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# "The support afforded by the air force was faultless" The Royal Air Force and the Raid on Dieppe, 19 August 1942

Ross Mahoney

Operation Jubilee, the raid on Dieppe, 19 August 1942, maintains a specific place in Canada's cultural memory of the Second World War. Charles Stacey, the Canadian army official historian, stated in 1948 that, "The raid on Dieppe was perhaps the most hotly-discussed operation of the war."<sup>1</sup> The debate over Dieppe is best represented by the duologue between Brian Loring Villa and Peter Henshaw over the role of Vice-Admiral Lord Louis Mountbatten and the Chiefs of Staff Committee in the authorisation of Jubilee, which came to fruition in the pages of *The Canadian Historical Review* in 1998.<sup>2</sup>

The debates over Jubilee can be transplanted onto the role of the Royal Air Force (RAF) in the raid. Villa has argued that, "There was a degree of callousness in [Air Chief Marshal Sir Charles] Portal's [chief of the air staff] allowing a largely Canadian force to go in without the bomber support they needed."<sup>3</sup> This fallacious argument, based on hindsight and a lack of understanding of the RAF's capability at this point in the war, requires revision. The historiography on Jubilee has failed to contextualise the RAF's role in the raid. Accounts polarise between triumphalism or criticism of the RAF's claims. Most fail to grasp the context in which the RAF launched the raid.

**Abstract: The failure of Operation Jubilee, the raid on Dieppe, has partially been attributed to the failure of the RAF to provide the bomber support needed to support the landings. This fallacious argument, based on hindsight and a lack of understanding of the RAF's capabilities at this point in the war, requires revision. This article examines the doctrinal and operational context of the RAF forces involved in Jubilee. Prewar combined operations doctrine stated that the key role for air power was the maintenance of air superiority. The absence of heavy bombers at Dieppe did not doom the operation. The RAF contributed significantly to the operation by seeking to battle the Luftwaffe in the manner that it did during Jubilee, and as such, it provided the most appropriate protection that it could for the assault forces.**

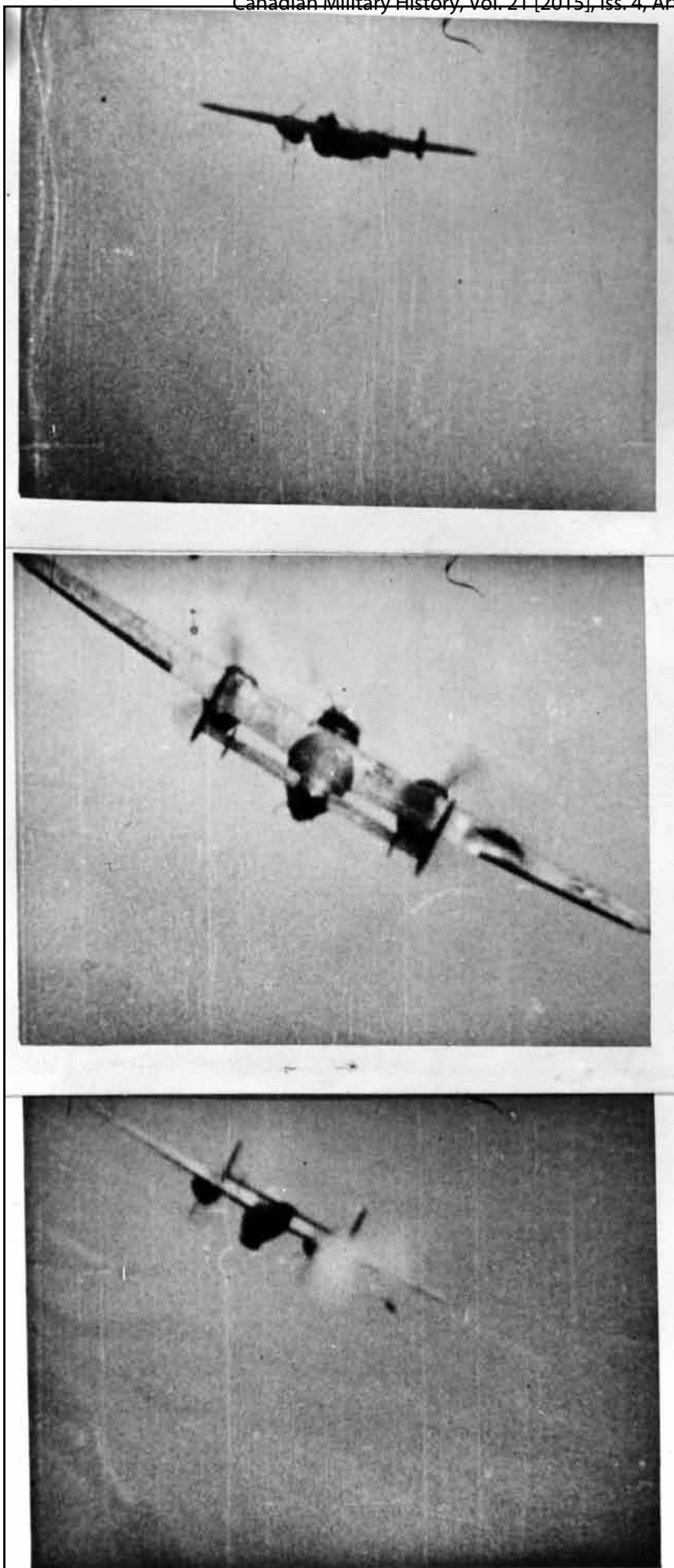
The only work that examines the RAF's experience remains Norman Franks' narrative account, which fails to analyse key factors of the RAF's performance.<sup>4</sup>

This article examines the doctrinal and operational context of the RAF's involvement in Jubilee and deals with the key question of lessons learnt. It contends that prewar combined operations doctrine argued that the key role for air power was to maintain air superiority in order to protect assaulting forces. It then considers this alongside the development of

the offensive use of RAF Fighter Command in the period 1940-1942. In understanding the twin pillars of doctrine and operations, this article challenges the revisionist argument that the failure of the RAF to supply bombers doomed Jubilee. It argues that in actually seeking to battle the Luftwaffe in the manner that it did during Jubilee it provided the most appropriate protection that it could for the assault forces.

## A Doctrinal Problem

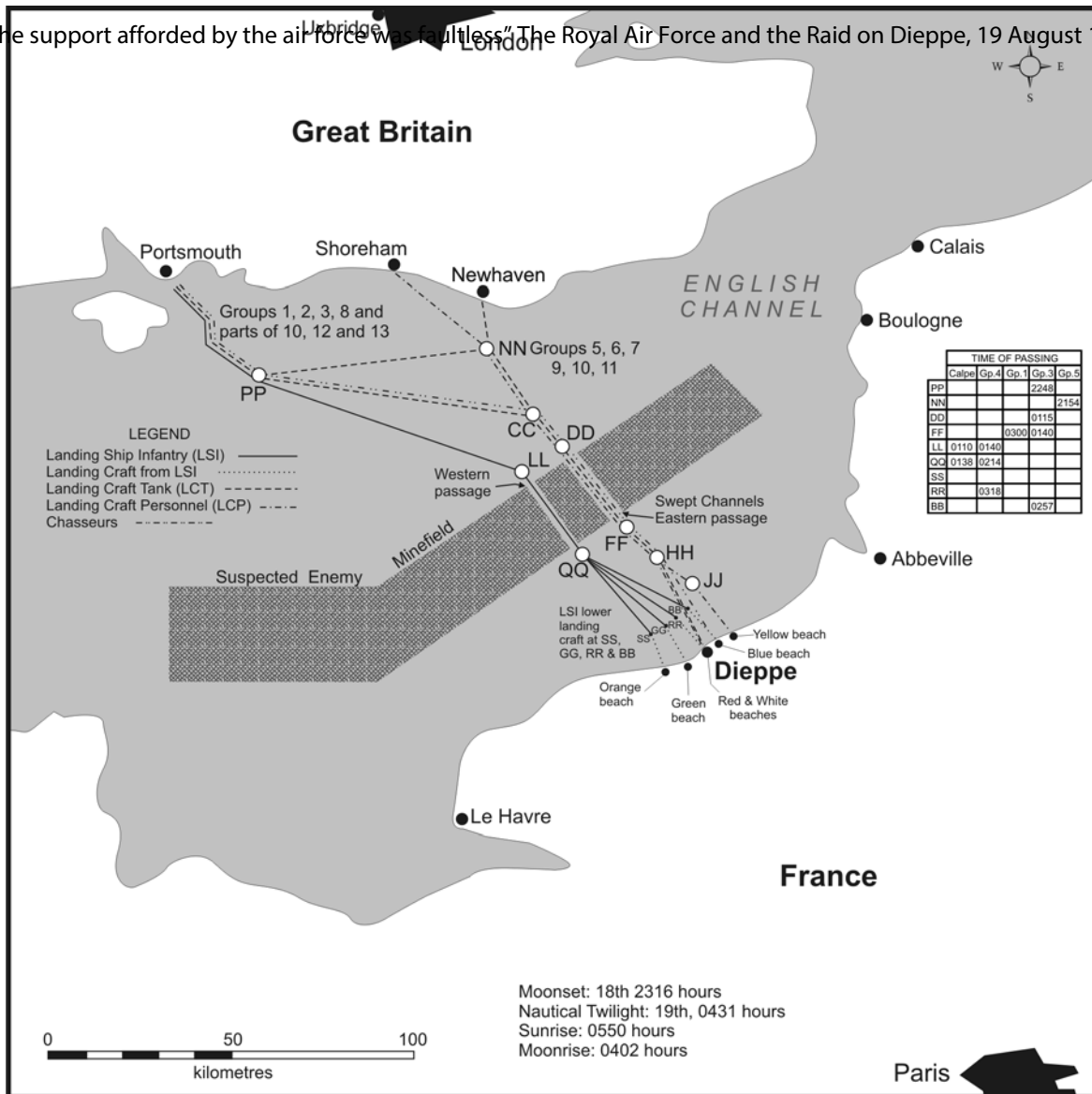
In early June 1940, the Prime Minister Winston Churchill called for the "Joint Chiefs of Staff to propose me measures for a vigorous, enterprising and ceaseless offensive" against German held territory.<sup>5</sup> Churchill believed that these operations would have strategic effect and the increasing size of the raids up to Jubilee illustrates their growing importance in British strategy. This led to the appointment of Lieutenant-General Alan Bourne (Royal Marines) as "Commander of Raiding Operations on coasts in enemy occupation and Advisor to the Chiefs of Staff on Combined Operations" on 14 June 1940.<sup>6</sup> Admiral of the Fleet Sir Roger Keyes replaced Bourne on 17 July as director of Combined Operations, as Churchill believed Bourne would not question Admiralty orders that



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RAF gun camera footage showing an attack on a German twin-engine aircraft, likely a Dornier DO 17, over Dieppe, 19 August 1942. The footage a sequence, starting at the top, of the fighter approaching and then opening fire on the aircraft. In the final frame the German bomber has been hit in the starboard engine which begins to smoke. The fate of this aircraft is not known.

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Map drawn by Mike Bechtold ©2012

undermined his position. Keyes founded Combined Operations Headquarters (COHQ) and led it until 27 October 1941 when the young and ambitious Captain Mountbatten replaced him. Keyes was replaced because of ongoing disputes with Churchill over the latter's desire to re-title his role as advisor to the Chiefs of Staff on Combined Operations.

The focus on strategic aspects of Jubilee has led historians to ignore its doctrinal context. A consideration of the doctrine that informed operational decisions is useful in highlighting the context of the RAF's decision to utilise a supporting force that was predicated on the use of fighters to fight for air superiority.

During the interwar period, the key question that vexed experts on combined operations was whether

they could be successful in the face of opposing air power. In 1923, the RAF produced Air Staff Memorandum No.10, which noted that a combined operation against an enemy who had air superiority was "doomed to failure."<sup>77</sup> This did not mean that they considered combined operations impossible, quite the opposite. Throughout this period, the RAF considered its primary objective in combined operations as being the attainment of air superiority. For example, during the 16th Staff Course at the RAF Staff College in 1938, Group Captain Ronald Graham noted in his lecture, "Introduction to Combined Operations," that while the addition of air power to the pantheon of war had complicated the character of combined operations, "we should not allow the question of

air opposition to obscure the value of the exercise."<sup>78</sup>

In 1919, Major-General Warren Hastings Anderson, commandant at the Army Staff College, noted in the first combined operations staff exercise following the First World War that in the future this form of operation had to take account of all three services. Anderson stressed that any new *Manual of Combined Operations* should take note of the "views and requirements" of the RAF who "must of course be included in it."<sup>79</sup> The importance of air superiority was enunciated as early as 1922, when Air Vice-Marshal John Higgins, director of training and staff duties, and the RAF representative on the Altham Committee, noted in a paper entitled "Some Aspects of Combined Operations in so far as they affect the

Royal Air Force," that the primary role for the RAF was air superiority and aerial interdiction. The Altham Committee was formed as a joint service committee under the chair of Captain Edward Altham, Royal Navy in order to revise the 1913 edition of the *Manual of Combined Operations*. It evolved out of discussions at the Army Staff College and the formation of the Dawney Committee in 1920, which met to revise the relevant chapter on combined operations in the Army's *Field Service Regulations*. The Altham Committee supervised the production of the Provisional 1922 *Manual of Combined Naval, Military and Air Operations* that was formalised in 1925.<sup>10</sup> Throughout the period, the *Manual of Combined Operations* remained a jointly authored publication produced under the auspices of the Admiralty. Higgins highlighted the RAF's argument that it considered a combined operation as that between more than any one service. For the RAF the methods it employed in achieving air superiority were equally applicable to any form of "joint" operation.<sup>11</sup> This broad view sat outside of the scope of the doctrine, which focussed on amphibious operations involving all three services due to the RN's control of the manual's production and publication.

Air superiority remained the cornerstone of the *Manual of Combined Operations* throughout the interwar years. The manual was updated in 1922, 1925, 1931 and 1938. The RAF's strategic doctrine of the period, AP 1300 *The War Manual*, defined air superiority as a "state of moral, physical and material superiority" over the enemy that would allow freedom of action.<sup>12</sup> This fluidic definition of the hubris of air superiority allowed a number

of interpretations about how to attain this state during the interwar period. The historiography of the RAF's development has stressed its focus on bombing as the means of achieving air superiority.<sup>13</sup> This was not an infallible conclusion in an era of rapidly changing technological fortunes. In a lecture on "Air Warfare" in 1925, the commandant of the RAF Staff College, Air Vice-Marshal Robert Brooke-Popham, noted that three key methods existed, fighting in the air, bombardment, and destruction of means of production.<sup>14</sup> The 1925 *Manual of Combined Operations* noted that air superiority could be achieved through the application of indirect air power through the destruction of enemy air forces, lines of communication, demoralisation of personnel and the civilian population, and destruction of material by bombing. Fighters were limited to providing direct air cover over the beachhead.<sup>15</sup> By the time of the 1938 edition of the *Manual of Combined Operations*, it had become apparent that fighter aircraft should take on a greater range of operations. The provision of adequate fighter cover through the offensive use of fighter patrols became one of the three main uses of air power in support of combined operations, along with bombardment, and the provision of smoke screens. The increasing scope of the 1938 edition of the manual within the context of

the changing technological landscape shows there had been an increasing realisation that fighters could take on offensive roles. In a lecture to the Army Staff College in 1938, Graham noted the increasing use of fighters but also stressed the problem of achieving air superiority without denuding the operation of surprise, which was considered vital.<sup>16</sup> This issue would take on importance during the planning of Jubilee.

By the outbreak of the Second World War, it was widely accepted that air superiority was a necessary pre-requisite for success in combined operations. Air Vice-Marshal Richard Peirse, deputy chief of the air staff (DCAS), noted in 1938 that, "One of the greatest difficulties in this form of operation will be the need for establishing a favourable air situation."<sup>17</sup> By the time of Jubilee operational experience proved this belief correct.

## The Need for Air Superiority

In the two years after the formation of COHQ there was little opportunity for the utilisation of air power in support of small-scale raiding operations. Not until Operation Archery, the British commando raid on Vaagso, Norway in December 1941, did the first truly joint combined operation take place.<sup>18</sup> A pattern was set during Archery that was based on the beliefs that underpinned

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**RAF fighter pilots gather for a group photo after the Dieppe Raid.**

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**Not visible over the beaches at Dunkirk in 1940, the army dubbed the RAF the "Royal Absent Force." In fact, RAF operations to protect the beach and the Royal Navy from Luftwaffe attacks was conducted some distance from the battlefield and was a major factor in the success of the operation.**

the *Manual of Combined Operations*, and had been illustrated through broader operational experience. Five fighter squadrons (long-range Bristol Beaufighters and Blenheims) and two squadrons of Handley Page Hampdens supported Archery. Their primary mission was to provide air superiority.

While the RAF lacked knowledge of raiding style combined operations, it did have experience in other forms of amphibious operations from the Norwegian Campaign, the Dunkirk evacuation and the Battle of Britain in 1940 to reinforce its belief regarding the importance of air superiority. Norway illustrated the problem of conducting a combined operation at the end of long and insecure logistics tail. The RAF was unable to build up enough strength to support ground forces while the RN failed to provide adequate carrier air cover in the initial phase. The inability to establish forward air bases led Major-General Bernard Paget, the commander of a British force in Norway, to remark that "all the lessons of peacetime exercises" had been forgotten.<sup>19</sup> The

problem of building up air strength during a combined operation was considered in numerous exercises during the interwar period with few adequate solutions found.<sup>20</sup> Conversely, the Luftwaffe provided effective support in what has been described as the first modern joint campaign.<sup>21</sup>

The nature of the counter air operations undertaken by the RAF during Operation Dynamo at Dunkirk earned it the unfortunate epithet of the "Royal Absent Force."<sup>22</sup> The operations were primarily concerned with providing air cover over the evacuation area utilising offensive operations. Seventy-five percent of operations conducted by the RAF during Dynamo consisted of fighter sweeps by large-scale formations from Air Vice-Marshal Keith Park's No.11 Group. The success of the RAF aided the RN's ability to withdraw forces and Admiral Bertram Ramsey signalled on 29 May that, "I am most grateful for your splendid cooperation. It alone has given us a chance of success."<sup>23</sup> Air Vice-Marshal James Robb, deputy chief

of combined operations, noted that Dynamo was a combined operation in reverse and that until the experience of Dynamo and Norway the use of air power in support of combined operations had been a theoretical concern based on beliefs. He noted that recent experience had proven those beliefs, suggesting that, "If the enemy has a powerful air force, we must prevent him somehow or other from interfering with our landing and our lines of communications."<sup>24</sup>

The Battle of Britain highlighted the significance of air superiority in defeating a planned combined operation. While debate remains over the exact aims of the Luftwaffe's air campaign it is clear that preparations were made to invade. Oberkommando der Wehrmacht (OKW) planning documents clearly indicate that for Operation Seelöwe to succeed the Luftwaffe would have to wrest control of the air from the RAF. Hitler's Führer Directive No.16 made this the primary prerequisite of future operations while an OKW directive of 2 July concluded that the "Invasion of England is quite possible under certain conditions of which the most important is the gaining of air superiority."<sup>25</sup> The RAF noted that the initial phase of the battle would consist of attacks against airfields and factories in an attempt to bring Fighter Command to battle and attrite its strength supported this view.<sup>26</sup> The RAF's ability to hold off Luftwaffe attacks led to a shift in strategy towards attacks predicated on coercion. The RAF's success illustrated that its interwar belief on the difficulty of gaining air superiority in face of first class air power had been prescient in the test of battle. This would prove important for Jubilee.

In the aftermath of the Battle of Britain, RAF Fighter Command launched a strategic fighter offensive that sought to bring the Luftwaffe to battle and attrite its strength. This strategy of "leaning forward into

France" began as early as 21 October 1940 when Park was ordered to take the offensive when weather and lack of enemy activity warranted it.<sup>27</sup> This strategy provided the operational context for RAF operations during Jubilee. Air Marshal Sir Sholto Douglas, air officer commander-in-chief of Fighter Command, and the new head of No.11 Group, Air Vice-Marshal Trafford Leigh-Mallory, vigorously pursued it throughout 1941 and 1942.

Throughout 1941, Fighter Command sought to define its role as the RAF went from the defensive to the offensive. Operations in 1941 consisted primarily of Rodeo, Rhubarb and Circus operations. Circus operation made use of bombers of No.2 Group, Bomber Command. These operations required effective co-operation between the two commands and, in early 1941, they were not always successful. From mid-1941 onwards, the fighter offensive took on greater strategic importance as it sought keep Luftwaffe forces away from the eastern front. Operations continued into 1942, and on 13 April Leigh-Mallory was ordered:

- (a) To pick targets right on the coast, and not try to penetrate.
- (b) To carry out a proportion of... operations without bombers at all, since the Hun [was] apparently ready to react even though no bombers [were] present.
- (c) To employ large numbers of squadrons with a view to outnumbering the Hun.<sup>28</sup>

This revised directive was based on the issue of wastage that had plagued the offensive in 1941 which led to Douglas' operational policy being amended on 13 March 1942. Douglas was ordered to resume Circus operations and supplement



**Air Vice-Marshal Sir Trafford Leigh-Mallory was the air officer commanding No.11 Group and as such was the air commander for the Dieppe operation.**

these with fighter sweeps in order to attrite Luftwaffe strength, though he was to conserve strength where possible until the introduction of more effective aircraft.<sup>29</sup> In 1941 and 1942, Douglas and Leigh-Mallory faced the problem of balancing issues of technological change, which affected the question of wastage, and the strategic requirements of Fighter Command's new role in the British war effort. This led to discussion on the applicability of the offensive. An exchange of views between Douglas and his senior air staff officer, Air Commodore Douglas Evill, in March 1941 saw Evill contend that Circus operations at the time were ineffective and should be curtailed or stopped until a new method was found for their employment.<sup>30</sup> However, Douglas argued that a curtailment of operations would not be advantageous, though he did agree that there was need for further training.<sup>31</sup> While the offensive provided Fighter Command with the opportunity to "lean forward into France," by mid-1942, it had

been virtually stalemated due to the tactical advantage enjoyed by the Luftwaffe. When viewed in conjunction with an appreciation of combined operations doctrine, the experience of 1941 and 1942 and the orders issued to Leigh-Mallory on 13 April provide the operational context for No.11 Group's operations over Dieppe. The experience reinforced the belief underpinning the RAF's involvement in combined operations doctrine in the interwar years, the need for air superiority.

The RAF also participated in training for combined operations. In November 1941, as the scale of combined operations increased, COHQ was provided with an air advisor in the form of Group Captain Alfred Willetts.<sup>32</sup> It

became clear to Mountbatten that there was a need to train the RAF in the requirements of combined operations and test the beliefs of interwar doctrine. Air Chief Marshal Sir Charles Portal, chief of the air staff, agreed. The director of plans, Air Commodore William Dickson, examined the issue with the view to posting a "competent" body of men to work with the RN and Army at COHQ.<sup>33</sup> This group of officers would form the core of No.1441 Combined Operations Development Flight that was based at the Combined Training Centre at Inveraray. This unit tested problems that arose as air power began to be utilised in ever expanding roles by COHQ.<sup>34</sup>

Training of operational units in the RAF's functional commands assumed even greater importance in 1942 as planning for large-scale operations took priority. On 16 February Portal told Mountbatten that six squadrons were earmarked for training with the expeditionary force while the director of fighter operations, Air Commodore John



**Pilots from No.401 RCAF Squadron rest between sorties, 19 August 1942.**

Whitworth-Jones, noted that 15 squadrons were available for training. It was expected that the training regime of No.1441 Flight would mirror Fighter Command's, as it was this command that would provide the bulk of forces for any operations. Bomber Command was expected to provide units from No.2 Group for training.<sup>35</sup>

By 31 March, commands were ordered by the DCAS to, "press forward as rapidly as possible with training and preparation for combined operations."<sup>36</sup> Douglas was expected to provide units for training as well as supporting Army Co-Operation Command in the preparation of fighter-reconnaissance operations. Training fell into two categories of operations: air cover over the area of the operation and support of ground troops in the land phase of the battle.<sup>37</sup> Air Marshal Arthur Harris, the head of Bomber Command, raised questions over the draft orders issued to Bomber Command. He replied to a letter from the vice-chief of the air Staff, Air Chief Marshal Sir Wilfred Freeman, in his usual acerbic tones when he described it as training for "hypothetical operations."<sup>38</sup> Despite Harris' objection, by May 1942 training for Combined Operations became a vital aspect of the functional commands' commitments. DCAS

informed Douglas on 1 May that his priorities were:

- (a) The intensification of the day fighter offensive which calls for reinforcement of 11 Group with Spitfire squadrons.
- (b) Maintenance of a proper state of readiness of squadrons earmarked for operation "Region"
- (c) The training of fighter squadrons in rotation in Combined Operation<sup>39</sup>

In the same month, No.239 Squadron was the first unit to go through the training at RAF Abbotsinch and would later serve during Jubilee. By the time of Jubilee, the RAF was prepared to provide the increasing support needed for the ever-larger raids being conducted by COHQ.

### **Planning and the Bombing Issue**

The origins of Rutter/Jubilee lay in Anglo-American discussions in early 1942 to increase the scale and frequency of raids.<sup>40</sup> On 18 April, the Chiefs of Staff Committee approved a memorandum that stated that raids were "to be undertaken in the summer of 1942 on the largest scale that the available equipment will permit."<sup>41</sup> These discussions fell under the larger hubris of decisions concerning

Operation Sledgehammer/Roundup and the debate over the invasion of Europe in 1942. It had a clear impact on the RAF because as combined operations increased in scale they would require greater air support. This increase had the advantage of allowing Fighter Command to continue its policy of offensive air operations against the Luftwaffe as outlined in the air staff's directive to Douglas on 13 March.

The first consideration of Dieppe as a target for an operation occurred at a meeting of the Target Committee of COHQ on 3 April.<sup>42</sup> From here, an outline plan was produced and Mountbatten received approval for Rutter on 13 May.<sup>43</sup> The plan that emerged envisaged a frontal assault on Dieppe proceeded by bombing of the town and airborne assaults on the gun positions on headlands overlooking the town.<sup>44</sup> By the time the final air plan for Rutter emerged the bombing of Dieppe itself had been removed, and by the time of Jubilee the use of airborne forces had been replaced by commando assaults from the sea. As early as 14 April, Willets, Mountbatten's air advisor on combined operations, questioned the use of airborne troops.<sup>45</sup> However, Major-General Frederick Browning, commander of Britain's airborne forces, lobbied for their use.<sup>46</sup> The key issue related to the allocation of transport squadrons equipped with bombers that could be used in on-going Bomber Command operations. For example, on 11 May Harris requested that Nos.12 and 142 Squadrons be given over to Bomber Command for use in Operation Millennium, the thousand bomber raid on Cologne on the night of 30/31 May 1942. While not used, it highlights the problems facing the



airborne force in 1942. The problems of allocating transport squadrons reduced the commitment of the airborne division to one battalion by 1 June.

The final air plan for Rutter visualized five key roles for the RAF; diversionary night bombing, the transport of airborne troops, air cover, reconnaissance and direct air support.<sup>47</sup> It was expected that 110 bombing sorties would take place as a diversion against Boulogne and two other undecided targets.<sup>48</sup> After Exercise Yukon II, it was decided that Rutter would take place on 4 July, however, prevailing weather conditions led to its postponement and eventual cancellation after 8 July. The debate over the decision to remount the operation has been well documented.<sup>49</sup> However, by 14 July the operation had been resurrected as Jubilee.<sup>50</sup> It is clear that Leigh-Mallory was supportive of any decision to remount Rutter.<sup>51</sup> The revised Jubilee air plan saw the RAF focus on providing air cover with direct air support a secondary priority. These operations continued through the daylight hours with the most intensive periods coming during the landing and withdrawal. Low-level fighter and bomber attacks supported assault forces and provided smoke-laying where appropriate. Aircraft from Army Co-Operation Command provided tactical reconnaissance within the battle area and along the lines of approach to Dieppe.<sup>52</sup> While Dieppe was not bombed, a diversionary raid remained part of the plan with aircraft from the US 8th Army Air Force attacking the airfield at Abbeville, a purely military target. Command and control was provided through No.11 Group Headquarters at RAF Uxbridge. The headquarters

ships HM Ships *Calpe* and *Fernie* provided control of close support aircraft with links to Leigh-Mallory at Uxbridge; Air Commodore Cole on the *Calpe* represented Leigh-Mallory. Cole was instructed to liaise with the other force commanders and direct low-level operations.

During the course of the raid, the RAF provided constant air cover with operations split into five phases starting at 0445 hours and finishing at 2245 hours. In total, 70 RAF squadrons and four US Eighth Army Air Force squadrons were tasked to support Jubilee. The first phase, 0445 hours to 0550 hours, saw attacks on the beaches and defences with Douglas Bostons laying smoke while escorted bombers attacked the beach front. Wing Commander G.C. Surplice of No.226 Squadron flew one of the first smoke laying operations of the day and reported taking off in the dark and encountering light anti-aircraft fire during the operation. His aircraft was attacked by a Focke-Wulf FW190, which his gunner, Pilot Officer L.J. Longhurst, claimed as it turned away with smoke pouring from its engine.<sup>53</sup> At the same time Hawker Hurricane fighter-bombers and Supermarine Spitfires attacked gun batteries on the flanks, which

were assaulted by Nos.3 and 4 Commando. In the second phase, 0550 hours to 0730 hours, air cover and ad hoc direct support were provided. For example, at 0645 hours, No.88 Squadron provided support to the Royal Regiment of Canada that was being held up at Puys on Blue Beach. The third phase, 0730 hours to 1030 hours, saw the RAF tasked with providing air cover for operations on the ground. This was the greatest period of activity for the RAF with "20 to 30 fighters being constantly in the area." The penultimate phase, 1030 hours to 1410 hours, saw the RAF continue to provide air cover while the withdrawal from the beaches was undertaken. Additionally, limited direct air support was provided for the withdrawing forces. During this phase Luftwaffe tactics against the attacking forces changed with larger mixed formations of fighters, fighter-bombers and bombers being utilized. The final phase, 1410 hours to 2245 hours, saw air cover provided for the fleet returning to the UK.<sup>54</sup>

The operation cost the RAF 108 aircraft while Luftwaffe records show that their losses totalled no more than 48 aircraft with the loss of 21 fighter pilots.<sup>55</sup> However, it was initially assumed that RAF and



Canadian Forces Photo PL 10706

**A Spitfire from a Canadian squadron is refuelled following a sortie to Dieppe, 19 August 1942.**

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#### A formation of aircraft over Dieppe, 19 August 1942

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Luftwaffe losses were even. At a War Cabinet meeting on 22 August the foreign secretary, Sir Anthony Eden, described the Luftwaffe as having been roughly handled.<sup>56</sup> Leigh-Mallory claimed that "Reports since received indicate that the German Air Force...lost between 150 and 200 aircraft."<sup>57</sup> Despite this apparent discord between Leigh-Mallory's claim and the actual records, the key indicator of the RAF's relative success on the day relates to pilot losses. Of RAF losses, 33 percent of pilots were classified as safe.<sup>58</sup> This means that they were picked up either by friendly craft or by the air/sea rescue (ASR) organisation. Leigh-Mallory in his covering letter to his report to the secretary of state for air on Jubilee praised the work of the ASR organisation and lamented the loss of several of the Dover station's craft, which had been operating outside of the range of the air cover umbrella.<sup>59</sup> These were the last vessels to leave the battle area and some of the last missions performed by the RAF were to provide air cover for these vessels.<sup>60</sup> Additionally, another 13 percent of pilots were classified injured or

wounded and able to be return to service. However, the Luftwaffe lost 38 percent of its fighter pilots as killed while another 29 percent were classified as missing.<sup>61</sup> The Luftwaffe suffered an attrition of 67 percent, a rate that was unacceptable for the return that occurred during Jubilee. From 1942 onwards, there was a general decline in both the quality and quantity of German fighter pilots; therefore, a high attrition rate exacerbated the problem.<sup>62</sup>

Despite its relative success, the key criticism of the RAF's planning for Jubilee lay in the decision to cancel the pre-bombardment that had been part of the initial outline plan for Operation Rutter. Villa has noted that, "Without heavy air bombardment, the disparity in fire-power proved fatal to the Canadian and British invaders."<sup>63</sup> This fatalistic post-facto analysis has percolated into recent works with historian Robin Neillands writing that Air Marshal Leigh-Mallory's decision to cancel the bombing, "fundamentally undermined the possibilities of success at Dieppe."<sup>64</sup> While bomber support may have

aided the attackers, the planners had to contend with considerations that would have ameliorated against its effectiveness. These considerations include the applicability of use of bombers to the raid and the issue of authorisation from the War Cabinet.

The *Manual of Combined Operations* contended that the use of bombing depended on, "the number of aircraft available and other operations required of them," and that, "In most cases the general struggle for air superiority, local operations in defence of the landing against enemy aircraft, and spotting and reconnaissance duties will have prior claims."<sup>65</sup> In this light, the decision can be viewed as conforming to prescribed doctrine. The use of heavy bombers also faced the problem of denuding the operation of surprise. While this contention may appear as fallacious reasoning for what some have claimed was a poor operational decision, it was based on operational experience. The growing scale of raids in 1942 had seen greater use of air power that had not always been successful. During Operation Chariot, the raid

on St. Nazaire on 28 March 1942, the use of bombers alerted the defenders to the approaching operation due to their peculiar bombing patterns and they failed to provide the planned diversion.<sup>66</sup> The inclusion of bombers for Rutter was based on the insistence of the other services. On 21 April, it was accepted that the target would be Dieppe itself.<sup>67</sup> Despite its initial inclusion in the planning for Rutter direct bombing of Dieppe was removed at the meeting on 5 June. However, diversionary attacks remained an important element of air plans for both Rutter and Jubilee.

Direct bombing was removed for several reasons. First, the issue of surprise was paramount in Leigh-Mallory's reasoning. This was based on operational experience. Second, Harris noted that for operational reasons any attack would have to go in after morning twilight. Given the tight schedule of operations for Rutter, this would leave the bombers a window of five minutes for any operation.<sup>68</sup> After the decision was taken to remount the operation as Jubilee Leigh-Mallory made this operational factor clear in an undated memorandum on "The Employment on Bombers" that was certainly circulated before the meeting at COHQ on 24 July despite Villa's claim that this was produced in September 1943.<sup>69</sup> Leigh-Mallory made clear the difficulty of coordinating Bomber Command operations with the requirements of the operation.<sup>70</sup> The primary aim of the RAF was to provide effective air cover, and battle the Luftwaffe for air superiority, and thus the appearance of bombers five minutes before the attack would cause problems.<sup>71</sup> The concern of causing casualties to assaulting forces played a role in Leigh-Mallory decision making at

the meeting on 5 June. Finally, a key issue facing planners was a standing order from the War Cabinet relating to the use of heavy bombers over occupied territory. Mountbatten had noted this issue in a meeting of the Chiefs of Staff Committee as early as 13 May and it was fully explored in his appreciation for Rutter.<sup>72</sup>

Even before the fall of France in June 1940, the War Cabinet laid down rules governing bombing in France. These were amended in July 1940 to take account of the armistice and drew attention to the concerns raised over targets where civilian casualties could be incurred.<sup>73</sup> Sir Archibald Sinclair, the secretary of state for air, directed that military objectives could be attacked in France. They included military forces, works and fortifications, establishments and depots, shipyards and factories, lines of communications and transport, and other objectives of military necessity. While this suggests that bombing could have been used to support Rutter/Jubilee it is the reference in paragraph 3 of the Annex, which highlights the complexity of the issues that hampered Bomber Command operations in this sphere. It noted that:

3. Bombardment by naval and air forces is to be confined to military objectives and must be subject to the

following general principles:

- (a) The intentional bombardment of civil populations as such is illegal.
- (b) It must be possible to identify the objective.
- (c) The attack must be made with reasonable care to avoid undue loss of civil life in the vicinity of the target.
- (d) The provisions of Red Cross conventions are to be observed.<sup>74</sup>

This made Harris adamant that if Bomber Command was to be used then it had to be under conditions that fitted these considerations. Thus, cancelling the pre-bombardment made sense given that these conditions could not be guaranteed, and that it might risk the loss of surprise.

The bombing of targets in France was a sensitive political subject that affected the conduct of combined operations. The St. Nazaire raid highlighted the problem of accurate targeting in occupied-territory as cloud cover had abrogated the bombers' effective use.<sup>75</sup> It is clear that Churchill's policy towards the bombing of France was guided by four key concerns. First, the fear of pushing the Vichy regime into the hands of Germany. Second, Churchill did not want to damage relations with the US who maintained links with Vichy having granted them full diplomatic recognition. Third,

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**The crew of a German 20 mm anti-aircraft gun searches for targets over Dieppe, 19 August 1942.**

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Canadian Forces Photo PMR 81-6978

Canadian Forces Photo PMR 84-376



**Top left: An air photo of Dieppe taken during the battle. A large fire can be seen burning in a building on the seafront while other plumes of smoke are created by the burning landing craft on the beach.**

**Centre and bottom left: Scenes of the air battle over Dieppe: A twin-engined aircraft is photographed in its final seconds before it plunges into the sea; Lazy contrails trace the path of aircraft on a summer day.**

Canadian Forces Photo PMR 86-262



Canadian Forces Photo PMR 86-288



Churchill had to maintain good relations with Charles de Gaulle and the Free French forces based in the UK. Finally, Churchill was politically sensitive to the issue of civilian casualties in occupied territory.<sup>76</sup> The impact of the sinking of the French Fleet at Mers-el-Kebir on 3 July 1940 had strained relations between Britain and France and it remained an important element of Vichy responses to British actions.<sup>77</sup> However, this did not mean that targets in France, both in Vichy and occupied-territory, could not be attacked. A complex relationship between the air staff, relevant operational commands, the War Cabinet and Churchill existed to debate the merits of attacking specific targets in occupied territory. For example, the Renault factory at Billancourt was attacked on 3 March 1942. However, the operational conditions for this attack fit the conditions laid down by the War Cabinet.<sup>78</sup> Often discussions over targets in France were protracted, as with the attack on the Schneider works at Le Creusot on 17 October 1942 that was first suggested on 9 April.<sup>79</sup> Even into 1944, Churchill remained concerned over attacking targets in France. One of the underlying issues concerning the Transportation Plan was civilian casualties. Churchill feared postwar retribution and it took the threat of General Dwight Eisenhower's resignation to force through acceptance of the plan.<sup>80</sup> Despite this Churchill quipped at Air Chief Marshal Sir Arthur Tedder on 3 May 1944 that, "You will smear

the good name of the Royal Air Force across the world.”<sup>81</sup> He also telegraphed Roosevelt on 7 May to express his, and the War Cabinets concern over what he described as the slaughter of French civilians.<sup>82</sup>

Additionally, the RAF lacked the capability to attack pinpoint targets at this stage of the war. The Butt Report of August 1941 made it clear that Bomber Command struggled to hit targets. Only one in three attacking aircraft hit within five miles of their objective.<sup>83</sup> The problem of precision targeting had been identified as early as 11 October 1939 when Air Vice-Marshal Arthur Conningham noted that his crews in No.4 Group were having difficulty locating targets at night.<sup>84</sup> Bomber Command would adopt area bombing as its main

mode of operation until greater scientific and navigational aids became available from 1942 onwards. Despite the problem of targeting, Dieppe had been previously been attacked, however, by the time of the raid it was considered an unsuitable target for the Bomber Command main force. In 1943, Bomber Command’s Operational Research Section produced an assessment that raised questions of the efficacy of the command’s use based on its available strength, effectiveness and nature of the target.<sup>85</sup> Dieppe was considered a wasteful target given the force requirements required to attack it. This was a reasonable assertion given the aim of Bomber Command. While the use of heavy bombers in support of ground operations

increased after 1943 they were not always beneficial; operational research reports questioned the efficacy of their use for anything other than morale reasons.<sup>86</sup> Given the geography of Dieppe, it is hard to imagine what advantage the use of heavy bombers would have actually given the attackers.

### Lessons Learnt

One of the key issues raised by Jubilee is that of whether the cost was worth the sacrifice. Mountbatten made rigorous attempts to defend the necessity of the raid up to his death. As late as 1974 he continued to argue in the pages of the *Journal of the Royal United Services Institute (JRUSI)* that Jubilee had been a necessary

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**An RAF Boston (with its bomb bay doors open) flies over the naval task force at Dieppe. At least one ship is in the process of laying a thick smoke screen to hide the vessels from German coastal batteries.**

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Canadian Forces Photo C3080





**Top:** The use of heavy bombers was cancelled for the attack on Dieppe, American heavy bombers were tasked with diversionary operations. Here, the crew of a US B-17 Flying Fortress, “Dixie Demo” leave their aircraft following their participation in Operation Jubilee.

**Above:** The air photo captures the explosion of bombs dropped by American B-17s on the German aerodrome at Abbeville/Drucat on 19 August 1942. Key to the annotations: **A.** Bombs bursting in the northern dispersal area; **B.** Bomb bursts in a dispersal area; **C.** Bomb bursts on the northern end of the NE/SW runway; **D.** Bomb bursts on the eastern end of the E/W runway; **F.** Bomb bursts on a light anti-aircraft position; **H.** Bomb bursts on a heavy anti-aircraft position; **I.** Bomb bursts on the outskirts of the aerodrome.

precursor to Operation Overlord when he stated that countless lives were saved during Overlord because of the lessons learnt at Dieppe.<sup>87</sup> This post-facto defence of his own actions was undoubtedly born out of the fact that, as his official biographer noted, Dieppe was one of the two great criticisms that blighted his career.<sup>88</sup> Indeed, the text of the *JRUSI* article came from his address to the Canadian Dieppe Veterans and Prisoners of War Association on 28 September 1973 where he sought to justify the reasons for the raid. It is clear that this was specious reasoning on the part of Mountbatten who tried to stretch the verity of his claims by ignoring other theatres of operation.

The attempt to analyse lessons learnt from the operation began soon after with Captain John Hughes-Hallett, the Jubilee naval force commander, supervising a quick post-mortem process that saw the production of a combined report on the operation and a separately produced “Lessons Learnt” document. A key element of this document was the reports by the individual force commanders. Leigh-Mallory submitted his report on 5 September 1942. In his covering letter to Sir Archibald Sinclair, secretary of state for air, Leigh-Mallory outlined his view that in overall terms the operation had been a success from the perspective of the air force.<sup>89</sup> Leigh-Mallory praised the work of the squadrons providing air cover and noted that this “was the most satisfactory part of the Operation.” Notably Leigh-Mallory also praised the work of the air-sea rescue organisation that picked up 20 pilots in the course of the operation.<sup>90</sup> Leigh-Mallory’s key concern related to the provision of adequate aerial recognition training for RN gunners who had posed serious problems of command and control (C2) for the system then in place. While Leigh-Mallory praised the standard of work undertaken by his own controllers

on both *Calpe* and *Fernie* it is clear from the discussions both before and after the operation that this was a problem that had to be examined in order to fully apply air power in combined operations.<sup>91</sup> Given the criticism in the historiography over bombing it is interesting to note that Leigh-Mallory's comments on this subject were purely of an operational nature. He noted that bombing was not as useful as smoke laying in initial landing operations and that plans to utilise the light bombers of No.2 Group to attack reinforcements had come to nothing due to the lack of German troop movement.<sup>92</sup>

Overall, various reports on Jubilee highlighted three key conclusions on the RAF experience. First, combined operations could be used as a means of drawing the Luftwaffe to battle, thus, allowing Fighter Command to attrite its strength. Second, there was a need to improve the command and control (C2) functions which supported such operations. Finally, there was a significant attempt to address the utility of bombing as a means of supporting such operations. The "Lessons Learnt" report also highlighted concerns over the scale of operations, use of smoke, the use of airborne forces as well as the aforementioned issue of C2.<sup>93</sup>

Perhaps the least useful lesson learnt was Leigh-Mallory's attempt to link the use of combined operations to an offensive fighter strategy; in effect, intruder-based operations using commandos as bait rather than bombers. This was not an unreasonable conclusion given that after Dieppe the Germans began reinforcing positions in France and Norway. Leigh-Mallory wrote to Mountbatten on 22 August stating that, "I feel that we might profitably conduct a future operation on rather different lines." He saw the success of No.4 Commando's operation against the Hess Battery as a blueprint for future operations.<sup>94</sup> Two operations made it as far as the planning stage,

Operations Aflame and Coleman. While there were advantages to this type of operation, it was ultimately a dead-end by late 1942 with prevailing operational issues such as the impact that weather would have on fighter operations and bombing accuracy.<sup>95</sup> However, in 1943 it received renewed vigour when Operation Starkey, a sham British and Canadian amphibious invasion in the Boulogne area of France, became an important element of Operation Cockade, a plan designed to pin down German forces in Western Europe.<sup>96</sup> Key to this was the desire to bring the Luftwaffe to battle. Starkey was launched on 16 August and culminated on 9 September. It sought to feign the movement of a large number of troops and to deceive the Germans into believing that a major operation was to take place in the area of Boulogne.<sup>97</sup> RAF Fighter Command supplied 72 squadrons that provided air cover and hoped to fight a major air battle using a RN force as bait. Ultimately, Starkey failed. It did have an impact on the planning for deception operations for Overlord, in particular Fortitude South, which was reconsidered in light of problems of conception that plagued Starkey. Deception had been at the core of these planned operations with Mountbatten claiming that Coleman would be the deception plan for Operation Torch.<sup>98</sup> Starkey also began to change the attitude prevalent in the RAF that air superiority could be gained during the course of a combined operation. By Overlord, it was recognized that this was a prerequisite that would have to be gained beforehand.

The force commanders in their individual reports that formed the Combined Report on Jubilee highlighted the question of C2.<sup>99</sup> The key experience revolved around the loss of HMS *Berkeley*, which was sunk by the Luftwaffe because of the RAF's inability to engage below 3,000 feet for fear of friendly

anti-aircraft fire from supporting RN destroyers.<sup>100</sup> The problem of C2 at such an intimate level of operations had been highlighted in the interwar years when HMS *Nelson* had been used as a HQ ship during exercises off the Yorkshire coast in 1934.<sup>101</sup> This was one of Leigh-Mallory's concerns after the debacle of Exercise Yukon II in preparation for Operation Rutter.<sup>102</sup> This concern led Mountbatten to initiate an inter-service committee to explore the issue in early 1942.<sup>103</sup> The report led to the development of HMS *Bulolo* and *Largs* as headquarters ships, however they were not available for Jubilee and the attacking forces had to rely on adapted destroyers that were not sufficient for the job. Jubilee acted as a trigger for the extended development of the headquarters ship concept as it illustrated the dire need for specialist ships to serve in this role. This was reinforced by *Bulolo*'s success during Operation Torch. However, it was clear that the headquarters ships could not completely resolve the complicated issues of C2 for air operations. The ultimate result was the development of fighter direction tenders (FDTs) manned by specially trained fighter direction officers. FDTs were equipped with ground control intercept radar and the relevant intelligence streams to allow the control of fighter aircraft over the invasion area, a role that decreased pressure on headquarters ships, which took on a greater oversight role in 1944. This revised system would prove itself during Operation Overlord.<sup>104</sup>

The problem of fire support in combined operations was a key lesson identified by Hughes-Hallett who noted that the RAF part was of vital importance.<sup>105</sup> Throughout late 1942, COHQ began studying the question of fire support through its Assault Committee, which simply stated that, "In all stages of the action all forms of air support would be an urgent requirement."<sup>106</sup> A technical

sub-committee was set-up to examine "Whether the requirements of fire support in assaults could be met by bombing, gunfire from ships, or a combination of both."<sup>107</sup> Despite the obvious need to examine the issue of aerial bombardment it was not dealt with in any meaningful manner until Leigh-Mallory raised the issue at Exercise Rattle in June 1943.<sup>108</sup> Leigh-Mallory's personal experience of Jubilee clearly highlighted the importance of aerial bombardment to him. This line of experience in conjunction with reports emanating from the Mediterranean, in particular Operation Corkscrew, the invasion of the Italian island of Pantelleria, would form a vital source of information in the planning for Overlord. Air Vice-Marshal Ronald Graham formed an inter-service committee under the auspices of the Chiefs of Staff Committee to examine the problem of fire support for amphibious operations. This committee submitted its report in early 1944 and it emphasised the need for the use of air power by noting that all action would be joint, and that the effort fell into three tasks: silencing coastal defences; drenching fire during the assault; and provision of support during the build up of the bridgehead.<sup>109</sup>

### Conclusion – Success or Failure?

It is clear that the debate over the effectiveness of the RAF during Jubilee remains contentious. A broader analysis of the context in which the RAF was operating highlights the idea that the RAF did indeed pursue the right strategy to support Jubilee. RAF strategy stressed the importance of air superiority and it was widely accepted that this was the overriding consideration in combined operations. A simple statistical analysis of losses does little but misunderstand the problems of

supporting combined operations with offensive air power. Without air cover, Jubilee would have been an unmitigated disaster. Given that only one ship, HMS *Berkeley*, was lost due to bombing highlights its importance. Indeed, Hughes-Hallett wrote that "The fighter cover afforded by No.11 Group was magnificent and the...loss of one ship...should be regarded as...fortunate."<sup>110</sup>

Contemporary Canadian views highlight the complexity of the operation and lessons learnt by the RAF. Captain G.A. Browne of the Royal Canadian Artillery, who served as a forward observation officer, commented on the cancelling of the aerial bombardment to preserve the element of surprise that:

Further, is surprise easier to obtain, than the preparatory heavy air bombardment which in our case would quite probably have succeeded where surprise, or rather the hope of surprise, failed?<sup>111</sup>

In contrast Lieutenant J.E.R. Wood of the Royal Canadian Engineers, who was captured on Red/White beach, commented after the war that:

Some of our people later claimed they never saw the Air Force. Of course they didn't. They were too busy up top keeping the Luftwaffe off us. I can truthfully say we were not machine gunned on that beach except by our own people after we'd folded up. That means the R.A.F. did its stuff.<sup>112</sup>

Conversely, the Luftwaffe's 8th Abteilung wrote that the key lesson for the Allies lay in understanding that air supremacy was what was required in any future Combined Operation.<sup>113</sup> This is what the RAF had been arguing since the early 1920s.

While the War Cabinet's conclusion that the "Support

afforded by air forces was faultless" overstates the operation's success, it is clear that the RAF considered their experience as positive and they did learn lessons from Jubilee.<sup>114</sup> In line with developments from operations in the Mediterranean, attempts were made to integrate improved C2 systems for future combined operations. Additionally, scientific attempts were made to examine how bombing could be used to support operations. Jubilee acted as a trigger for developments that emerged in the course of 1943 and these improvements were evident during Operation Overlord. However, the path between failure at Dieppe and success on D-Day was not the direct line suggested by Mountbatten.

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