

Nacelles

ISSN : 2552-6987


10 | 2021

Bataille de France, 1940. Repenser les forces aériennes au combat

The Royal Air Force in the Battle of France: A Failure to Commit

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 <http://interfas.univ-tlse2.fr/nacelles/1225>

Electronic reference

Harry A. N. Raffal, « The Royal Air Force in the Battle of France: A Failure to Commit », *Nacelles* [Online], 10 | 2021, Online since 10 mai 2021, connection on 18 mai 2023. URL : <http://interfas.univ-tlse2.fr/nacelles/1225>

The Royal Air Force in the Battle of France: A Failure to Commit

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Introduction

- 1 The comprehensive defeat suffered by Allied forces in the Battle of France (May-June 1940) is so connected with the German *Blitzkrieg* and the success of the *Luftwaffe* that there is a tendency to neglect the operations of the Allied air forces. In contrast, histories of the Royal Air Force (RAF) in 1940 focus primarily on the victory achieved in the Battle of Britain and neglect the RAF's operations in France. There has been some recent scholarship on the British use of tactical air power in France. However, the RAF's operations in France remain imperfectly understood.¹
- 2 This article starts by establishing which RAF formations contested the Battle of France. The qualitative nature of the RAF's support is then analysed, with the campaign divided into four phases: from 10 May to the German breakthrough at Sedan; from 15 May to the with-

drawal to the Channel ports; from 26 May until the evacuation of Dunkirk; and from 5 June during the German offensive over the Somme to the final withdrawal of British units from France. This article – based mainly on primary sources from the UK National Archives – will demonstrate that in each phase, the RAF failed to concentrate its available forces on the decisive point of the battle, reducing its overall effectiveness.

1. British Air Power: In France and from England

3 The RAF forces in France were divided between two separate air formations. To directly support the operations of the British Expeditionary Force (BEF) there were 13 squadrons available in France – five of Westland Lysanders, and four each of Bristol Blenheims and Hawker Hurricanes. These squadrons formed the RAF Component (RAFC) of the BEF and provided reconnaissance and fighter protection in support of the field force. The RAF also deployed the Advanced Air Striking Force (AASF) to France with eight squadrons of Fairey Battles, two squadrons of Blenheims, and two squadrons of Hurricanes. The AASF's objective was to isolate the battlefield and so "stop the enemy reinforcing his first attacking wave and to prevent the continuation of the attack and the possibility of his exploiting any partial success".² To achieve this, the AASF made air interdiction attacks to destroy, divert, or delay German military forces and disrupt German lines of communication – the routes between the German base of operation and operating military force. Although coordinated through the headquarters of the British Air Forces in France (BAFF), the AASF and RAFC remained distinct forces, which reduced their ability to mutually support the other's operations. During the Battle of France, the AASF had difficulty securing additional fighter cover for its bomber formations. Equally, the RAFC – lacking an independent air strike capacity – encountered delays during its attempts to secure air support from the AASF (or from 2 Group, Bomber Command, whose six Blenheim squadrons BAFF could also call on).³

4 The 342 aircraft in France available for operations represented over a quarter of the RAF's front-line strength on 10 May.⁴ The Lysander and Battle squadrons (over half the BAFF force) were, however, of lim-

ited operational value. The Battle fell short on almost every conceivable performance criterion including operational range, service ceiling, defensive armament, bomb load, and speed.⁵ Despite the limitations of the forces available to the BAFF, however, it could have had a greater effect on ground operations had it been possible to secure air superiority – that degree of dominance in the air battle which permits the conduct of operations at a given time and place without prohibitive interference by the opposing force.⁶ Throughout the course of the campaign, the BAFF lacked sufficient fighters to wrestle air superiority from the *Luftwaffe*. Instead, the majority of the RAF's fighter strength remained in Britain under the control of Fighter Command. As the German attack commenced, additional fighter squadrons were assigned to BAFF. However, throughout the campaign in France, Fighter Command prioritised the integrity and efficiency of the air defence of Britain.⁷ The greater part of the RAF's bomb carrying capacity was also retained in Britain under Bomber Command. To meet the demands of Allied ground forces for air support, British-based bombers became directly involved in the Battle of France. Throughout the battle, however, the RAF advocated that Bomber Command should be employed in attacks against oil and industrial targets in Germany. Therefore, whilst the RAF possessed a large air power reserve in Britain, it was organised into role-specific Commands which believed their force's main effort should not be in France.⁸ Nonetheless, these forces would increasingly become involved in the Battle in France to support the Allied armies and supplement the operations of the BAFF. For the RAF, therefore, the Battle of France was fought both in France and from England. It is therefore necessary to consider both the operations of the BAFF and those squadrons of Fighter and Bomber Command which came to be involved in the Battle of France.

2. Opportunity Lost: British Air Power in the Battle of France between 10 and 15 May

⁵ Launched on 10 May, the German offensive (Fall GELB) was dependant on crossing the Meuse before the end of 13 May.⁹ The Allied campaign plan involved an advance into Belgium to meet what was ex-

pected to be the main axis of the German attack. There were therefore two places to establish British air support: with the BEF in Belgium; and against the German forces advancing to the Meuse. To meet the first of these tasks the RAFC provided reconnaissance and fighter cover. Air strikes were also made by the AASF and 2 Group to delay the German thrust through Maastricht during which heavy losses were suffered. The delays these attacks caused were limited (not least because the German military held several crossing points in the area) but nonetheless General Halder, the Chief of Staff at German Army Supreme Headquarters, noted the “great destruction by enemy bombing at Maastricht”.¹⁰ Not for the last time in France, however, the RAF possessed only a partial reconnaissance picture of the overall battle; objectives for positive counter action were identified at Maastricht but not whether these were the correct targets to attack.¹¹ The decisive point of action was in the Ardennes; any serious delay here would jeopardise the timely capture of bridgeheads over the Meuse and offer Allied forces the opportunity to react.

- 6 On 10 May, the AASF did despatch missions to the Ardennes. German forces here had rapidly become congested on the limited routes available through the area and offered an ideal target. Despatched shortly after 12:00, the attack by 32 Battles had only a small fighter escort and therefore attacked at low height. Anti-Aircraft (AA) fire damaged or destroyed 84 per cent of the attacking force. At 15:30, a further 32 Battles (without fighter escort) were despatched; Messerschmitt Bf 109s destroyed ten Battles.¹² The heavy losses on 10 May and a subsequent lack of detailed target intelligence from the Ardennes – German fighters preventing all but a fraction of Allied reconnaissance sorties – meant that on 11 May, the AASF directed only eight Battles to the Ardennes.¹³ During this period, air attacks had the potential to isolate the advanced forces at the spear tip of the German attack from reinforcements and supplies. Had this result been achieved, the Allies would have had the opportunity not only to prevent the German breakthrough but to secure a favourable outcome to the Battle of France. During this short window, therefore, British air power had the opportunity to produce a decisive effect. The blame for it failing to secure this achievement has previously been placed on the French High Command’s refusal to sanction the initial British request for attacks on the columns in the Ardennes.¹⁴

This request was made during the morning of 10 May by Air Marshal Sir Arthur Barratt, Air Officer Commanding-in-Chief British Air Forces in France.¹⁵ As discussed, however, when the AASF did attack on 10 May, it suffered heavy casualties and lacked the means to seriously disrupt the German advance. For the AASF to have achieved more during this period, the Allied air forces would have had to secure air superiority over the Ardennes.

- 7 On 13 May, the German army forced the Meuse and established a bridgehead at Sedan. The AASF and 2 Group made a determined effort on 14 May to support a counterattack at Sedan before further German forces could secure and expand the bridgehead.¹⁶ During the late afternoon and evening the AASF with 67 Battles (60 per cent were lost) followed by 2 Group with 28 Blenheims (25 per cent lost), bombed German forces and crossing points at the bridgehead. Roads between Bouillon and Sedan were blocked after hits on “double rows of tanks packed tight in village streets” and three bridges were damaged or destroyed.¹⁷ British air support had slowed the movement of German forces and the counter-attack temporarily contained the bridgehead at Sedan. To fully check the German advance, however, would have required further action by Allied ground forces who were not available, partly because the *Luftwaffe* had isolated the battlefield and prevented reserves being brought forward. The losses of 14 May prevented the RAF repeating its efforts at Sedan and German forces subsequently broke out to northern France.
- 8 Following 15 May, BAFF operations were largely restricted because of its earlier losses and the need to regroup at airfields further from the front. The AASF in particular was reduced to “a state of virtual impotency” and its Battle squadrons were restricted to night operations except in emergencies.¹⁸ On 15 May, 24 Blenheims of 2 Group attacked bridges over, and lines of communication leading to, the Meuse. These attacks were followed that night by 12 bombers targeting lines of communication in the same area. The majority of Bomber Command’s night operations were, however, against strategic targets and not designed to have an immediate effect on ground operations.
- 9 Had the RAF proved capable of intervening effectively in the Ardennes sector before 13 May then it could have slowed the German offensive during the decisive opening period of the Battle of France.

However, the aircraft of the AASF proved incapable of operating in areas where the Germans held air superiority and the majority of Bomber Command's operations, as will be discussed below, did not directly target German forces moving into and through the Ardennes. As a result, the RAF lost the opportunity to meaningfully influence the Battle of France.

3. The RAF during Fall Gelb: Underestimating the Need to Contest Air Superiority

10 Throughout the Battle of France, the BAFF lacked sufficient fighter strength to prevent the *Luftwaffe* gaining air superiority and providing air support to the German advance. The Hurricanes with the BAFF offered a credible return but there were never sufficient numbers to meet the continual requests for fighter cover during this opening period (see Table 1). From 10 May, BAFF fighters had provided air cover over the BEF and RAF occupied airfields in France. However, in this latter task it was not wholly successful. Four Battles of 88 Squadron and effectively all of 114 Squadron (one of only two AASF Blenheim squadrons) were destroyed on the ground on 10 and 11 May respectively.¹⁹ The AASF and 2 Group suffered losses to German air attacks as did RAFC reconnaissance aircraft. The RAFC's fighters were able to provide air cover over the BEF, but primarily because the *Luftwaffe* was engaged elsewhere. Escort missions for BAFF and 2 Group air strikes led to larger losses, which increased as the diminished number of Hurricanes engaged the main force of the *Luftwaffe*. The BAFF did not have enough fighters to contest German air superiority and was therefore never able to shape air operations to its own design.

Table : Daily number of BAFF Hurricanes destroyed or missing

May 1940	Hurricanes on establishment at start of day	Available for Operations	Losses
10	96	84	12
11	148	120	5
12	143	105	11
13	132	88	8

14	156	101	21
15	135	61	19
16	116	55	12
17	152	110	14
18	138	96	28
19	107	81	15
20	80	66	9

TNA: AIR 16/960 – Combats & Casualties, May 1940; TNA: AIR 20/1968 – Summarised Order of Battle; TNA: AIR 22/32 – AMWR Daily Strength Returns.

- 11 The *Luftwaffe*'s ability to gain air superiority left the RAF unable to influence the decisive stage of the Battle of France. The *Luftwaffe*'s experience in the Spanish Civil War had provided it the opportunity to develop the means, methods, and techniques necessary to effectively employ tactical air power.²⁰ The RAF, although lacking the *Luftwaffe*'s practical experiences, had developed the necessary principles to apply tactical air power. Importantly, the RAF recognised that the critical need was not for direct air support, but instead to isolate and interdict the battlefield.²¹ The RAF also recognised the importance of holding air superiority over the battlefield, and the denial of aerial freedom to the enemy.²² The latter task was essential at the outset of the Battle of France. Had it been possible to temporarily achieve air superiority over the Ardennes – or at the least, effectively deny the *Luftwaffe* air superiority – the opportunity would have existed for the AASF to attempt operations without debilitating losses. Instead, the RAF miscalculated where the greatest proportion of its efforts should be directed and the majority of the RAF's fighter strength remained based in Britain.
- 12 Fighter Command's standing priority was the air defence of Britain, and this responsibility was prioritised at the expense of the forces in France both before and after 10 May 1940. From the outset of the Second World War, the British Air Staff had faced conflicting requirements with regard to fighter policy: the RAF needed both to ensure the air defence of Britain and to provide fighter protection to the British forces in France. Given the limited resources available, the RAF could not meet both tasks. If Fighter Command retained the majority of British fighter strength, adequate fighter protection in France could not be accomplished. However, Fighter Command was

below the level of strength the Air Staff estimated as necessary for the task of home defence.²³ Given these conflicting requirements the Air Staff prioritised the air defence of Britain.

- 13 The RAF's initial deployment reflected its doctrinal belief that the decisive battle would not be fought by the armies in France but by the air forces in the skies above Britain and Germany. The RAF expected that offensive action by Bomber Command would be met by retaliation by the *Luftwaffe*. Therefore, as the Air Officer Commanding-in-Chief Fighter Command, Air Chief Marshal Hugh Dowding, articulated, it was necessary for the RAF to also be "strong at Home, so that we may not be diverted from our aim by fear of 'reprisals'".²⁴ British fighter strength, used in its "proper sphere", would engage and frustrate the *Luftwaffe's* bombing of Britain whilst the RAF's offensive bombing operations caused the capitulation of Germany. The proportion of fighter aircraft the RAF based in France left it unable to contest air superiority.²⁵ This was a strategic failure based on the RAF belief in the doctrine of offensive operations.
- 14 The RAF had anticipated that once the Battle of France commenced it would face calls to provide additional fighter cover over the Allied ground forces. In 1939, Dowding envisaged that such calls could form "a tap through which will run the total Hurricane output and that the Hurricane squadrons at Home would become a diminishing force, doomed to extinction."²⁶ To an extent the RAF's fears were realised. Faced with the gravity of the situation developing in France, the British War Cabinet authorised fighter reinforcements to be sent to the continent. By 12 May, four squadrons had been despatched to the BAFF to supplement its original strength. These were followed by a further 32 Hurricanes and pilots to replace combat losses. However, despite the RAF anticipating that they would be called on to provide additional resources they did not expect it to be on the scale, or at the speed, which the crisis in France subsequently demanded.
- 15 The RAF reinforcements to France also lacked their complete maintenance facilities which, as battle damage was suffered, reduced the number of serviceable aircraft available for operations. A large-scale redeployment of Fighter Command's squadrons after 10 May would have exacerbated this problem.²⁷ The RAF lacked sufficient transport aircraft and motor vehicles to rapidly redeploy ground personnel and

equipment. Deploying additional Hurricane squadrons to France during the battle meant accepting high-levels of operational unserviceability and these levels were likely to increase in relation to the additional squadrons deployed.²⁸ The RAF, with its resources divided between role-specific commands organised to conduct and defend against strategic bombing, did not have an effective means to rapidly redeploy its fighters. Although there was a shortage of well-developed facilities to call on in France the main source of inefficiency lay in moving these units after the battle had begun. The existing facilities at BAFF airfields did offer the means for additional Hurricane squadrons to have been deployed to France had the decision been made and implemented before the Battle commenced.

- 16 In the absence of adequate fighter cover, AASF Battle squadrons suffered losses of 50 per cent between 10-15 May (the peak of their daylight operations). By comparison, the Blenheim squadrons of Bomber Command lost only 3 per cent during the peak of their daylight operations (20 May-4 June).²⁹ A range of factors influenced the difference in the AASF's and Bomber Command's daylight losses, including the proximity of targets to British air bases and the obsolescence of the Battle. However, loss of British bombers was consistently lower when British fighter cover was present.³⁰ The RAF fighters were developed for home defence – the need for a long-range fighter to escort bombers having been dismissed by the RAF during the interwar period – and possessed a relatively small fuel capacity which limited their operational range.³¹ As a result, the RAF could only provide fighter cover for the BAFF by basing fighters in France. As a British continental commitment became increasingly likely, Fighter Command – with its singular focus on the air defence of Britain – resisted the need for a further commitment of resources to France.

4. British Fighter Squadrons for France: The Military-Political Dimension

- 17 The RAF's subsequent review of the campaign considered the debate was not whether too few but too many fighters were sent to France. This is in stark contrast to the view held by senior French Officers –

echoed during the Battle of France by Barratt – that the RAF should have committed more aircraft. This would subsequently prove a fruitful line for Vichy propaganda. The invisibility of the RAF's fighters in the skies over France in 1940 was contrasted with its “odious aggression” in bombing France after the armistice.³² In December 1940, Major-General Spears, Head of the British Mission to General Charles de Gaulle, noted that the concept of a British betrayal was being “carefully fostered” to ensure that Vichy forces were hostile towards Britain and that:

Lectures have been organised with the object of instilling the idea that all France's misfortunes are attributable to Great Britain... the leitmotif of these effusions is always the same; we inveigled France into the war, then abandoned her in her hour of greatest need.³³

- 18 Given the criticism subsequently directed at British authorities for the limited fighter support provided by the RAF it is worth noting that, in addition to the Hurricanes that the British did commit to the Battle of France, both from the outset and the replacements despatched after 10 May (the equivalent of some ten squadrons), further fighter reinforcements were planned. On 14 May the British War Cabinet had ordered that ten further squadrons be prepared to move. This was followed on 16 May by a decision to transfer four fighter squadrons to France. In addition to these four squadrons, six squadrons of British based aircraft were authorised to operate from French airfield during the day, returning to Britain each evening. However, the speed of the German advance and the evacuation of BAFF from Northern France superseded these decisions.
- 19 The British refusal to provide additional fighter squadrons after 16 May needs to be weighed against the military realities that emerged. Dowding was rightly concerned that reinforcements for France would hollow his command to a point it could not guarantee the air defence of Britain, whilst having little effect on the situation on the continent.³⁴ During the opening days of the Battle of France, the commitment of British fighters, and the extent that the defences of Britain were being denuded had concerned the War Cabinet.³⁵ After the breakthrough at Sedan, Britain had to consider the possibility that France would be defeated and the need to conserve the RAF's fighter strength was established. This was a political decision, sanctioned by

the Prime Minister Winston Churchill and the War Cabinet, and dictated by strategic necessity. After this point any support provided to the French would be limited by the extent it would reduce the air defence of Britain.³⁶ On 18 May, Churchill confirmed this position when he wrote to Major-General Hastings Ismay, Deputy Secretary to the War Cabinet and Churchill's Chief of Staff, that "no more squadrons of fighters will leave the country whatever the need in France".³⁷

5. RAF Bomber Command: Air Strikes between 10 and 16 May

20 During the initial and decisive period of the Battle of France, the resources available to Bomber Command were not employed to the fullest possible extent. The use of air power to directly intervene in the land battle was widely opposed by the RAF and was seen by Air Marshal Charles Portal, Air Officer Commanding-in-Chief Bomber Command, as a "prostitution of its true function".³⁸ Portal also opposed attacks on German supply lines and reserve movements. Such targets were heavily defended and – in areas outside the Ardennes – the damage caused was frequently circumvented with ease by the advancing German forces.³⁹ Instead, Portal advocated attacks on German industries, believing that this would lead to retaliatory attacks on Britain by the *Luftwaffe* which would in turn offer Fighter Command the chance to engage the *Luftwaffe* on favourable terms. Employing Bomber Command in this fashion was also expected to force the *Luftwaffe* to withdraw both fighters and anti-aircraft guns from the frontline to defend targets of vital importance in Germany. The cumulative result of Bomber Command's actions would, it was argued, therefore directly ease the pressure on the land forces in France.⁴⁰ Portal's arguments were echoed elsewhere in the RAF. During this same period, Dowding called for the full employment of Bomber Command against targets in Germany and did so for the same reasons as Portal – that these would stimulate the *Luftwaffe* in to attacks against Britain, from where Fighter Command could engage them on advantageous terms.

21 From the night of 10 May until the night of 14 May, Bomber Command employed a nightly average of 30 aircraft against airfields and lines of communication in West Germany and the Netherlands. Numerous

targets were attacked and results were achieved but the division of effort reduced the overall operational effect.⁴¹ The effect was reduced further by the failure of many of the crews to identify and attack their assigned targets. On 11 May, 37 aircraft were despatched to attack road and rail targets in West Germany, but only around half of these located and bombed the target. The RAF's air crews on night operations during the Battle of France relied almost entirely on dead reckoning to navigate to and from the Low Countries.⁴² Many crews failed to find their targets as a result and this reduced the number of attacks delivered against German lines of communications in Germany and the Netherlands. During the decisive period of the Battle of France, not only were the attacks by Bomber Command widely dispersed, with many crews failing to find their targets, but they were only made with a limited proportion of the Command's resources. Operations against German lines of communication involved only 100 sorties (see Table 2). Bomber Command, believing it was limited in its ability to meaningfully delay the German advance, instead held back the majority of its forces in anticipation of its assault on industrial targets in the Ruhr.⁴³ The RAF contested the Battle of France with a force ill-designed for, and a doctrine prejudiced against, the military reality of supporting the Allied armies.

Table 2: Sorties despatched against German Lines of Communications

Night of:	Wellington Sorties	Whitley Sorties	Hampden Sorties	Total
10 May	0	9	0	9
11 May	0	18	19	37
12 May	6	6	0	12
13 May	0	6	6	12
14 May	18	12	12	42

M. Middlebrook and C. Everitt, *The Bomber Command War Diaries: An Operational Reference Book, 1939-1945* (New York: Viking, 1985), pp. 41-42.

22 Bomber Command was restricted in operating against German lines of communication during the German advance through the Ardennes because of a lack of up-to-date operational intelligence. German air superiority over the Ardennes restricted reconnaissance reports and instead Bomber Command's initial night offensive was directed

against the German forces advancing into the Netherlands and Belgium. Moreover, had better intelligence been available the RAF would have interpreted it through the doctrinal prism of offensive air power. During the evening of 12 May, the Chief of the Air Staff, Air Chief Marshal Cyril Newall argued in a minute to the War Cabinet that German movements in Belgium and the Ardennes might simply be a decoy. Newall posited that Germany was not attempting to defeat Allied ground forces but was instead intent on capturing airfields in the Netherlands.⁴⁴ Having captured these airfields, and weakened the RAF response through its diversion to support the Allied ground forces, the *Luftwaffe* would have gained a favourable position to launch a bombing offensive against Britain. The *Luftwaffe* bombers were in reality providing tactical air power, isolating the battlefield, and preventing the movement of Allied reserves.

- 23 On 10 May Newall had strongly recommended to the British War Cabinet that immediate attacks be made on the Ruhr. The War Cabinet had agreed that the information received regarding German bombing of cities in France, Belgium and the Netherlands provided sufficient justification for the employment of Bomber Command against target in the Ruhr.⁴⁵ However, the authorisation for the RAF to commence its strategic bombing offensive was then deferred several times. The British government was initially reluctant to sanction the attacks for fear it would leave Britain open to the charge of having initiated unrestricted bombing. Additionally, the French government were concerned that British attacks on German industries could lead to retaliatory strikes on French cities. The delay in authorising the British strategic bombing offensive was, however, significantly influenced by operational considerations. Bomber Command crews required sufficient illumination from the moon to be able to navigate and bomb targets in Germany. The moon conditions for an attack on oil refineries in Germany were not favourable during the first five days of the Battle of France.⁴⁶ Acting on this information the War Cabinet delayed a decision to authorise the RAF's strategic attacks until 15 May. On the night of 15 May, Bomber Command despatched 111 aircraft, over 60 per cent more than it had despatched on any previous night since 10 May.⁴⁷ On 16 May, however, Churchill flew to Paris and agreed to increase the use of Bomber Command against the Meuse crossings. Despite preferring to prioritise strategic bombing,

Newall agreed to this change in targets. The debate was simultaneous to the one regarding additional fighter squadrons for France and it was apparent to Newall he could not reject both requests. However, although in the aftermath of this decision some 50 per cent of the bomber effort was made against targets in direct support of the Allied forces, this percentage decreased markedly in the period shortly after and stood at around 35 per cent on 19 May.⁴⁸

24 Bomber Command's operations in support of the Allied ground forces continued to be widely scattered. The 21 bombing sorties made on the night of 16 May were not concentrated and this pattern was repeated during Bomber Command's 268 night sorties before 21 May. Some attacks disrupted German lines of communication but these were dispersed across a broad geographical area and, made by individual aircraft, were incapable of isolating the battlefield.⁴⁹ Lacking in cohesion, the effort achieved negligible operational results. This was a pattern to be repeated in Bomber Command's attacks for much of the remainder of the Battle of France.

6. The German Break-Out: British Air Power between 17 and 26 May

25 As the German forces broke out from Sedan their attack threatened to cut the Allied forces in two. During this period, between 17 and 20 May, the AASF and 2 Group made 17 Battle and 76 Blenheim sorties. During the first two days the RAF's operations were designed to slow the German pursuit of 1^{re} Armée but heavy losses (mainly to German fighters) meant that the attacks achieved little other than obstructing roads near the German frontline on 18 May.⁵⁰ RAFC Blenheims were also despatched on armed reconnaissance missions and local successes were registered against armoured fighting vehicles near the frontline.⁵¹ German forces threatening to encircle the BEF from the south were attacked on 19-20 May, 17 Battle and 47 Blenheim sorties were directed against columns on the Arras-Bapaume road. RAFC and AASF Hurricanes provided escorts and fighter patrols over the area and the British bombers reported hits on troops, roads, and junctions.⁵² The German operations were now favoured, however, by the number and condition of the roads in the area, the terrain – which was more open – and the wide area to spread the advance into. Ger-

man motorised units now had the opportunity to move faster and delays at any one point had limited effect on the overall speed of the advance. The influence that the RAF could exert on the overall battle in these conditions was greatly diminished: air power could not provide a substitute for the lack of Allied troops to halt the German breakthrough. As the Allies withdrew to the Channel, however, the small delays that the RAF were able to create were of value.

26 Between 21-26 May, the RAF's air support aimed to impede, or at least delay, the German columns which threatened to divide the BEF from the main Allied force. On 21-22 May, 2 Group made 120 sorties on the German columns advancing in the area south of Boulogne; apart from the RAF attacks the German panzer advance faced little resistance.⁵³ Fighter cover was provided for these attacks, but the resources committed over France remained limited. The speed of the German advance had forced the remaining RAFC squadrons to evacuate to Britain along with the squadrons of Fighter Command despatched on 16 May.⁵⁴ During this withdrawal, 140 unserviceable Hurricanes (many only slightly damaged) had to be destroyed – 66 were evacuated.⁵⁵ On 21 May, Allied forces made a counter-attack at Arras which halted the German advance. The “fullest fighter cover” possible had been requested from first light to prevent the *Luftwaffe*'s involvement. However, Fighter Command only authorised the use of three squadrons to make fighter sweeps over the area.⁵⁶ As a result Arras, located over 150 km from air bases in Britain, received little protection and Stuka attacks in the early evening helped German forces stabilise the situation there. On 22 May, a French thrust on Cambrai – left largely undefended as German armour pushed forward – was unsuccessful because of losses caused by unopposed German air attacks.⁵⁷ As Allied forces withdrew to the coast, British fighter cover halted some *Luftwaffe* attacks but, more frequently, could only reduce the effectiveness of German air operations. RAF successes against *Luftwaffe* bomber formations over the battlefield and rear areas were also typically linked to periods when German fighter operations were poorly co-ordinated.⁵⁸

27 From 20 May, AASF Battles operated by night undertaking air interdiction attacks against lines of communication in the Ardennes, principally targeting roads, railways, and supply dumps between Givet and Charleville and stores at Libramont. These efforts, however, were

dispersed across numerous targets.⁵⁹ General Wolfram von Richthofen, commanding *Fliegerkorps VIII*, recorded that airfields – which were also targeted as part of this dispersed effort – suffered from “pointlessly scattered explosive bombs”.⁶⁰ Nonetheless, air interdiction operations in the Ardennes – made both by the AASF and Bomber Command during this period – were directed on an area where disruption to German operations could be produced.⁶¹ Attacks around Givet–Charleville–Libramont had the potential to delay supplies and reinforcements reaching forward units. Air strikes at Givet produced definite results; on 28 May German forces there suffered 173 casualties and led to the redistribution of AA guns to defend targets in the area.⁶² During this period, General von Rundstedt, commander of *Heeresgruppe A*, complained of confusion in the rear services reaching as far back as Libramont and stressed that the need for order to be restored in these areas was almost more important than forward operations.⁶³ Bomber Command’s air interdiction attacks, however, fell principally on lines of communication in Belgium and West Germany. On the night of 21 May, these operations involved 124 aircraft and were again widely scattered and incapable of creating a crisis at any one point. The failure to identify one decisive node on the German supply system and concentrate efforts against it meant that damage was always limited in scale and disruptions were only temporary. Air strikes on railways resulted in damage which was harder to repair than comparable damage to roads and therefore produced longer delays to large quantities of supplies and material.⁶⁴ Despite this shortcoming, air interdiction operations by the AASF and Bomber Command caused delays to supplies being brought forward by rail to maintain German forces.⁶⁵ To maintain the flow of supplies, motorised transports from forward units were withdrawn: for instance, *Panzergruppe Kleist* was obliged to divert one-and-a-half transport battalions.⁶⁶ That the air interdiction attacks of Bomber Command and the AASF had some effect on the German rear services during the Battle of France is clear; that this translated into an element of disruption to the supply of forward units is probable, but that this disruption was typically anything more than an inconvenience is doubtful.

28 Bomber Command’s efforts in support of the land battle would continue during the evacuation of Dunkirk. However, the senior leader-

ship of the RAF felt that both air interdiction and direct support missions were a misallocation of the RAF's resources. Instead, it was felt that the RAF should pursue strategic bombing which would, it was predicted, deliver an immediate contribution to the land battle as well as produce material damage. It was expected that in retaliation German bombers would be rapidly redirected against targets in Britain whilst German fighters and AA guns would be withdrawn from the front to provide for the air defence of Germany.⁶⁷ Here then is a good place to review the effect of Bomber Command: to the wider land battle during the campaign in France, minimal; to the aerial dispositions, negligible; to German key industries, slight. Bomber Command's night bombers possessed the main strike capacity of the RAF but they exerted little overall influence on the Battle of France.

29 By 23 May, 2 Group had been reduced to 60 operational aircraft. It therefore proved necessary to employ part of the AASF in the air operations against German forces around Arras and Boulogne.⁶⁸ Added to this force were the RAFC Lysander and Blenheim reconnaissance units. Having been evacuated to Britain, the RAFC units now made armed reconnaissance to locate, bomb, and report back positions of advancing German forces.⁶⁹ Boulogne was evacuated on 23 May having received fighter cover from the RAF since 20 May. Calais also received fighter cover until operations there ceased on 26 May; German forces there reported that – for the first since 10 May – the Allies held air superiority.⁷⁰ As the *Luftwaffe's* fighter protection over the coast became better organised, however, Fighter Command's ability to intervene in German air operations declined. On 24 May, 2 Group made attacks on German convoys in the vicinity of Arras whilst the AASF undertook day attacks on armoured fighting vehicles north of Abbeville. However, the RAF's main effort was made, with some success, on columns and bridges near Calais on 24-25 May, and bridges near Kortrijk on 25-26 May. Air Commodore James Robb, Air Officer Commanding 2 Group, complained that “the only result of a local success such as the destruction of a bridge that can be repaired in a few hours, is to redouble the appeals for the use of our very small force”.⁷¹

However, delays – even those measured in hours – were of consequence in preventing the Germans exploiting local successes against an Allied line which lacked depth.⁷² Delays to the German advance caused by the RAF should not be exaggerated but they were of value as the Allied position solidified around Dunkirk.

7. The RAF at Dunkirk: A Battle Fought by Separate Commands

30 On 26 May, the evacuation of Dunkirk, Operation DYNAMO, commenced. For nine days, the RAF was engaged on supporting ground and naval operations at Dunkirk, concentrating its resources in a limited area for the first time in the Battle of France. Churchill would later hail the RAF as having won a victory which enabled 338,000 soldiers to be evacuated by 4 June. Soldiers evacuated from Dunkirk, however, criticised a perceived absence of fighter cover.⁷³ As a consequence, the debate regarding the RAF's contribution is often focused on demonstrating that Fighter Command operated over Dunkirk.⁷⁴ The effectiveness of the RAF's operations has until recently been neglected.⁷⁵ During Dynamo, RAF Bomber-, Coastal-, and Fighter Command undertook operations with different objectives to support the evacuation of Dunkirk. There is, therefore, an important distinction to be made between the three Commands and the results they achieved during the evacuation.

31 Fighter Command flew 2,200 sorties during DYNAMO. The effect of these operations was, however, limited. Originally, it was anticipated that German land operations would force DYNAMO to be terminated after 48 hours; had this occurred only half of Fighter Command's squadrons would have been involved in providing air cover for the evacuation.⁷⁶ During the first 48 hours, the *Luftwaffe* destroyed the facilities of Dunkirk's inner harbour, which – but for the Royal Navy's extemporised use of the Dunkirk Mole – should have left it impossible to evacuate large numbers of troops. As it became apparent that the majority of Allied forces could be recovered from Dunkirk, Dowding still restricted the strength of the forces available to provide air cover.⁷⁷ Contrary to the established narrative of Dunkirk, these forces were not sufficient to protect the evacuation.⁷⁸ The *Luftwaffe* caused heavy losses to Allied ships at Dunkirk on 29 May and again on

1 June when further daylight evacuations were terminated; these were the only days of sufficiently clear weather to allow the operations of dive-bombers. On 29 May 12 British ships were lost directly to air attack and the evacuation was almost halted, whilst on 1 June the *Luftwaffe* sank 13 ships and further daylight evacuations were suspended.⁷⁹ The majority of the troops landed in England by British ships were lifted from Dunkirk either by Destroyer or Personnel Vessels, 96,000 and 87,000 respectively.⁸⁰ These types incurred heavy losses and by the end of evacuations on the night of 2-3 June only 13 of the 40 destroyers involved in Dynamo remained fit for service.⁸¹ Throughout DYNAMO, the greatest inhibitor to the *Luftwaffe*'s success was not Fighter Command but the unfavourable weather.

32 Fighter Command's employment of its resources during Dynamo reflects operational decisions made during the initial period of the Battle of France. The forces committed were always restricted to ensure that, if losses were incurred, they did not compromise the air defence of Britain. The fragmented commitment of Fighter Command meant, however, that insufficient resources were available to successfully contest air superiority at the decisive point. At Dunkirk, it is probable that this led to Fighter Command suffering greater losses than if it had contested the air battle with a larger number of aircraft. It certainly resulted in Fighter Command failing to adequately protect daylight evacuations.

33 The RAF's contribution during Dynamo was not, however, restricted to Fighter Command. Air strikes were made in support of the Allied forces holding the Dunkirk perimeter and the RAF aimed to materially assist the situation on the ground.⁸² At the outset of DYNAMO, these attacks aimed to delay the German advance and aid the withdrawal of the BEF to Dunkirk. Artillery and troop concentrations near the coast were successfully attacked by Fleet Air Arm (FAA) aircraft under Coastal Command's control. This permitted Bomber Command to attack targets inland around Kortrijk and St. Omer. Between 26-28 May, 132 day – and 137 night –sorties were made in this area which succeeded in creating obstructions on routes leading to German units attempting to cut the corridor down which Allied forces were withdrawing to Dunkirk. Allied forces involved in heavy fighting around Cassel, the Ypres front, and at St. Omer were materially assisted by these air strikes which delayed German forces arriving in

greater strength. Air strikes also caused losses amongst German units and created demands for the *Luftwaffe* to provide air cover to guard against further bombing. A greater proportion of Bomber Command's effort could, however, have been delivered on supply dumps, movements and rear positions in close proximity to the German forces. During Dynamo 267 sorties were made against oil objectives and targets in the Ruhr which, even if successful, could bring no immediate benefit to the Allied ground forces.⁸³

- 34 Between 29 May-1 June, 212 daylight sorties were made by 2 Group to attack targets on routes leading towards the Dunkirk perimeters. German troops and transports around Diksmuide, Veurne and Nieuport were attacked with notable success as were pontoon bridges being erected at Nieuport.⁸⁴ On 31 May, a strong German attack threatened to break the BEF's defensive line at Nieuport.⁸⁵ The arrival of Blenheims of 2 Group decisively defeated the German attack; forward German troops "turned and fled" and all movement of German reserves stopped following accurate bombing.⁸⁶ German vehicle and troop concentrations east of Nieuport, as well as roads and bridges in the area, were also successfully attacked by FAA aircraft.⁸⁷ Weather conditions initially limited the RAF's bombing programme on 29 May. However, in response to urgent requests from the BEF for further air strikes, 15 Vickers Wellingtons attacked targets east and west of the Dunkirk perimeter. These attacks were repeated on 30 May by 28 Wellingtons and, on both days, important road junctions behind German forces and convoys travelling in the area were hit.⁸⁸ Between 31 May-2 June, 65 night sorties were made to provide direct support for Allied troops by attacking German positions at, and in close proximity to, the Dunkirk perimeter. These attacks impeded German preparations for offensive operations and accounts from German forces on the perimeter demonstrate that night bombing caused considerable "inconvenience".⁸⁹ After 1 June, the Blenheims of 2 Group were despatched against artillery positions on the coast with the object of neutralising gunfire on ships traversing the coast west of Dunkirk. The missions were considered essential to allow the evacuation to be completed.⁹⁰ The likelihood is that these attacks caused little loss amongst the German batteries; however, the attacks did achieve the aim of suppressing fire from these positions.

- 35 During DYNAMO, the RAF benefitted from the theatre of operations having contracted in size. The withdrawal of Allied forces to, and the defence of, Dunkirk, benefited from the RAF's air strikes although a proportion of the bombing effort continued to be directed against strategic targets. Fighter Command's priority remained the preservation of its resources. As during the earlier stages of the campaign, both Bomber and Fighter Command viewed operations at Dunkirk through the prism of their distinct, role-specific, force structures and diluted the concentration of their efforts.

8. The Fall of France: RAF Operations between 5-18 June

- 36 During the final stage of the Battle of France, the RAF understandably looked to balance any further support it offered to the Allied armies with the need to preserve sufficient forces to ensure Britain's security were France to be defeated. As a result, the RAF was unable to influence the land battle during FALL ROT, the second German offensive which commenced on 5 June. The AASF had only 18 serviceable fighters available. On 5 June, the AASF fighters continually patrolled airfields around Rouen but – massively outnumbered by the *Luftwaffe* – they were insufficient to prevent the *Luftwaffe*'s operation or provide air cover over the front. During the evening of 5 June, 18 Hurricanes of Fighter Command escorted Blenheims of 2 Group. The Hurricane was, however, a short-range interceptor and could only operate for a limited time over the battlefield. Although between 5-9 June Fighter Command maintained a daily average of 100 sorties over France, the limited range of both the Hurricane and Spitfire meant there was a consistent lack of air cover.⁹¹ On 7 June, the AASF Hurricane strength was increased to 80. This modest number could not dramatically alter the nature of the wider air battle during ROT but it permitted the AASF to protect its airfields and effectively escort bomber formations over the frontline.⁹² On 5 June, 11 Battles and 24 Blenheims attacked tanks and transports immediately behind the battlefront. With only a limited number of bombers, the attack had had to be delayed until a clear target of value was identified. Given the wide frontage attacked during ROT this was difficult to determine, and the delay and limited size of the RAF's attack meant that there was little prospect it would

do more than a minimal amount of disruption.⁹³ The AASF also made air interdiction attacks against targets in the Ardennes. As during GELB, however, the preponderance of British air power remained in Britain. Bomber Command's night force, some 285 serviceable aircraft did contribute during ROT – on 5 June, 48 aircraft targeted lines of communication behind the Somme.⁹⁴ These attacks, intended to make an immediate impact on the battlefield, continued for the remainder of the campaign. Between 6-15 June, 628 night sorties were made by Bomber Command. The main effort was against German lines of communication, but the largest raids were directed against strategic targets.⁹⁵

37 On both 6 and 7 June, 92 Blenheim and 33 Battle sorties targeted German forces and the routes of advance. Unlike those of 5 June, these missions commenced in the morning but were still insufficient to stymie the speed of the German advance towards Rouen.⁹⁶ Between 8 and 12 June, 2 Group undertook 248 sorties and AASF Battles made 104 daylight sorties in support of the Allied forces in France and, as the German breakthrough worsened, to impede the advance to the Seine crossings at Rouen. An important effort was also made to support French forces to the east with attacks made on pontoon bridges over the Oise. French fighters provided air cover and the destruction of three bridges was later claimed.⁹⁷ During this period, the AASF and Fighter Command provided patrols over British 51st Division and 9^e Corps d'Armée including their attempted evacuation from St. Valery-en-Caux. Evacuations from Le Havre during 10-12 June also received fighter cover and the roads to Le Havre were covered by armed bomber patrols. This was the peak of British fighter involvement in the air cover provided during ROT, the remaining operations in France being progressively further from British airfields.

38 The Battle of France now appeared lost. To maintain the possibility of Britain's ally continuing the fight from abroad, even if it suffered the loss of Metropolitan France, Churchill now promised the maximum possible air support. On 13 June, 2 Group made 52 sorties and 42 Battles were despatched in the Seine area against German forces along the Marne. During the night of 13 June, 163 aircraft were despatched against a wide range of targets supporting German lines of communication in France, Belgium and the Netherlands. At the same time as the RAF made this effort, however, it was preparing to with-

draw the AASF and the worsening military situation led to the progressive evacuation of the remaining units in France. Indeed, following 13 June, there was a diminuendo of air strikes before France asked for a ceasefire. Fighter patrols, by Hurricanes based in France and Britain, continued until 18 June when the last AASF aircraft returned to Britain. There were, however, no more RAF attacks made in large numbers with the aim of delaying German units at the head of the advance. For such attacks to be effective they needed to be coordinated against a single point through which lines of communication to the front line depended. Following the German breakout at Sedan there had been few of these, now there were none.

Conclusion

- 39 During the Battle of France, 1,526 RAF personnel were killed, wounded or reported missing and 959 RAF aircraft were destroyed – 508 of which were BAFF aircraft.⁹⁸ However, the RAF's application of its resources during the Battle of France meant that it was almost totally irrelevant in determining the final outcome of that decisive battle. After the Second World War commenced, the Air Staff, Fighter Command and Bomber Command viewed the Battle of France as a distraction from the battles they wanted to fight – the air defence of Great Britain and the strategic offensive against Germany respectively. The RAF's decision to prioritise their preferred campaigns over the Battle of France rested on its pre-war doctrine regarding the offensive use of air power. Given the limited resources available, this condemned the RAF to irrelevance in the Battle of France. Unable to be sufficiently strong in France and pursue their preferred strategy, the RAF purposefully limited their contribution in France. In doing so the RAF intentionally accepted the consequence that they would not meet the *Luftwaffe* on equal terms over France, believing that instead, they could force the *Luftwaffe* to conform to the preferred British strategy for the use of air power. Bomber Command undertook strategic attacks on targets in Germany in the mistaken belief that this was the decisive point to apply pressure in 1940. Political directives to provide greater support for the land battle frustrated the RAF's desires to concentrate exclusively on targets in Germany but did not lead to a re-evaluation regarding the overall use of Bomber Command. The RAF, having failed to assess how it could produce a defin-

itive effect on the battle, undertook attacks across a widely dispersed geographical area and there was consequently no prospect of their significantly disrupting the German advance. The exception to this was during DYNAMO when air strikes were concentrated in a limited space, therefore benefiting Allied ground forces. Similarly, Fighter Command failed to concentrate its resources on the air battle in France and instead prioritised the air defence of Britain. The single focus of Fighter Command restricted the fighter cover available during the Battle of France. The BAFF fighter squadrons were massively outnumbered throughout the campaign; the reinforcements it received from Fighter Command invariably came after the decisive moment in the battle had passed, with the result that they often did little more than replace destroyed and damaged BAFF fighters. These aircraft recorded successes against the *Luftwaffe* at times during the campaign but they rarely prevented the *Luftwaffe*'s operations. The Fighter Command squadrons which operated over France from Britain were also restricted in number and even during DYNAMO insufficient resources were provided to achieve air superiority, without which it was not possible to exert a meaningful influence on German operations. Without adequate fighter cover, the bombers of the BAFF proved incapable of sustained daylight operations and were too few in number to exert a decisive influence on the course of the battle. During DYNAMO, Bomber and Coastal Command made meaningful contributions. However, Fighter Command failed to protect daylight evacuations from Dunkirk. In considering the Battle of France it is practical to ignore much of the work of the BAFF, and the RAF more generally. Crucially, during the opening days of the Battle of France, the RAF was not able to bring its full strength to bear to meaningfully influence the battle. To be virtually irrelevant to the outcome of a decisive battle is an error few armed forces have the opportunity from which to recover.

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ABSTRACTS

English

This paper intends to examine the influence of the Royal Air Force during the Battle of France. It establishes the initial deployment of British Air Power resources in France and the extent to which the majority of the RAF's strength remained in Britain as part of an offensive air power strategy. It considers the operations of the RAF during the initial days of the Battle of France. It demonstrates that the RAF had an opportunity to have delayed the German advance through the Ardennes and examines the reasons for the RAF's failure to commit sufficient fighter aircraft. It analyses the role of RAF Bomber Command during the battle. The paper then considers the RAF's role during the remaining stages of the battle, including during the Dunkirk evacuation and Fall Rot. The paper concludes that the Royal Air Force was largely irrelevant to the outcome of the Battle of France.

Français

Cet article se propose d'examiner l'influence de la RAF dans la Bataille de France. Il établit le déploiement initial des ressources de l'*air power* britannique en France et montre que la majorité de la force de la RAF est restée en Angleterre dans le cadre d'une stratégie de puissance aérienne offensive. En considérant les opérations de la RAF pendant les premiers jours de la bataille de France, il démontre que la RAF a eu l'occasion de retarder l'avancée allemande à travers les Ardennes et examine les raisons de la réticence de la RAF à engager suffisamment d'escadrons de chasse. Il analyse le rôle du RAF *Bomber Command* dans la bataille. L'article s'attache ensuite au rôle de la RAF au cours des étapes ultérieures de la bataille de France, y compris l'évacuation de Dunkerque et le franchissement allemand de la ligne Weygand. L'article détermine que la RAF était en grande partie sans importance pour l'issue de la bataille de France.

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Mots-clés

air power, RAF, bataille de France, AASF, BAFF, guerre aérienne, seconde guerre mondiale, puissance aérienne

Keywords

Air Power, RAF, Battle of France, AASF, BAFF, air warfare, World War II, WWII

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