area. Four of these went to the west of Arnhem, but two did not drop and the other two saw no signals in the dropping zone. All four were damaged by flak but managed to return to base. The remaining seventeen aircraft re-supplied the U.S. 82nd Airborne Division - fifteen dropped successfully and two landed on an airstrip west of Grave. None of the aircraft was lost and 36 Spitfires provided escort without incident.

The Eighth Lift (D + 8) 25 September, 1944

The last re-supply mission to Arnhem was undertaken by seven aircraft of No. 575 Squadron at Brussels. Six of these dropped medical supplies and food on to a dropping zone west of Arnhem at Heaveadorp 682768. One aircraft was destroyed and three damaged by flak.

On this day it was finally decided to evacuate 1st Airborne Division across the river because it was not possible for the Allies to cross it in force; the enemy were too strong below the Rhine and the Allied supply corridor had been cut. During the afternoon 1st Airborne Division were told of the plan to evacuate them. At 21.40 hours the operation began and was completed as far as was possible by 06.00 hours on 26 September. The exhausted remnants of 1st Airborne Division made their way from their perimeter across an enemy-held stretch to the river whilst covering fire was given from the south bank. Assault boats, barges and rafts were used and, in the cover of rainy darkness, the survivors made their way to safety, many of them swimming the fast flowing Rhine. The following numbers were evacuated on this night - 1,741 men of 1st Airborne Division, 160 of the Polish Parachute Brigade, 75th Dorset Regiment and

422 glider pilots. A few more crossed the river on the following night. 6,400 did not return.

A.E.A.F.
File/TS. 35108
Enc. 124A

On 28 September, 1944, the 1st Allied Airborne Army informed Twenty-first Army Group that, as the link-up had been made between Airborne forces and ground troops, the operation was considered completed and no further re-supply was to be scheduled as an operation in support of Market. In future, supply of Airborne forces was to be considered as supplying ground forces and handled through C.A.T.O.R. This decision released the U.S. VIIIth and IXth Air Forces, 2nd T.A.F. and Air Defence of Great Britain from fighter escort duties for re-supply operations.

Thus ended the Battle of Arnhem, the story of which will live always as one of the most gallant undertakings in the annals of British military history.

Operation Market

Air Movement Summary (R.A.F.)

| | <u>Despatched</u> | <u>Success- ful</u> | <u>Unsuccess- ful</u> | <u>Cas- ualties</u> | <u>Lost</u> |
|---------------------|-------------------|-------------------------|---------------------------|-------------------------|-------------|
| "D" Day Pathfinders | 12 | 12 | - | - | - |
| Gliders | 358 | 319 | 39 | 6 | - |
| "D" + 1 Re-supply | 33 | 30 | 3 | 14 | - |
| Gliders | 296 | 272 | 24 | 30 | 8 |
| "D" + 2 Re-supply | 165 | 147 | 18 | 97 | 13 |
| Gliders | 44 | 30 | 14 | 9 | 11 |
| "D" + 3 Re-supply | 164 | 152 | 12 | 62 | 9 |
| "D" + 4 Re-supply | 117 | 91 | 26 | 38 | 23 |
| "D" + 6 Re-supply | 123 | 115 | 8 | 63 | 6 |
| "D" + 7 Re-supply | 21 | 21 | - | 4 | - |
| "D" + 8 Re-supply | 7 | 6 | 1 | 3 | 1 |
| <u>Totals</u> | | | | | |
| Pathfinders | 12 | 12 | - | - | - |
| Gliders | 698 | 621 | 77 | 45 | 19 |
| Re-supply | 630 | 562 | 68 | 281 | 52 |
| | 1340 | 1195 | 145 | 326 | 71 |

Glider Failures not due to Enemy action

| | | |
|--------------------|---|----|
| Towing failure | - | 28 |
| Tug failure | - | 13 |
| Glider failure | - | 5 |
| Navigation failure | - | 2 |
| Total | | 48 |

Total British and American Aircraft and Gliders

| | <u>Despatched</u> | <u>Lost</u> |
|---------|-------------------|-------------|
| A/C. | 12,997 | 238 |
| Gliders | 2,598 | 139 |

Conclusions

An analysis of the results and execution of operation Market revealed the following principal points:-

A.M. File
C/32058/46

38G File/
10/80/7

War Office
Narrative

No. 46 Group
History

(a) Whenever possible operational control of the Air Forces in support of an Airborne operation should be vested in the Air Officer Commanding of the Tactical Air Force in whose area the force is to be landed. Generally he was in the best position to assess the air situation and organise supporting operations. In the subsequent crossings of the Rhine (Varsity) the operation was planned by SHAEF and executed by 2nd T.A.F. who provided all necessary fighter cover, escorts and anti-flak operations as well as offensive air support. These operations were completely successful.

In operation Market, however, air support was first arranged through First Allied Airborne Army and later directly with No. 11 Group. It is doubtful whether, in view of the large numbers of aircraft involved and the slowness of communications between Belgium and the U.K., control by 2nd T.A.F. of air support for the air operations would have improved the position. The fact that in Market the re-supply aircraft suffered heavy casualties was due not so much to any failure in the control system for supporting operations but rather to the unavoidable dangers of flying into a small area which was bound to be well guarded by an already forewarned enemy.

(b) As much time as possible should be allowed for making preparations for the operation. Seven days were allowed for the planning, issuing orders, briefing, etc., for operation Market. Although this was an adequate time interval for 1st Airborne Division, who were well practised in these methods, it would not have been sufficient for a division inexperienced in Airborne operations, rapid planning and issuing orders.

(c) Importance of dropping in one lift

Owing to the lift being split, the effective strength was reduced to that of a brigade because part of the first lift had to be used to protect the landing of the second lift. Therefore, all troops and supplies essential to the success of the mission must be landed on the first lift. Complete surprise must also be gained and, to achieve this, swift progress is essential on the first day and if this is not maintained then the enemy has time to recover. Had it been possible to carry out the first lift before dawn and the second at mid-day, then the surprise element would probably have been maintained, and the landing zones held long enough to be consolidated.

(d) Dropping and landing zones always to be selected as near as possible to the objectives

Subsequent examination of the terrain in the vicinity of the bridge, together with information obtained from the Dutch, indicated that it might have been possible to land gliders and/or paratroops on the south side of the river within one mile of the bridge. Although the ground in this area - known as Polder Land - was subject to flooding when the fast-moving Rhine was at high level, it appeared that during the few days immediately preceding the operation there was no flooding. The real disadvantage of this plan, however, lay in the existence of networks of irrigation

ditches⁽¹⁾ which would have jeopardised safe glider landings. These might have been possible if the glider undercarriages had been jettisoned but this always involved the possibility of not being able to swing the glider tail open to unload vehicles. Because of this and also the difficulties of concentrating troops and moving vehicles, due to the ditches, the glider pilot regiment decided against taking the risk.

In previous operations the maximum dropping distance from the objectives was five miles; in operation Market it was seven to eight miles. The choice of landing zones as far from the objective as they were squandered to a certain extent one advantage to be gained from Airborne operations - that of surprise. Although in the case of Market the surprise element was limited by reason of the approach of the Airborne forces in daylight over a considerable stretch of enemy occupied territory. The enemy were well aware of what was coming, when it was coming, but could only not be certain of where it was going to happen.

In view of the terrain to be traversed between the landing zones and the bridge - involving fighting through dense pine woods, easily defended by the enemy, and the suburban areas of Oosterbeek it was extremely difficult for the attacking forces to reach the bridge in sufficient numbers and within a short enough time to capture a point which naturally would be the first concern of the defending forces.

(e) Intelligence

Intelligence appreciation of the flak defences around Arnhem was extremely pessimistic. It was both thin and inaccurate and there was little information concerning enemy troops in the area. There was no knowledge of the presence of IIInd S.S. Panzer Corps, consisting of IXth and Xth Panzer Divisions, who were refitting in the neighbourhood.⁽²⁾

(f) There was a lack of close offensive air support, especially during the first day, and also when the airborne troops were moving in towards Arnhem.⁽³⁾

(g) Operation Market again confirmed the lesson that all personnel of Airborne Divisions must have maximum infantry and weapon training.

(h) Re-supply

There were many aspects of this problem. Firstly, lack of information regarding the flight plans of the re-supply aircraft adversely affected the provision of

File 2nd T.A.F./
30317/Sigs. Ops.
6.1.45

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- (1) The land here is divided by ditches into areas of 50 to 100 metres in width and 100 - 200 metres long. The ditches are 2 - 3 metres wide and $1\frac{1}{2}$ deep with usually $\frac{1}{2}$ metre of water in them.
 - (2) Subsequent information from Dutch sources also revealed that at the time of the operation there were three German battalions in the town.
 - (3) One of the major reasons for the failure of Market was that the Germans were able to bring up re-inforcements, including tanks, to Arnhem without undue interference.

fighter cover. 2nd T.A.F. were unaware of the plans due to inadequate communications, thus quite frequently immediate air support was lacking for periods of three to four hours. In spite of this, whenever the weather was at all favourable the re-supply mission had to go on in view of the critical position of the ground troops. Although some support was given by No. 11 Group it was not sufficient, whereas more complete cover might have been able to silence, to some extent, the light anti-aircraft fire which was responsible for most of the casualties. Secondly, the question of air defence by day; lack of information again affected fighter support and the proximity of enemy airfields also aggravated the situation. As regards air defence by night, Fighter Command was responsible for the night defence of the dropping and landing zones for the period D + 1 to D + 4. After this No. 85 Group took over. The method employed by Fighter Command was to fly in a G.C.I. unit which, when set up, would enable the aircraft to revert to "close control with the ground". This method clashed with No. 85 Group night defence organisation which could easily have absorbed the dropping/landing zone commitment and could have undertaken to provide close control from the first night on. This became obvious when, owing to the ground situation, it was apparent that the G.C.I. unit was unable to operate. Therefore, it would have been much better to have utilised the existing No. 85 Group organisation for night defence.

It was recommended that when future Airborne operations were planned a T.A.F. representative be present to advise and make provision for the very close liaison necessary between First Allied Airborne Army and the Tactical Air Force prior to and during an operation. It was agreed by SHAEF, First Allied Airborne Army and 2nd T.A.F. that future plans were to include the establishment of a small liaison co-ordinating group on the staff level of the First Allied Airborne Army with the Army and Tactical Air Commanders of the zone, and a single plan agreed upon between the Troop-carrier Command, the Area Air Commander, the Airborne Forces Commander and the Army.

No arrangements were made in advance for emergency re-supply from the continent in the event of non-operational weather in the United Kingdom until it was too late due to lack of equipment, trained packing personnel and adequate supplies.

At Arnhem there were instances where the supply dropping points could have been changed at the last moment had it been possible to notify the aircraft and also to confirm the exact location of the dropping points. It will be seen, therefore, that one of the principal lessons arising out of Arnhem was that adequate and well organised communications were a fundamental necessity to success in an Airborne operation. Information received after the war from the Dutch Underground Movement revealed the fact that a complete and efficient secret communication system was in operation prior to the battle and the use of it was offered to the allied forces. This system provided a direct contact to Nijmegen and thus to the allied headquarters. In view of the extreme poverty of communications, especially with regard to re-supply, it might seem that

some use could have been made of it, but for reasons of security it was decided not to use it.

There were several other factors which contributed to the failure of the re-supply at Arnhem. The anti-aircraft defences were strong causing losses to the aircraft and the consequent evasive action resulted in scattered dropping. An elaborate anti-flak plan is, therefore, necessary if re-supply is to be carried out under unfavourable conditions such as those prevailing for operation Market. Generally, however, low level re-supply into an area heavily defended by A.A. is not a practicable risk. No. 46 Group lost 30% of their aircraft engaged in re-supply and 80 of the remainder were damaged.

The size of the perimeter in which the ground forces were contained was very small and flying into such an area against strong enemy opposition was not satisfactory, but if it had to be done then the latest tactical and topographical information should be available and perfect co-ordination with Fighter escorts and Fighter Bomber or low firing aircraft maintained. This was scarcely feasible in operation Market where the participating air forces had to operate from scattered areas - France, Belgium and various parts of England - and where communications were slow and inadequate.

When possible the re-supply aircraft should be stationed as near as practicable to the Airborne Forces in order that advantage may be taken of changing weather conditions which may become more suitable for re-supply work and less suitable from the view-point of the enemy defences. Another advantage of basing re-supply aircraft as near as possible to the operational area was that of speed. It enabled a quicker turn-round to be made facilitating rapid concentration of dropping. This again was not possible in Market where the problem of intensive urgent re-supply was not envisaged. To have done so would have been tantamount to planning for failure.

On the ground, constant shelling and mortaring of the perimeter by the enemy as well as the lack of available vehicles made collection and distribution impossible in the later stages.

(i) Height of Fly-In

It might be that the aircraft would be less vulnerable against flak if they were to fly at low level, climbing to dropping height only when near to the dropping zone. The disadvantages of this were the difficulty of map reading at low level and the reduction in effective range of radio visual aids.

(j) It was noticed that when fighter cover was lacking losses due to flak were higher than the average also, of course, fighter cover kept off the enemy fighters. The air losses sustained during one lift and part of another were due in the first instance to lack of air cover caused by the breakdown in communications with fighter bases on the continent, and in the second case by the fact that it was not known that bad weather had grounded the fighter force, otherwise the re-supply aircraft probably would not have been despatched.

(k) Towropes

Some trouble was again experienced with broken towropes caused mainly by cloud conditions and the slipstream effect of the tug aircraft. There did not seem to be any antedote for this unless the problem of coordinating tug and glider movement could be perfected by the production of a composite aircraft.

(l) Glider becoming redundant

As heavy equipment could be dropped by parachute the use of the glider became less. Parachute aircraft were less dependent on weather and light; they were faster, more manoeuvrable and more economical of equipment and crews. Only the Hamilcar really retained its value because of its size and the weight of cargo it was able to carry.

(m) Once more the value of the Dakota as an all-round aircraft was demonstrated. It could be used either for transport or for Airborne tasks, thus it did not need to lie idle between operations as was the case with some of the Bomber type aircraft in No. 38 Group.

The ideal aircraft for Airborne operations would appear to be the four-engined Bomber type, able to carry and drop heavy loads and also to tow the Hamilcar. In order to simplify maintenance and administration, this aircraft should be of a similar type to those employed in Bomber Command.

(n) The ground aids to navigation were satisfactory but not necessarily reliable. Visual aids could not be too distinctive. Ground signals should be as large as possible and smoke dense and lasting.

It is always easy to be wise after the event but, after examination of the results and consideration of the difficulties that prevented the successful accomplishment of Operation Market, it would appear that the risk taken was not justified. Several thousand men lost their lives - many aircraft were lost and others damaged in attempting what proved to be a virtually impossible task. Historians may well wonder whether, if a considerable risk was to be taken with only a marginal chance of success, it would not have been better to increase the risk factor slightly and considerably improve the chances of success. The evidence later available indicated that although losses might have been rapid and high if the landings had been made near the bridge, at least there was a strong possibility that it might have been taken and held. It was possible also that had coup-de-main parties been landed in the vicinity of the bridge success might have attended their efforts, but in view of the intelligence available at the time and the conditions then persisting, it would be invidious to blame the airborne planners for their decision to choose dropping/landing zones where they did. The primary reason for their choice was to facilitate rapid concentration and unloading.

Operation Market was undertaken with very little margin for ensuring success against the enemy and the weather. Field Marshal Montgomery said that had 1st Airborne Division received a planned measure of Airborne reinforcements and resupply, plus support from the air, the result would have been different. In his opinion the operation was 90% successful; it was a difficult operation with considerable risks, but was justified because if good weather had held after 'D' Day it

would have been fully successful. In addition the link-up with 1st Airborne Division and XXXth Corps would have been made if the Polish Parachute Brigade, plus a glider regiment and 82nd U.S. Airborne Division, could have been dropped on D + 2. Normal air action, too, would have impeded the enemy, closing in on the bridge-head and retarding his reinforcement.

However, it is essential to regard the operation as a separate entity and not to allow one's critical judgment of it as such to be obscured by the eventually successful military campaign which could in a sense be said to have been assisted by the failure at Arnhem. From the purely military point of view, the operation at Arnhem was not a success - the crossing of the lower Rhine was not completed. But, the operation did create very definite advantages for the Allied Forces. The enemy had been compelled to draw armour from Nijmegen in order to maintain attacks against the line of communications which was held and along which supplies were carried, even under heavy fire. Gradually this tiny corridor was widened and eventually a firm line was established along the rivers Waal and Maas. Bridge-heads were also secured across these two rivers which formed a valuable corridor for the subsequent advance to the Rhine. The fight at Arnhem also prevented the enemy from taking the bridge at Nijmegen, which eventually provided a valuable springboard into Germany.

From the No. 38 and 46 Group viewpoints, operation Market was undoubtedly successful. Of the 1340 sorties flown during the eight days, almost 1200 carried out their tasks successfully despite the severe opposition encountered by the re-supply missions. On the first three days R.A.F. aircraft carried 4,500 men, 95 guns and 544 jeeps or larger vehicles across 200 miles of sea and enemy territory, dropping them distances of up to 60 miles behind the Front line.

The following message was sent by the G.O.C., 1st Airborne Division, Major-General Urquhart to the Air Officer Commanding, No. 38 Group:-

"We were given a very good start by the R.A.F. The result of the dropping of the paratroops and glider landings was quite first-class, it was easily the most successful and accurate of any previously achieved, either in operations or in exercises. All units were able to move on to their tasks directly at full strength, and in a very short time after landing. We must thank you also for the efforts made to re-supply us during our nine days' battle on the ground. We are full of admiration for the way in which aircraft faced the initial flak, which thickened up considerably after the initial stage. The Division was by then occupying a very small area, which was thickly covered over by trees and houses, and this made the re-supply task extremely difficult and hazardous".

German Reaction to Operation Market

The Germans admitted surprise and thought that the attacks against anti-aircraft positions were an attempt to destroy the bridges. They considered that we used too much of the Air Force to protect Airborne landings instead of interfering with movements of German reinforcements.

Translation from
German documents

380. Report
App. O.

They attributed the failure of the Arnhem operation mainly to:

- (a) Time interval of the landings, caused by weather conditions.
- (b) The landing places being too far from the objectives, resulting in the loss of the surprise element

2. With the future Allied Airborne Operations therefore, a stronger, more timely strong-point build-up must be reckoned with - and in connection therewith, a stronger attacking ability by the Allied Air Force against the AA defences of the objectives must also be expected. (It is revealed from captured documents that the Allies were well informed regarding the strength and disposition of German A.A. defences.)

3. It seems questionable whether, in view of the failure of one of the three Airborne Divisions, there will be any fundamental alteration of the principals of airborne operations as shown.

4. The basic tendency of the Allies when using airborne troops, does not seem to aim at the carrying out of keen, thrustful actions of small groups, but rather on the landing of large formations in the rear of the enemy in close co-operation with simultaneous ground and/or sea-landing operations (Normandy). The continuous increase of Airborne troops, the formation of an Airborne Army and further, the preparation of Infantry Divisions for Air-transport, points in this direction.

5. Within the framework of larger operations the carrying out of small airborne undertakings with a limited target can also be reckoned with, as they were planned according to the Normandy landings. Further, the repetition of single operations is also possible, like the destroying of an especially stubborn battery-position in Normandy (mouth of the Orne). There, freight gliders landed with British paratroops in the middle of the battery position, while at the same time the linking-up attack from outside was carried out against the position.

Conclusion to Volume IV

At the end of September the great advance which began with the break-out from the Normandy beach head in July came to an end. The Armies of the Allied Expeditionary Force stretching from the North Sea to the Mediterranean were halted before the natural obstacles of the Rhine, the Meuse, the Moselle and the man-made fortifications of the Western Wall. General Eisenhower's strategy had been to advance on a broad front towards the two great industrial areas of Germany and while those operations were in progress to open up ports to maintain an invasion of the Reich. But Field Marshal Montgomery's flanking movement across the Lower Rhine had failed although the Northern Group of Armies was in an excellent position to thrust south-eastwards at the Ruhr from the Nijmegen bridgehead.

The Supreme Commander's anxiety over the over-riding need for a port was at this stage fully justified. Although the railway system of France and Belgium was beginning to function again and the mines of northern France and Belgium had been pressed into service for the Allied forces on the Continent

both British and U.S. Armies were starved of essential fuel and ammunition. Convoys still had to cross France before reaching the fighting line. There was also a shortage of British troops and Twenty First Army Group extended within the narrow salient between the North Sea and the Meuse did not possess sufficient strength to conduct operations to the east and at the same time clear the enemy from the estuary of the Scheldt.

While the speed of the Allies slackened the resistance of the German Armies returned as suddenly as it had left them at the end of August. They were determined to protect the Ruhr and the Saar. Both - the former in particular, were surrounded by a network of strategically placed railway lines and along them reinforcements poured west of the Rhine and the Meuse. France was lost and the Allies stood on German soil. The Wehrmacht was exhorted to defend the Fatherland. On 17 September Field Marshal Von Rundstedt, Commander-in-Chief West urged them to fight to the bitter end. 'Positions will be held to the last man Every pillbox, every block of houses in the cities, every German village will become a fortress which will either bleed the enemy to death or bury its garrison in battle.' In two months time the enemy had so recovered that he was able to launch an offensive which at its outset gained surprise and retarded Allied plans for operations in the new year.

In the meantime the principal task for the Allies was to free the port of Antwerp. Elsewhere the Armies held their ground and strengthened their lines of communication.