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## Air Operations at Dieppe: An After-Action Report

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# Air Operations at Dieppe

## An after-action report by Air Marshal Trafford Leigh-Mallory

**T**he ill-fated action at Dieppe in August 1942 is most often remembered for the heavy casualties suffered by the Canadian land forces deployed in the assault and the political controversy that followed this 'military debacle'. Lingered doubts over the rationale for the raid, and persistent statements that lives were lost in vain, continue to this day. But the Dieppe Raid was much more than casualties and questionable military decision making. It had immediate and valuable implications on the planning and conduct of future Allied amphibious operations, particularly the D-Day landings on 6 June 1944.

Operation Jubilee was the first joint operation of consequence conducted by British and Commonwealth forces in the European theatre during the Second World War. It was joint because the three services – the navy, army and air force – planned and executed the raid in concert with each other. Sadly, for the Allied forces involved, it also demonstrated just how unprepared they were in 1942 for joint co-ordination at the operational level of war. In many respects, the raid took the form of three separate services executing pre-arranged single-service plans that at best were loosely co-ordinated. So long as their activities went according to plan, which was the case for the navy and the air force, they were successful. Missing was the flexibility of response that is essential for effective impromptu action from one or more service when enemy activity or other unexpected developments disrupt pre-planned operations. The post-raid Dieppe Report by the Air Force Commander, Air Marshal Trafford Leigh-Mallory, makes for interested reading on how the British and, subsequently, the Anglo-American Allies identified the key elements required for successful joint and combined operations.

Leigh-Mallory's report focuses on the conduct of the air operations but it also addresses how air forces can best be used in future operations with the navy and the army in both pre-arranged and impromptu actions. For Leigh-Mallory it all begins with effective command and control. RAF doctrine also emphasized the importance of co-ordinating the entire air effort – fighters, bombers, reconnaissance aircraft, etc. – from a central point. Fighter Command's ground

control organization was used for this purpose and it proved very successful in co-ordinating the various offensive and defensive air operations during the Dieppe Raid. A system of forward air control was also established using radio links onboard headquarters ships. This enhanced the flexibility of the air forces by linking centralized control with decentralized delivery. Moreover, it was on the basis of the success achieved by the air forces during the Dieppe Raid that the air plan for Operation Overlord was devised.

The Dieppe Raid also highlighted a number of other important factors that affected the nature of the contribution made by air forces in joint operations. The primary importance of air superiority to all other air operations, the impermanence of close support and the many difficulties of target identification, the benefits of an indirect application of air power through dislocation rather than destruction of enemy forces, and the pressing need to strengthen cross-service understanding and develop common operating procedures, all feature in the lessons identified by Leigh-Mallory and the air staff from the Dieppe Raid. Leigh-Mallory is also adept at identifying the strengths and weaknesses of air operations in a joint campaign and drawing the correct lessons on how to maximize success and minimize inherent weaknesses. His conclusions are particularly apposite and many of the observations made in his Dieppe Report had direct impact in both the air plan and the wider planning for D-Day and the Normandy Campaign.

The Dieppe Report, therefore, is one of the more important 'lessons learned' documents of the Second World War. It established a clear conceptual framework, based on hard earned and costly experience, for joint and combined operations that were the pre-requisites for an Allied victory in Europe.

David Ian Hall

(David Hall is an Air Warfare Historian on the Higher Command and Staff Course at the Joint Services Command and Staff College, part of the UK Defence Academy, Shrivenham.)

Royal Air Force  
Uxbridge, Middlesex  
5 September 1942

# Dieppe Report

## Covering Letter by Air Force Commander

Sir,

I have the honour to forward herewith my Report on the part taken by the Air Forces in the DIEPPE Operation on 19th August, 1942.

2. This Operation involved landings at Dieppe by our troops at first light followed by a withdrawal about mid-day. The Air Forces involved operated most intensively throughout the day from dawn until late into the afternoon. As the withdrawal was made on the same day as the landing a far heavier strain was imposed on the Air Forces than would have been the case had our occupation of Dieppe been more prolonged.

3. Our attacks from the sea were made under the supporting fire of destroyers only against strong and well organised shore defences. Every effort was made therefore to provide maximum air support and air cover during the initial assault.

4. This Air Support under fighter cover compromised airborne smoke and bombing attacks on enemy battery positions and the shooting up of the enemy's defences by cannon Hurricanes. Of these, smoke was by far the most effective. It was laid by Bostons and Blenheims dropping 100lb. phosphorus smoke bombs from about 50 feet.

5. The main landing was timed for 0520 hours and from 0510 to 0600 hours the smoke from these bombs covered the front of the Eastern Headland overlooking Dieppe. Both the Naval and Military Force Commanders

accompanying the expedition report that no intense fire came from this Eastern Headland until the smoke had cleared. From then onward there was intensive fire from that direction. A further sortie of smoke aircraft was recalled as a result of a signal from the Military Commander requesting cessation of air support against Bismark and Rommel. It subsequently transpired that our troops had not advanced as far towards the Eastern Headland as was then thought and smoke was in fact still urgently required. When further smoke was finally requested only a few smoke bombing aircraft were available as the remainder were loaded with SCI for the final smoke curtain to cover the withdrawal. The few available aircraft were however dispatched to the Eastern Headland. During our final withdrawal a smoke curtain laid across the frontage of Dieppe again proved most effective in covering our ships.

6. Bombing attacks on battery positions were not as effective as smoke. I had reckoned on certain batteries opening fire on their SOS lines after our flank landings had begun at 0450, but these were very slow in getting into action. They were not firing therefore when our initial bombing attacks were made in the half light at the time of our main assault and the Bombers thus found it extremely difficult to locate their targets.

7. Cannon Hurricane attacks against defences along the front of the main beaches in support of the assault were extremely successful though their attacks lasted only ten minutes. The Naval and Military Force Commanders paid tribute to the magnificent timing of this attack, and reported that these Fighters completely

The seafront in Dieppe photographed in March 1946.



diverted enemy fire from our assaulting Infantry. Unfortunately our Infantry touched down on the beaches a few minutes late. They were thus not able to take full advantage of the Fighters' presence, and when the Fighters had concluded their attacks were subjected to heavy fire from houses along the front.

8. It was intended to employ Bombers against any enemy reinforcements making for Dieppe but none were located. Insistent demands were made for continued attacks against enemy gun positions. Bombers proved to be quite ineffective for this task although in the circumstances it was the only use to which they could be put.

9. Cannon Hurricanes throughout did magnificent work, especially during the final stage of the withdrawal when attacking machine and heavier gun posts on the Headlands flanking Dieppe. These attacks temporarily diverted fire, thereby assisting our troops to disengage and to re-embark.

10. The most satisfactory part of the Operation from the Air Force point of view was the cover given to the expedition. The earlier fighter cover sorties left ground in the dark, and arrived over Dieppe punctually at first light. They patrolled between about 3,000 and 6,000 feet. This worked well, as enemy aircraft came low, in attempts to bomb and shoot up our ships. Later, as bombers appeared, I was informed that they were flying between 10,000 and 12,000 feet, some dropping their bombs from these heights, and others diving down. I adjusted the heights of my patrols accordingly. I also learned that Focke Wulfs were flying at about 15,000 feet and Spitfire IX Squadrons were ordered to patrol above them. These changes in tactics worked well and in all some 45 Bombers were destroyed, 11 probably destroyed and 54 damaged. That only one major vessel in the expedition was seriously damaged throughout the day can be attributed to the excellent work of the Fighter Cover Squadrons.

11. The Air/Sea Rescue organisation as a whole worked very well. Some 20 pilots all told were picked up from the sea. It is regretted that Dover should have lost three out of their five rescue boats but it was quite impossible to keep continuous track of their activities. Whilst under the Fighter screen they were adequately protected

but at times they gallantly went beyond this cover and suffered casualties.

12. An unsatisfactory feature of the Operation was the low standard of aircraft recognition displayed by friendly gun crews. Our own aircraft were very frequently fired on and suffered casualties. There are two obvious remedies for this. Naval gunners should be given intensive training in aircraft recognition, and selected personnel skilled in the recognition of aircraft should be carried in each ship. The Royal Observer Corps is the most suitable source for providing experts for this work.

13. I consider that the total casualties we suffered in this Operation were remarkably light in view of the number of Squadrons taking part and the intensity of the fighting. Details given in Appendix "C" reveal that the highest casualties per Squadron were 2.5 in the Army Co-operation Tactical Reconnaissance Squadrons, and the lowest .84 per Squadron of the Fighter Cover.

14. My main conclusions from the day's operations are:

(i) That smoke either dropped or laid from aircraft is of the highest value in a combined operation of any kind. I could quite easily have done with treble the number of smoke aircraft.

(ii) That such an Operation facilitates fighting at altitudes best suited to our present equipment.

(iii) That with the present relative strengths in aircraft, adequate cover can be provided for an expedition of this nature. Had the battle been more prolonged my Squadrons would have been in a better conditions than the enemy to continue on the following day. Reports since received indicate that the German Air Force on the Western Front lost between 150 and 200 aircraft. Although many of our pilots had done as many as five sorties, there was no undue sign of fatigue.

(iv) We gained much valuable information concerning the forward control of aircraft, both as regards Cover Squadrons and Close Support aircraft. Controllers in the Headquarters Ships were of the greatest

assistance to the Fighter pilots, and this system calls for a wider application in future.

Mentions in connection with this very memorable engagement.

15. I cannot speak too highly of the way on which all ranks of the Royal Air Force played their part in this battle.

Your Obedient Servant,  
T. Leigh-Mallory  
Air Marshal,  
Air Force Commander

16. I am forwarding separately a list of recommendations for decorations and

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## Report by the Air Force Commander on the Combined Operation Against Dieppe - August 19th, 1942.

### General Outline

1. Operation "JUBILEE" was a raid against occupied territory with the purpose of capturing by assault and occupying for a limited period, the town of DIEPPE. Military tasks in the area of DIEPPE included the destruction of local defenses, power stations, dock installations – the capture of prisoners and the destruction of the aerodrome installations near the town. It was also intended to capture and to remove German Invasion barges and other crafts in the harbour.

2. The operation was planned to take place on the first suitable morning for such a

landing between the 18th and the 23rd August. The expedition sailed from the area of the PORTSMOUTH Command in a succession of groups starting at civil twilight on the evening of the 18th August.

3. The Naval, Military and Air Forces assigned to this operation are set out in Appendices A and B to this report. A Sketch map of the operation is attached at Appendix E [not reproduced].

4. The plan prepared jointly by the three Force Commanders involved a landing on the outer flanks of DIEPPE at "ORANGE" and "YELLOW" beaches by Nos. 4 and 3 Commanders, whose tanks were to neutralise enemy Battery positions 6 miles to the East and West of DIEPPE. At the same time a Regiment of the 2nd Canadian Corps was to be landed to secure "GREEN" Beach three miles to the west of Dieppe, and to attack objectives on the West outer perimeter of the town (HINDENBURG). Simultaneously the Royal Regiment of Canada was to secure "BLUE" Beach 1½ miles to the East of DIEPPE, and objectives on the East flank of the outer perimeter, i.e. BISMARCK. Half an hour after the Royal Hamilton Light Infantry and Essex Scottish Regiment with the Camerons of Canada were to make frontal assaults on "RED" and "WHITE" Beaches in front of the town of DIEPPE. This frontal assault was to have been supported



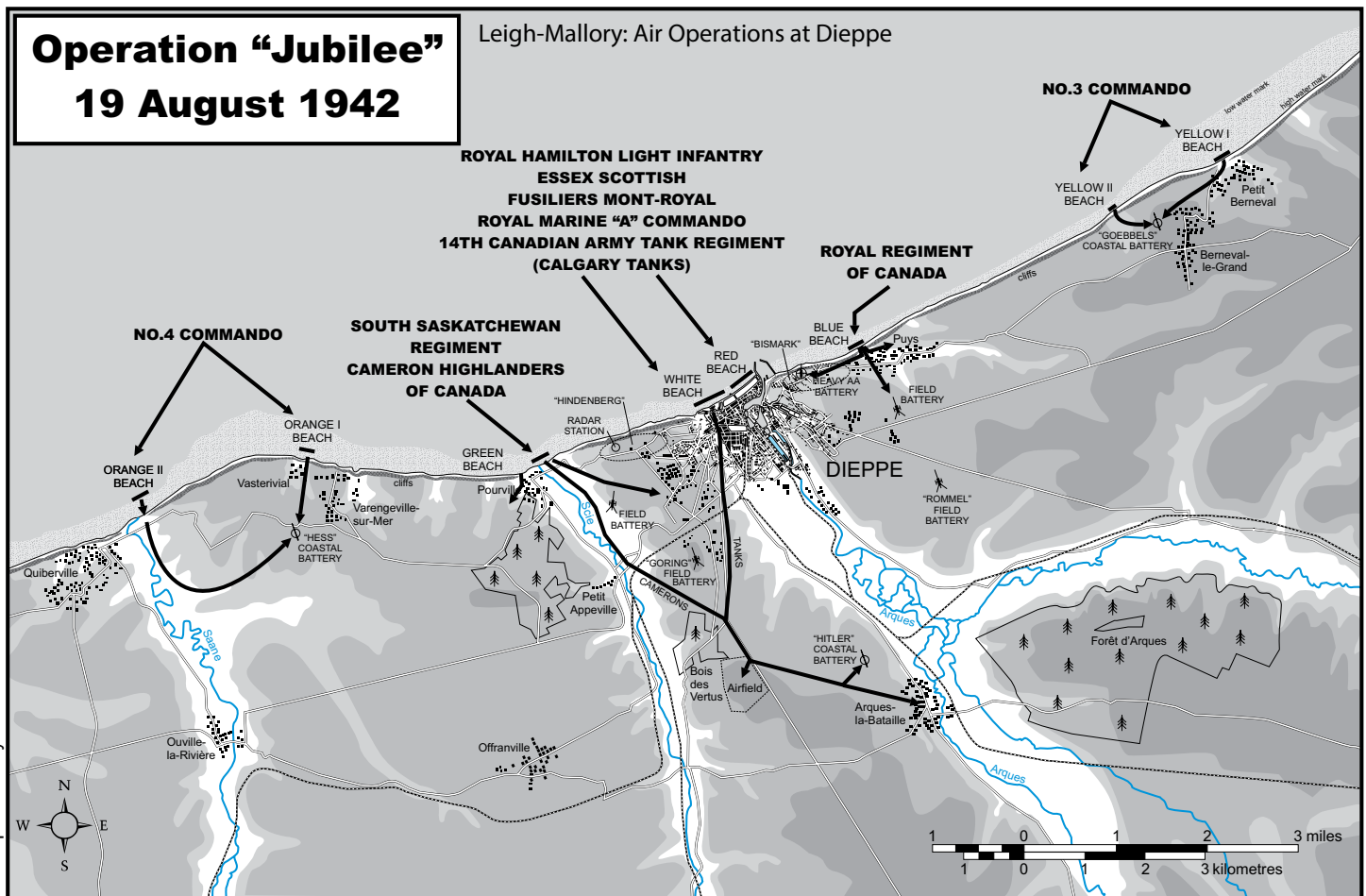
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Sir Trafford Leigh-Mallory, the author of this report, was the Air Force Commander during the Dieppe operation.

# Operation "Jubilee" 19 August 1942

Leigh-Mallory: Air Operations at Dieppe

Map drawn by Mike Bechthold ©2003



by an armoured detachment of 18 tanks. Later a Royal Marine Commando was to land near the Harbour of DIEPPE to demolish objectives in the Dock area. A further echelon of tanks was then to be landed making a total force of 38 tanks. It was intended, when the tasks ashore had been completed, to withdraw the whole force for re-embarkation at about 1100 hours.

## Air Support

Air support was to be provided throughout the operation as follows:

### Fighter Cover

(i) Fighter cover and general protection for the expedition throughout the hours of daylight. The primary task of this cover was to protect the expedition against air attack. It was considered that the two most dangerous periods in regard to attack from the air would be the landing and withdrawal. It was, therefore, decided that the strength of this fighter cover should vary from 2 to 6 squadrons during the different phases of the operation, with such reinforcement as might prove necessary.

### Close Support

(ii) (a) Close support, bombing and low flying fighter attacks on selected targets were to be made in direct support of the assault, occupation and withdrawal.

(b) Smoke laying aircraft were to be used to neutralize defences, both in accordance with the pre-arranged plan and subsequently as required at the request of the Military Force Commander.

(c) Day Bomber Squadrons were to be employed to attack both pre-arranged targets and requested targets.

### Reconnaissance

(iii)(a) Tactical Reconnaissance was to be made over the area of the operation including the lines of approach of any enemy reinforcement.

(b) Coastal ASV reconnaissance from Cherbourg to Boulogne was to be maintained throughout the night prior to the assault.

(c) Fighter anti-surface vessel reconnaissance patrols were to be maintained throughout daylight hours.

## Strategical Bombing

(iv) It had been agreed between the three Force Commanders not to lay on any preliminary or diversionary effort with bombers prior to the assault in order not to jeopardise surprise. A strategical bombing attack was, however, planned against the enemy aerodrome of ABBEVILLE, with a view to interfering with the operation of his defending fighters. This attack was to coincide with the main withdrawal from the Beaches at which time considerable interference was anticipated from fighters operating from the ABBEVILLE area.

### Disposition of the Air Forces in No. 11 Group

6. The following forces were available:

Day fighter forces  
 50 Squadrons (Cover)  
 6 Squadrons Close Support

Day Bomber forces  
 2 Squadrons

Hurricane Bomber forces  
 2 Squadrons

Army Co-operation forces  
 4 Squadrons

"Smoke" forces  
 3 Squadrons

These forces were disposed as set out in the Order of Battle, at Appendix 'A' to this report.

7. The assembly of these forces involved internal moves of Squadrons within No. 11 Group and the reinforcement of the Group by 15 Squadrons from outside. These extensive movements were carried out on the 14th and 15th August. Detail of the Squadron and necessary maintenance unit moves were as follows:

	Intake of Units into No. 11 Group	Internal Movements into No. 11 Group
Fighter Squadrons	17	17
Servicing Echelon	-	8
Squadron Transports	4.5	9.5
Petrol Tankers	7	12
Starter Trolleys	32	116
Echelons without air lift	-	6
Squadrons without air lift	-	6
Squadrons with air-lift	-	11

8. The following supplies of ammunition and petrol were accumulated at Stations in No. 11 Group immediately prior to the Operation.

Ammunition	20 mm Ball	20 mm HE/I	.303 AP	.303 Incend.	20 mm Links
	727,200	727,200	7,484,400	2,474,800	1,454,400
Petrol (100 Octane)	712,000 gallons				

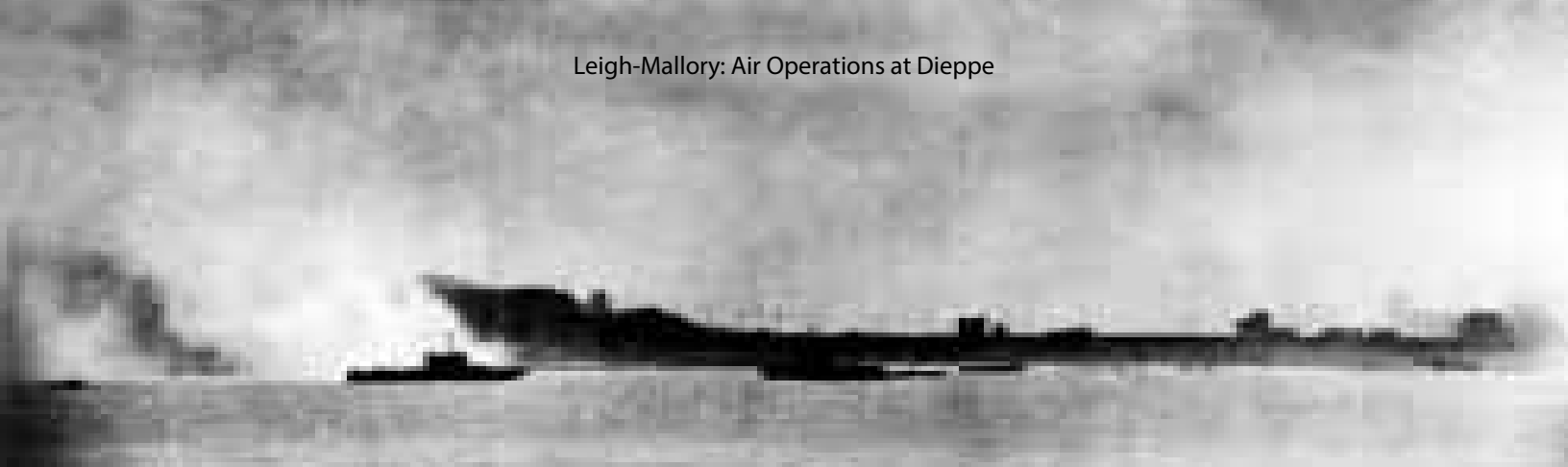
### Enemy Dispositions

9. The German Air Force had approximately 260 frontline single engined aircraft between Brest and Texel. These were disposed as follows:

Holland	40
Pas de Calais	125
Brest to Fecamp	95

10. The German policy since June this year has been to concentrate these air forces on a few aerodromes along the Western Front. The German system of reinforcement is flexible up to a point, with extreme mobility of units from one place to another. On the other hand he finds difficulty in adapting his control areas quickly to these reinforcements.

11. Apart from the reconnaissance units and a small number of aircraft used for anti-shipping, the whole of the German bomber force on the Western Front has been in use by night only. This force was disposed mainly in the Dutch bases at EINDHOVEN, SOESTERBERG, GILZE RIGEN and DEELEN. It numbered some 120 long range bombers with a further 100 at BEAUVAIS, CREIL, CHATEAUDUN, CHARTRES and RENNES. Reports from Pilots during the Operation JUBILEE indicate that a small number of bombers from reserve training units were brought into action. It was considered unlikely that he would be able to bring his fighters from as far West as Brest or as far North as Holland early in the operation. Thus the Fighter forces likely to oppose us in the early stages were from the ABBEVILLE area – 50, BEAUMENT-LE-ROGER area – 50, CHER-BOURG area – 20, together with possible reinforcements from ST. OMER and COURTRAI – approximately 30 and 45 respectively.



This photo of the Dieppe coastline was taken during the raid on 19 August 1942.

### **Command**

12. Captain J. H. Hallett, R. N. was the Naval Force Commander.

Major-General F. N. Roberts, MC was the Military Force Commander.

Air Marshal T.L. Leigh-Mallory, CB, DSO, Air Officer Commanding No. 11 Group, was the Air Force Commander.

### **Operational Control**

13. Control of all air forces was exercised direct by the Air Force Commander from his operational Headquarters at Uxbridge. Aircraft were despatched on instructions issued from No. 11 Group Operations Room through the normal Group to Sector, Sector to Squadron Dispersion Point channels. The Force Commanders afloat were able to ask at any time for special air support from bombers or fighters by means of the W/T link provided between Portsmouth and the Headquarters Ship, and a listening watch maintained at No. 11 Group Headquarters.

14. The lowest Squadron in the Fighter Cover operated on No. 11 Group Guard No. 1 frequency so that the Fighter Controller in either of the Headquarters Ships could communicate with the Squadrons of the Fighter Cover.

15. All outgoing Close Support Fighter sorties called the Headquarters Ship by VHF R/T when approaching the enemy coast. The Fighter Controller in the Headquarters Ship then, at the request of either the Military or Naval Commanders re-directed Fighter sorties to attack any suitable alternative target which the situation demanded.

16. Despite the fact that a very large number of Squadrons were being used throughout the operation (over 60 squadrons) this method of control worked admirably. During the whole course of this very gruelling test of the normal ground control organisation in No. 11 Group there was no breakdown.

17. This proved conclusively that the existing Fighter ground control organisation, although primarily designed for defensive purposes, provides all the facilities required for the direction of offensive operations within normal fighter range. The co-ordination of the Air Force effort from a central point is essential. The Group Operations Room with its extensive network of communications augmented by advanced W/T and R/T communication with local Commanders in the expedition proved to be ideal.

18. The local control by the Headquarters Ships proved equally successful. The bottom Squadron of all Fighter Cover formations operated on No. 11 Group Guard I frequency, and were directed on to enemy aircraft by a Controller in Headquarters Ship No.2. Close Support Squadrons operated on a Tangmere Sector Operational frequency and were directed on to targets as required by the Military Commander by a Controller in Headquarters Ship No.1. Thus the two Headquarters Ships accompanying the expedition were used to assist in the control of air forces as would an AASC during a land battle.

19. In the majority of cases Close Support Fighter Pilots had been briefed, as to the targets to be attacked, before leaving the ground, but experience gained during the operation showed conclusively that it was possible to re-direct Fighters or to give them assistance in finding their target by local direction. Similarly Fighters were frequently assisted in sighting enemy aircraft by





CFPU PL 10706

the running commentary given by the controller in Headquarters Ship No. 2. There is no doubt that this local control was largely responsible for the high percentage of interceptions made on enemy aircraft, thus greatly minimising the effectiveness of enemy air attack on ships and troops.

20. To summarise – the system of control from the Group, through Sectors, and through the Headquarters ships, adequately met all requirements. The excellent communications and flexible control facilities of the normal Fighter organisation at home proved most efficient for such combined operations.

### **Tactical Reconnaissance**

21. Tactical Reconnaissance units suffered a higher casualty rate than any other type. This was due to the deep penetration required of them which necessitated their patrolling well beyond the Area of Fighter Cover. The coast roads leading to Dieppe were reconnoitred every half hour, and those from Amiens, Rouen, Yvetot and Le Havre, places from which reinforcements might be expected, every hour.

22. Aircraft took off from GATWICK, flew to the Dieppe area via the BEACHY HEAD route, made contact with the Command Ship, and then proceeded on their allotted tasks. On completion of each sortie Tactical Reconnaissance pilots flew sufficiently near to the ship to ensure satisfactory R/T transmission of any information they had. They then returned immediately to GATWICK and passed their information by telephone to the Air Force Commander.

Refuelling a Canadian Spitfire. Nine Canadian squadrons took part in Operation Jubilee, including six Spitfire squadrons, two of Mustangs, and one of Bostons.

23. The only movement worthy of note was that of about five light tanks approaching Dieppe reported at 1210 hours.

24. The range of the HF fitted in the Tactical Reconnaissance aircraft proved inadequate.

### **ASV Reconnaissance Patrols**

25. Aircraft of Coastal Command maintained ASV search patrols throughout the hours of darkness on the flanks of the expedition during the passage. No sightings were made.

### **General Narrative**

26. The operation is conveniently divided into five distinct phases. The first covers the outward passage and the landings on various beaches. The second covers the period when progress was being made towards the predetermined objectives ashore. The third phase covers the withdrawal of landing parties to their beaches. The fourth period extends to the time when the withdrawal was complete. The fifth phase covers the return passage to England.

### **Time**

(2000 hours) 27. The expedition sailed from the area of the Portsmouth Command in a succession of Groups on the evening of the 18th August, headed by the destroyer "CALPE".

(2130 hours) 28. Shortly before dark the convoy, which consisted of 217 craft in all, steamed past the "CALPE" (Headquarters Ship No. 1) to be checked.

(0115 hours) 29. In the early hours of the 19th August, the "CALPE" led the way through an enemy minefield, which had already been swept by a flotilla of mine-sweepers from Newhaven. A quarter of an hour later the whole convoy was safely through the minefield but it was noticed that the LCTs had lagged some way behind.

(0300 hours) 30. Shortly after 0300 hours the first landing craft were lowered from their

parent ships. The lighthouse on the cliff outside DIEPPE was then visible. Up to this time the outward passage was comparatively uneventful, but a misfortune now occurred.

(0320 hours) 31. The landing craft conveying No. 3 Commando, which had been detailed to attack "YELLOW" Beach (6 miles East of DIEPPE) came into contact with an enemy convoy which included armed trawlers, and a number of our small craft were sunk. These losses resulted in the failure to subdue coast defence batteries to the East of DIEPPE.

32. There was no other enemy activity throughout the night and no attempt was made by the enemy to reconnoitre for our approaching expedition. It would seem, therefore, that the force was assembled and dispatched without disclosure. It would have achieved complete tactical surprise if No. 3 Commando had not unfortunately been intercepted by the enemy trawlers en route.

#### **Phase 1 (0445 – 0550 hours)**

33. Despite the chance contact with enemy ships en route, the forces arrived at DIEPPE approximately on time, and the initial naval bombardment of selected objectives was carried out as arranged.

34. In the opening attack, escort was provided for smoke carrying aircraft of Bomber and Army Co-operation Commands laying a smoke screen over the Cliff Headland to the East of Dieppe Harbour. This was most effective lasting from 0510 to 0600 hours. Intruder aircraft engaged each of the two gun Batteries to the South of Dieppe with bombs and machine guns. Hurricane Bombers, Fighters and Spitfires attacked the coastal emplacements, and beach defences. Cannon fighters provided direct support to our troops as they landed at "RED" and "WHITE" Beaches in front of DIEPPE and were successful in centralising enemy fire along the front from

A grainy air photo of Dieppe taken during the raid.





**Above:** This group of pilots from No.401 Spitfire Squadron, commanded by Squadron Leader Keith Hodson, was photographed on the day of the Dieppe assault as the pilots waited for their aircraft to be refuelled in between flights. Shown in the group are (l.-r.) Flight Sergeant Ed Gimbel, who had shared the probable destruction of two Fw.190s two days previously, F/L Jim Whitham, who shared the destruction of another Fw.190 on the same day and who probably destroyed one Fw.190 and damaged another on the day of the Dieppe affair, Flight Sgt. Bob Reesor, who also scored a probable earlier in the week, P/O B. "Scotty" Murray, who shared the destruction of a Fw.190 with F/L Whitham two days before the Dieppe show and who scored a probable and a damaged on the day of the big air battles.

**Left:** P/O B. "Scotty" Murray just back from a flight on the day of the Dieppe air battles. On that day, he scored a probable and a damaged during one flight. Two days earlier, he had shared in the destruction of a Fw.190 with F/L Jim "Whit" Whitham while the squadron was escorting Flying Fortresses of the USAAF to Rouen.

CFPU PL 10628

0515 to 0525. During the landings there was little opposition from enemy aircraft.

35. In phase I our surface forces kept to their time table despite shelling by enemy shore batteries. Batteries situated to the south of the town were slow to commence firing but when they did were particularly destructive. Further smoke screens were requested to cover our landings, a necessity which had already been anticipated and additional smoke aircraft were already on their way to the scene of action.

## Phase 2 (0550 – 0730 hours)

(0640 hours) 37. The Western Commando had been completely successful in overcoming the battery position at HESS and killing all the personnel. The final assault on this position was assisted by a Squadron of Spitfires which attacked HESS Battery at 0620 just before our men were due to attack. This assistance was successful and the attack was made immediately our aircraft had finished. The CP of this Battery was in a Lighthouse close by which had been attacked by two Spitfires at first light. The landing on the Beach 1½ miles to the West of Dieppe (GREEN Beach) was also successful, capturing the RDF station and destroying their other objectives.

38. The Eastern flank (BLUE Beach) initial attack had, however, failed. A second attack made at approximately 0740 resulted in a small penetration, which, however, did not succeed in silencing the guns on the Eastern Headland. In the main landing on Red and White Beaches the tanks were held up by the inability of the Engineers to land the explosives necessary to blast a passage through the promenade wall, with the result that the majority of the tanks were stranded, and the infantry were disembarked whilst the tanks were still immobilised. Large white houses overlooking the Beaches gave considerable trouble and bombardment by destroyers was requested from our troops ashore.

(0605 hours) 39. In view of these difficulties a further smoke screen was called for on the Eastern Headland "BISMARCK" but no aircraft were immediately available for this. The smoke carrying aircraft were at once ordered to load up

with smoke bombs and take off as soon as they were ready.

(0621 hours) 40. Earlier attacks had failed to silence the Eastern Headland defences and the gun positions (HITLER and GOERING) South of Dieppe continued to shell the Beaches.

(0605-0615 hours) 41. Twelve Bostons had already been ordered off to bomb HITLER and were quickly airborne.

(0640-0645 hours) 42. ROMMEL was also still giving trouble and the landing on BLUE Beach had in consequence failed. The only remaining Bostons were, therefore, detailed to attack ROMMEL followed by a further 6 when they became available.

(0723 hours) All these Batteries continued to harass our troops and an attack was called for on BISMARCK. A Squadron of Cannon Hurricanes had already been dispatched to be "on call" to the Headquarters Ship by 0740 and a second Squadron of Cannon Hurricanes was despatched to be "on call" to the Headquarters Ship 20 minutes later.

43. Thus at the end of the second phase the RDF Station, 5 light AA positions had been captured and the gun battery behind the ORANGE Beach had been demolished. Throughout this period air cover was afforded to the troops against moderate enemy fighter opposition; the number of enemy aircraft patrolling the area at any one time during this period did not exceed one Squadron.

## Phase 3 (0730 – 1050 hours)

(0730 hours) This third phase covers the withdrawal to the Beaches.

(0752 hours) 45. At 0752 two Cannon Hurricane Squadrons were ordered to engage enemy E-boats which had been reported proceeding south from BOULOGNE. Two fighter cover Squadrons accompanied these Hurricanes. At the same time a message was received cancelling the support on "BISMARCK" and "ROMMEL". The Air Force Commander was always doubtful whether this latter message was genuine, but had to act on it as information



CFPU PL 10747

Pilots of Canada's No.401 Squadron group themselves around Air Marshal A.M. Bishop during his visit to the unit in September 1942 to congratulate them on their performance during the Dieppe operation.

was received within a few minutes that a second landing in BLUE Beach had been successful. At this time one Bomber Squadron was on its way to bomb ROMMEL and was beyond range of recall. Aircraft were also on their way to drop smoke bombs on the Eastern Headland; these were recalled.

(0830 hours) 46. The situation had meanwhile deteriorated on the Western flank. Heavy opposition was also coming from the Western Headland and the houses behind the beach. Machine gunning and shelling continued undiminished from the Headland and from "HINDENBURG". (0916 hours)

(0926 hours) 47. A Squadron of Hurricane Bombers and a Squadron of Cannon Fighters covered by two Spitfire Squadrons were ordered to attack these positions.

(0940 hours) 48. The situation in various areas continued to grow critical and due to various delays the time scheduled for the evacuation was deferred from 1030 hours to 1100 hours.

(0956 hours) 49. At 0956 the following reply was received to the Air Force Commander's request for a situation report:

"Situation too obscure to give useful report. Air co-operation faultless. Enemy air opposition now increasing. Have you any questions."

(1004 hours) 50. A few minutes later a request was received for a 30 minute smoke screen along RED and WHITE Beaches from 1100 to 1130 hours: Thruxton was ordered to prepare as many aircraft as possible with SCI and as many aircraft as could be fitted were ordered off for this purpose. The Military Commander gave GREEN Beach third priority after RED and WHITE Beaches for smoke, and 3 Blenheims with an escort Squadron were detailed to this task.

51. At 1039 hours a request was made for maximum fighter support against machine gun positions on both Headlands.

(1039 hours) 52. Four Close Support Squadrons were ordered to these attacks with two Squadrons as cover.

(1047 hours) 53. A further call for support against the Headland came in 20 minutes later, by which time Squadrons were already on their way. At this time it appeared that the LCAs were arriving at WHITE Beach, ready to re-embark the forces on shore. Thus at the beginning of this third period the right wing of our landing

forces had made progress but those in the centre including the tanks were held up.

54. Enemy air opposition had by now increased considerably, 20 to 30 fighters being seen continuously in the area until 1000 hours when enemy bombers appeared escorted by fighters.

(1050 hours) 55. The enemy employed a considerable number of bombers from aerodromes in Holland in addition to small numbers from BEAUVAIS. To counter this increased enemy activity and in order to cover re-embarkation, which was about to commence, the strength of fighter cover over DIEPPE was increased from 3 to 6, and at times to 9 Squadrons. Heavy casualties were inflicted on the enemy bombers who were now concentrating on shipping and landing craft.

#### **Phase 4 (1050 – 1410 hours)**

56. The fourth phase marks the withdrawal from the Beaches. During this time the gun batteries BISMARCK and HINDENBERG on the East and West Headlands continued their intense bombardments, and in many areas the situation was more than critical.

57. Until the expedition had safely withdrawn, frequent and urgent requests were received for

bombing and close support attacks in enemy gun positions, and calls for smoke screens were made.

58. At 1030 hours a most successful pre-arranged attack was made by 24 Fortress Bombers escorted by four Spitfire IX Squadrons, on the enemy Fighter aerodrome at ABBEVILLE-DRUCAT. Some twenty-five tons of high explosives and a large number of incendiaries were dropped. Many bursts were seen in the North West dispersal areas and on the run-ways whilst fires were started in woods adjoining the dispersal areas. Bursts were also observed on storage sites and clouds of black smoke were seen rising from the whole target area. This very accurate bombing of dispersal areas and run-ways – bombs fell near to at least 16 aircraft in those areas – caused considerable confusion to the enemy, and he was denied the use of his aerodrome for probably 2 hours, his aircraft being instructed to land at alternatives. The ABBEVILLE control was out of action until the evening, when a new and unfamiliar voice came on the air.

59. This attack on Abbeville was followed by a diversionary feint made towards OSTEND by a Typhoon Wing in an endeavour to draw enemy Air Forces away from Dieppe.

(1100 hours) 60. The enemy air activity by this time had increased and he had altered his

Flight Sgt. Mehew Zobell, brought this Spitfire back safely home after the Dieppe affair despite the fact that his forehead had been injured - not seriously - by an exploding cannon shell from an enemy fighter. The holes which the shell made in the cowl of his cockpit are clearly visible. In the other picture, the severe damage to his rudder can be seen. Despite this he made a perfect landing. His only complaint was that the medical officer would not allow him to fly during the rest of the day. "I missed a lot of fun," he said bitterly.



form of attack. The tactics of our fighter cover were changed to meet this situation by adding a high Squadron of Spitfire IXs at 23,000 feet.

(1200 hours) 61. During this period bombing attacks were made by Boston Squadrons on BISMARCK and HINDENBURG.

62. Further attacks were also made by three Close Support Squadrons and smoke was laid between the East and West Headlands across the port of DIEPPE to cover the final withdrawal.

63. The constant requests for bombing, close support and smoke were met to the limit, demands frequently being anticipated as a result of the clear picture available in the Fighter Control Room and Uxbridge. All types of Squadrons were called on to operate a shuttle service.

64. It was decided that Tactical Reconnaissance aircraft could serve no further useful purpose and their operational flights were discontinued.

65. In the final withdrawal a maximum effort was directed to protect our re-embarking forces from both ground and air attack.

(1310 hours) 66. By 1310 hours it appeared doubtful whether any more troops could be evacuated. An hour later the last craft was reported 3 miles from the French Coast. The withdrawal from DIEPPE had been completed.

#### **Phase 5 (1410 – 2245 hours)**

67. As our forces cleared the enemy coast smoke-laying aircraft laid a protective screen between them and the enemy's defences.

68. The Typhoon Wing was then reinforcing our Spitfires in intercepting enemy bombers coming from the direction of Holland.

(1428 hours) 69. Fighter Cover was maintained throughout the long voyage home.

(1545 hours) 70. There was considerable deterioration in the weather and the enemy took advantage of the increasing cloud cover to send out single bombers to attack our ships as they neared the English Coast. One or two formations of FW 190s were also employed for this purpose. In addition to standing cover over the returning convoy, 86 interception sorties were made.

### **Appreciation of the Enemy's Air Effort**

71. The enemy reacted almost as had been foreseen; at first he did not appear to appreciate the scale of our effort and he used only 25/30 fighters in each sortie. As the day went on the strength of his sorties increased to between 50/100 aircraft. At first fighter bombers, and later, when the moves from Holland had been effected, night bombers in increasing numbers were used until all his resources on the Western Front were in action.

72. Early in the day enemy air effort was confined entirely to fighters patrolling the area in small numbers. Occasionally dive attacks on our ships were made from height. The German control merely instructed his aircraft to go to the DIEPPE area where large numbers of British bombers and fighters were operating.

73. It was not until about 1000 hours, some six hours after our assault, that our patrols encountered enemy bombers. It would seem, therefore, that these had not been at a high state of readiness.

74. The first bombers came in small numbers and were escorted by FW 190s. Later larger formations up to 15 in number operated under the main German Fighter Force which was engaging our cover patrols. Reports from pilots indicate that a small number of reserve training bombers were included.

75. The German Bomber Force throughout confined its attentions to our convoy and did not harass our troops ashore. A bomber jettisoning its bombs crippled HMS Berkeley shortly before 1300 hours. She was later sunk by our own forces.

The attack on ABBEVILLE – DRUCAT at 1030 hours was undoubtedly successful in striking at the enemy's most congested aerodrome at a critical period in the operation. This attack was timed and prearranged to this end and it undoubtedly succeeded in considerable reducing the efforts of the GAF against our expedition.

## Casualties

76. Details concerning air effort, serviceability of aircraft, casualties to aircraft and personnel and results achieved by the Air Forces during operations at Dieppe are shown in Appendix "C" to this report.

77. The very low rate of casualties suffered in all types of Squadrons during each intensive daylight operation in close support of a combined expedition are of particular interest.

## Administration

78. The concentration and redistribution of Air Forces in No. 11 Group was for security reasons undertaken as a reinforcing exercise, under the title of VENOM.

79. No serious administrative difficulties were experienced throughout the operation, though the shortness of the period of activity did not perhaps bring to light some of the difficulties which might have arisen had it been more prolonged.

## Communications

80. Communications on the whole were excellent. Signals were promptly and clearly received at Uxbridge. The majority of outgoing messages from Uxbridge to the Headquarters Ship retransmitted by Portsmouth, did not reach the Military Commander afloat, so that requests for Close Support from the Ship were often repeated unnecessarily.

81. The Control organisation in the Ships worked very efficiently and this system is capable of further expansion and development.

82. Additional land line links to Uxbridge for the operation worked fairly satisfactorily, although some of the temporary lines were not up to the high standard necessary.

83. The operations and Intelligence Teleprinter Operators worked at high pressure but were able to handle the traffic without serious delays.

## Conclusions

84. (i) This operation showed that such expeditions can be successfully supported and protected by home defence Fighters operated by the normal Home Defence Fighter Organization, assisted by forward direction through R/T in ships. This efficient organization is fully capable of so operating Air Forces to the limit of present fighter range and is bound to be superior to any alternative forward control scheme which could never provide anything like equal facilities.

(ii) Landings on such a scale in occupied territory in daylight effectively pin the enemy air forces to an area enabling our supporting Fighters to operate at height and in conditions best suited to them. In existing circumstances the enemy is forced to employ his night bombers in daylight, at times unescorted by fighters thus sacrificing an appreciable part of his limited bomber resources.

(iii) Close Support attacks by Cannon Fighters are effective only whilst they are engaging their targets, but they have no lasting material effect on well protected defensive positions. they are extravagant in as much as each aircraft is in action for a few seconds only. To achieve any lasting moral effect would demand such a large expenditure of these Fighters that our efforts in other directions would be reduced to unacceptable proportions.

(iv) A very much higher standard of interservice recognition is essential in combined operations. As modern aircraft are all so alike, it is imperative that all personnel have a very thorough knowledge of and frequent practice in recognition.

(v) Airborne smoke is extremely valuable in combined Operations. Smoke is often likely to have better effect than bombing, particularly if it is intended to protect surface forces against well placed gun positions. It is essential, however, to speed up the present rate of turn round for smoke carrying aircraft and to be able quickly to alternate between SCI and bombs and to change over from one to the other on the ground in the shortest possible time.



(vi) Some difficulty was experienced at times in obtaining detailed target requirements from the Headquarters Ship. This problem of locating and selecting suitable targets for Air attacks, together with methods for defining, to the Air Force Commander required careful interservice study so that the Air effort is always profitably employed.

Certain major conclusions together with my recommendations for awards are being forwarded by me in a separate letter.

T. Leigh-Mallory  
Air Marshal  
Air Force Commander

## Appendix C

Operation "JUBILEE"							
Effort		Enemy Casualties			Our Casualties		
No. of aircraft	sorties	destroyed	probable	damaged	pilots & crew		aircraft destroyed
					missing	killed	
<b>Fighters</b>	2399	87 ½	45	143	57	-	88
<b>Army Co-op Tactical Reconnaissance</b>	72	½	-	-	9	-	10
<b>2 Group</b>	62	-	-	-	1	3	1
<b>Smoke laying a/c</b>	50	-	1	-	3	7	7
<b>Coastal</b>	7	-	-	-	-	-	-
<b>American Bomber Command</b>	24	-	-	-	-	-	-
<b>Total</b>	2614	88	46	143	70	10	106

Enemy Casualties by Type			
	destroyed	probable	damaged
<b>Bombers</b>	41	17	58
<b>Fighters</b>	47	29	85
<b>Total</b>	88	46	143
Reports received indicate that the German Air Force on the Western Front lost between 150 and 200 aircraft.			

Average Casualties per Squadron			
Squadron type	No. of Squadrons	pilots killed or missing	Ave. casualties per squadron
<b>Close Support. (including Hurricane Bombers)</b>	8	15	1.87
<b>Army Co-operation</b>	4	9	2.25
<b>Smoke Laying</b>	3	3	1
<b>Bombers</b>	2	1	.5
<b>Cover Squadrons</b>	50	42	.84
<b>Total</b>	Pilots - 70	Crew - 10	