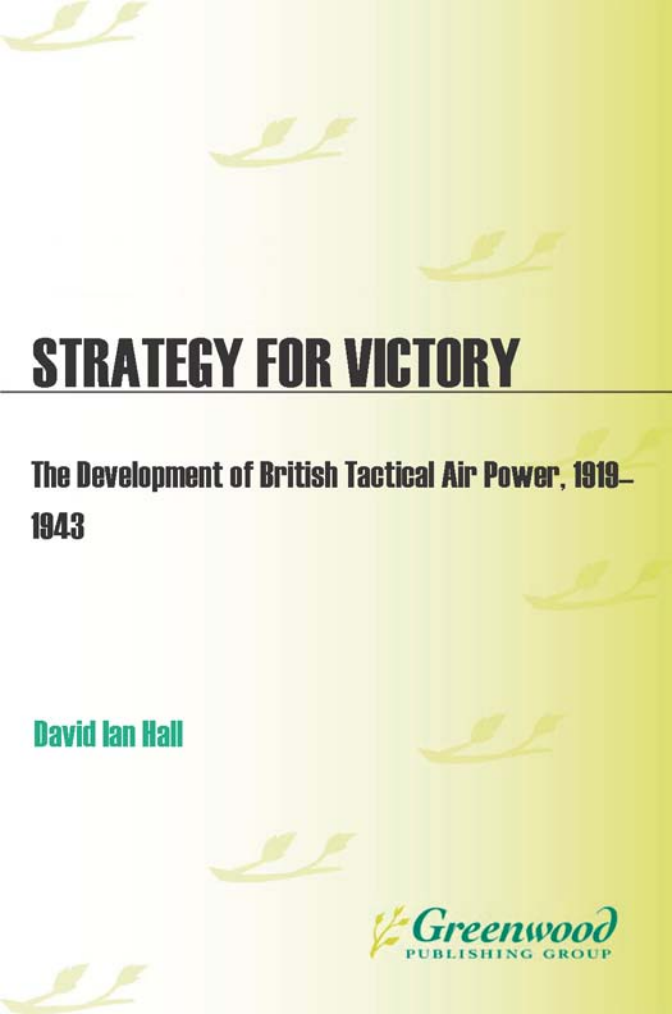




STRATEGY FOR VICTORY

**The Development of British Tactical Air Power, 1919–
1943**

David Ian Hall

 **Greenwood**
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for my parents

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David Ian Hall
King's College London
November 17, 2007

PREFACE

The British Army's lack of air support during the opening campaigns of the Second World War in France and North Africa stands out as one of the great ironies of that conflict. The British, after all, perfected air support during the Great War, and, in 1918, possessed what many at the time believed was the finest tactical air force in the world. Yet, by 1939, co-operation between the Army and the Royal Air Force was minimal at best. A number of historians have attributed the dramatic decline in Army-RAF co-operation to the Air Staff's so-called "single-minded belief in mass aerial bombardment as a war winner" and the corresponding British defence policy this strategic view produced in the 1930s due to an exaggerated fear of the bomber. Although this is only a partial explanation it is one that has gained a surprising degree of acceptance. Even Sir Maurice Dean, a distinguished historian of the RAF, has written: "Between 1918 and 1939 the RAF forgot how to support the Army." A cursory look at the early battles and campaigns fought by the British Army in the Second World War appears to support the critics' claims. From September 1939 to August 1942, the Army rarely won a battle and lost every campaign. One aspect common to all of these early defeats was the lack of adequate air support for the Army. The RAF, it is argued, trained and equipped to fight a separate war, could not give much support to the Army and begrudged what it gave. This story, however, is woefully incomplete. Both before and during the war Britain's airmen gave a great deal of thought to the subject of air support for an army in the field. To date, existing literature on the war has failed to give a satisfactory account of these efforts, leaving a significant story of ideas, intellectual development, and institutions to be told.

Extensive analysis of the use and misuse of air forces during the First World War led Britain's airmen to establish the first principles of air warfare—offensive initiative, air superiority, concentration of force, and the need for centralised command and control—which served them well in their development of theory and doctrine throughout the interwar period and the Second World War. Their advancement of “air power” also led to a bitter rivalry between the Army and the RAF and a fierce political struggle over the proper employment of finite air forces in war, which remained unresolved until the spring of 1943.

As a general rule the airmen tended to see a wider strategic application of air power. In a land battle, once command of the air over the intended area of operations had been established, air forces would make their greatest impact through offensive action designed to “isolate the battlefield” from enemy reinforcement and supply. Both training exercises and war experience had convinced the airmen that air attacks in the forward areas of the battlefield were ineffective. They inevitably involved unacceptable losses in aircraft and crews, which could not be replaced quickly and, thereby, undermined the air force's ability to maintain the all important condition of air superiority. Army officers were unimpressed by this logic. They wanted large numbers of specialised aircraft allocated directly to field commanders in order to shield their men from enemy air attack and to provide offensive air support (loosely described by the soldiers as flying artillery) to destroy enemy armour, artillery, and strong points at the forefront of the battlefield. What was required for these operations, they concluded, was their own army air arm. Anything less, stated the soldiers, was unacceptable.

Irreconcilable differences on matters of principle and deep-seated mistrust over intent bedevilled most dealings between the two Services as they struggled to find a mutually acceptable solution. The calamitous Battle of France in 1940 and the early setbacks in the Middle East merely made a bad situation worse. A severe lack of resources and technical problems with aircraft and rudimentary communications systems also hindered the rapid development of a comprehensive, flexible, and quick to respond air support system. But these physical problems were much easier to overcome than the conceptual differences over air-ground co-operation between the Army and the RAF. Air Marshal Sir Arthur Tedder, AOC-in-C Middle East, was instrumental in bringing about a change in army attitudes and developing an effective and efficient system of air support in North Africa. He was assisted in his efforts by the battlefield skill of Air Vice-Marshal Arthur Coningham, the eager and willing co-operation of General Bernard Montgomery, and the political influence and intervention of Prime Minister Winston Churchill. Personality and spectacular battlefield success in the Western Desert during the summer of 1942, combined to produce perhaps the finest air support afforded to any army during the Second World War. The creation of the 2nd

Tactical Air Force in June 1943 and its performance during the Normandy invasion through to the end of the war attests to this claim.

This monograph examines the nature of the interservice crisis and debate over air support from the end of the Great War 1914–1918 to the summer of 1943 and, in this context, the process by which it was settled. Drawn primarily from the rich collection of documents at the Public Record Office (Kew) and other British archives, the analysis traces how the British Army went to war in 1939 without adequate air support and how an effective system of support was organised by the RAF. As such, it is the first scholarly survey of the origins and development of British air support doctrine and practice during the early years of the Second World War.

ABBREVIATIONS

2nd TAF	2nd Tactical Air Force, RAF
AA	Anti-Aircraft
AASC	Army Air Support Control
AASF	Advanced Air Striking Force
AASGp	Army Air Support Group
AC	Army Co-operation
ACBA	Allied Central Air Bureau
ACC	Army Co-operation Command
ACIGS	Assistant Chief of the Imperial General Staff
AEF	Air Expeditionary Force
AEFHQ	Air Expeditionary Force Headquarters
AFHQ	Allied Forces Headquarters
AFV	Armoured Fighting Vehicle
AHQ	Air Headquarters
AIL	Air Intelligence Liaison
ALO	Air Liaison Officer
AM	Air Marshal
AOC	Air Officer Commanding
AOC-in-C	Air Officer Commanding-in-Chief
AOP	Air Observation Post
ASC	Air Support Control
ASCHQ	Air Support Control Headquarters
ASSU	Air Support Signals Unit
ASU	Air Storage Unit
ATM	<i>Army Training Memorandum</i>
AVM	Air Vice-Marshal

BAFF	British Air Forces in France
BEF	British Expeditionary Force
CAS	Chief of the Air Staff
CCOR	Combined Central Operations Room
CCS	Combined Chiefs of Staff
CID	Committee of Imperial Defence
C-in-C	Commander-in-Chief
CGS	Chief of the General Staff
CIGS	Chief of the Imperial General Staff
CO	Commanding Officer
COR	Combined Operations Room
COS	Chief of Staff
Col	Colonel
CSBC	Close Support Bomber Control
DAK	Deutsches Afrika Korps
DCAS	Deputy Chief of the Air Staff
DCIGS	Deputy Chief of the Imperial General Staff
DDMO	Deputy Director of Military Operations
DD Plans	Deputy Director of Plans
DDSD	Deputy Director of Staff Duties
DMI	Director of Military Intelligence
DMO	Director of Military Operations
DMO&I	Director of Military Operations and Intelligence
DRC	Defence Requirements Committee
EAF	<i>The Employment of Air Forces in the Field</i>
FAC	Forward Air Controller
FASL	Forward Air Support Link
FM	Field Marshal
FOO	Forward Observation Officer
Gen	General
GHQ	General Headquarters
GOC	General Officer Commanding
GOC-in-C	General Officer Commanding-in-Chief
GSO	General Staff Officer
HMSO	His/Her Majesty's Stationery Office
HQ	Headquarters
HQHF	Headquarters Home Forces
HQME	Headquarters Middle East
IAF	Independent Air Forces
IWM	Imperial War Museum
JIC	Joint Intelligence Committee
JPC	Joint Planning Committee
LHCMA	Liddell Hart Centre for Military Archives
L of C	Line of Communication

Lt	Lieutenant
Lt-Col	Lieutenant-Colonel
Lt-Gen	Lieutenant-General
Maj	Major
Maj-Gen	Major-General
MORU	Mobile Operations Room Unit
MTP	<i>Military Training Pamphlet</i>
NATAF	North-West African Tactical Air Force
NCO	Non-Commissioned Officer
NWAF	North-West African Air Force
ORS	Operational Research Section
PRO	Public Record Office, Kew, London
PUS	Permanent Under Secretary
QMG	Quarter-Master General
RA	Royal Artillery
RAC	Royal Armoured Corps
RAAF	Royal Australian Air Force
RAF	Royal Air Force
RASL	Rear Air Support Link
RE	Royal Engineers
RFC	Royal Flying Corps
RNAS	Royal Naval Air Service
R/T	Radio Telephony
RTC	Royal Tank Corps
RTR	Royal Tank Regiment
SASO	Senior Air Staff Officer
SHAEF	Supreme Headquarters Allied Expeditionary Force
Tac/R	Tactical Reconnaissance
TEWT	Tactical Exercise Without Troops
TNA	The National Archive (PRO, UK)
UK	United Kingdom
USAAF	United States Army Air Force
VCIGS	Vice-Chief of the Imperial General Staff
WDAR	Western Desert Air Force, RAF
WO	War Office
W/T	Wireless Telegraphy
ZOAN	Zone des Operations Aeriennes du Nord

Introduction

Even before the Frenchman Louis Blériot made his auspicious cross-Channel flight on 25 July 1909, in a “heavier-than-air fixed-wing flying machine,” aviation enthusiasts were straining their imaginations in an attempt to harness the aeroplane’s potential for military use. In Europe, roughly from 1909 to the outbreak of war in the summer of 1914, a few military and naval leaders expressed an interest in aeroplanes because of the enhanced possibilities they offered in observation and reconnaissance. Intelligence gathered by friendly aircraft could provide generals and admirals with early warning of enemy intentions. Commanders who availed themselves of the information acquired by aerial reconnaissance would be able to plot their troop or naval movements accordingly and, during the subsequent battle, ongoing aerial observation would enable them to exploit any combat success achieved. Moreover, in enlightened military circles, there was a steadily growing belief that a strategic advantage of this kind would be an important factor in bringing future campaigns to a quick and decisive end.¹

The French Army, in 1910, was the first European army to purchase aircraft. After initial instruction in flying, France’s military pilots trained for reconnaissance missions in support of an army in the field. A year later the experimental flying corps was given official sanction when the Inspectorate of Aeronautical Services was created and placed under the command of General Jacques Rogues. The Germans kept pace with developments in France and created their own Inspector of Aviation Troops. Both armies concentrated on developing a reconnaissance role for aircraft.²

Prior to 1914 air-to-air and air-to-ground combat roles were not part of official air policy in any European army, although practical efforts to make the aeroplane an effective offensive weapon were taking place in a number of

countries. In France, Great Britain, Germany, Italy, and the United States of America a variety of pioneering experiments including the mounting of bombs on aircraft and adapting machine-guns for aerial warfare were undertaken by civilian and military engineers alike. There was no lack of inventive endeavour in stretching the limits of existing technology to improve the offensive capabilities of aircraft. Nevertheless, senior military leaders were content to restrict their interest in military aviation to that of a special scouting role. Whether or not their reluctance to explore a combat role for aircraft was based on ignorance, indifference, prejudice, or a realistic scepticism of the impact that frail wires-and-struts aeroplanes—equipped with primitive forms of explosives and small firearms and lacking radios—could make on a modern battlefield, the day was fast approaching when soldiers and sailors who ignored this new form of war in the air would do so at their peril. The advent of war in the third dimension had come. Between 1911 and 1913 the offensive potential of the aeroplane received its first test in several small wars; a number of foreboding portents were exhibited.³

The first of these wars was the Italo-Turkish War of 1911–1912.⁴ During Italy's campaign to seize Libya in November 1911, an Italian pilot, who had been despatched on an otherwise routine reconnaissance mission, dropped three small bombs on Turkish defensive positions. This act of aerial bombardment had a negative effect on the morale of front-line Turkish troops wholly out of proportion to the damage caused and the threat presented. As a result of this unanticipated success, Italian planes continued to bomb Turkish troops and positions from time to time until the end of the war. Air bombardment of enemy ground forces by aeroplanes also occurred in the Balkan Wars of 1912–1913, and later in Morocco where the French Army used aircraft to support friendly ground troops suppress insurgents. In all of the above cases, the offensive air action taken was random, incidental, and often the result of an individual pilot's initiative. Official procedures or doctrine to guide pilots engaged in air-ground attacks did not exist before the autumn of 1914.⁵

The British Army's interest in military aviation was somewhat slower in developing than that of its continental counterparts. Service aviation had its formal beginning in Britain on 1 April 1911 when the Air Battalion was established within the Royal Engineers. Aeroplanes were to be employed on general reconnaissance and aerial survey work. As such they were not part of the mainstream of British military activity or training, or even included in the Army's general plans for operations of war. In fact, the British Army's senior ranks were not noticeably impressed by military aviation, which General Nicholson, the Chief of the Imperial General Staff (CIGS), regarded as being "largely irrelevant."⁶ It took Italian deployment of aircraft at Tripoli, in their campaign of 1911, to stimulate the British government to take further measures to secure an efficient air service for use in war.⁷

In November 1911, Prime Minister Asquith appointed Lord Haldane to chair a special sub-committee of the Committee of Imperial Defence to investigate and report on the state of military and naval aviation in Great Britain. The committee worked quickly and submitted its report on 28 February 1912. All of its main recommendations were accepted by the government; the most important one being the establishment of a single, unified air service. The committee reasoned that air forces may play an important role in a future war, and that it would be desirable to have a centralised air service so that "... in a purely naval war the whole service should be available for the Navy, while in purely land war the whole should be available for the Army."⁸ The Royal Flying Corps (RFC) was thus conceived. Constituted by Royal Warrant, the RFC came into being on 13 May 1912, with a Military Wing, a Naval Wing, and a Central Flying School. The Admiralty administered the Naval Wing and the War Office was responsible for the rest.⁹

Unfortunately, Britain's fledgling air service was anything but unified. Difficult questions concerning its administration and control gave rise to acute differences between the Admiralty and the War Office. Unable and unwilling to reach a reconcilable division of authority, the two air wings went their own separate ways. When the Royal Navy announced the formation of its own air service in July 1914, officially recognised as the Royal Naval Air Service (RNAS), it merely made public what was already an established fact.¹⁰ From the very beginning, each Service developed its aviation independently and without reference to the other. Both, however, envisaged employing their aircraft almost exclusively on reconnaissance tasks. Each service also stubbornly regarded such missions as a last resort rather than as a routine action during the initial stages of an engagement.¹¹

When war broke out between the major European Powers in August 1914, military aviation still had only one officially recognised function: to serve as "the eyes of the army." Four squadrons of the Royal Flying Corps, virtually its entire effective strength, accompanied the British Expeditionary Force (BEF) when it went to France. RFC aircraft flew reconnaissance missions over the advancing German columns and rear areas, gathering intelligence on troop concentrations and movements and the location of depots, dumps, and railheads, all in an attempt to discover the enemy's main intentions. Reward for their efforts came in the very first week of operations when RFC crews spotted a German Army advancing westward across Northern Belgium. This timely information ultimately enabled the BEF's beleaguered Commander-in-Chief, General Sir John French, to order a retreat from Mons before the city was enveloped behind enemy lines.¹²

The initial weeks of the war also presented aviators from both sides with a vast number of "targets of opportunity." The road network in Northern France and Belgium was severely congested with hundreds of thousands of troops and their artillery and supply trains marching to the front. At first

pilots attacked enemy columns on their own initiative and with whatever weapons they had at their disposal, such as grenades, small bombs, and even personal firearms. The material damage inflicted by early air attacks was minimal but aerial bombardment did have a spectacularly adverse effect on the morale of ground troops. It was a short step from reconnaissance to armed reconnaissance missions and by October the change was official RFC policy. RFC Headquarters issued a memorandum to squadron commanders in the field, stating that

[s]everal instances have occurred lately in which targets suitable for attack have been passed over without any action being taken. In future all aeroplanes carrying out reconnaissances [sic] will carry bombs and whenever . . . suitable targets present themselves they should be attacked by dropping bombs.¹³

Official recognition of this new combat role for aeroplanes came too late to make any real difference either to the course or the outcome of the early land battles on the frontiers. As the front stabilized, and soldiers took cover in an elaborate complex of underground dugouts and trenches, plentiful and undefended targets of opportunity became rare. Trench warfare did not, however, signal an end to combat aviation; rather it provided a fairly static environment in which the various aspects of war in the third dimension developed.

The first two years of the war heralded considerable and unprecedented expansion of specific combat tasks for the aeroplanes that fought over the Western Front. Aircraft employed in their originally conceived roles of reconnaissance and artillery observation soon saw regular service, bombing and strafing enemy troops and positions. Pilots who braved low-level flying reported increased accuracy and enhanced precision in their air attacks on ground targets. It was a new tactic that quickly gained favour at GHQ. Just before the British Army launched its major offensive on the Somme in July 1916, RFC pilots received a directive that made low-flying air attack official policy.¹⁴ But well before this date, and even before the end of 1914, the first bombing units appeared over the front. Throughout the winter months of 1915, individual pilots also experimented with air-to-air fighting.

Although the use of aircraft as a means of waging war had developed with astonishing speed, the military high commands of the warring armies still regarded air operations as being of minimal importance. Commanders in the field had a somewhat different view. They were beginning to recognise the vital benefits of aerial reconnaissance and close air support to their military operations. Consequently they made increasing demands on their superiors to provide more aircraft to perform these essential tasks. Early command and control arrangements also reflected the battlefield commanders' concerns and desires. Aircraft were attached to specific army formations at the front. They were under the direct command of the ground force commander, who

employed them as auxiliary forces in much the same way as he used his artillery. In the British Army one squadron of aircraft was assigned to each army corps. Similar arrangements applied to the French and the German air services.¹⁵

As the work aircraft were doing for their various artillery and infantry units increased, army commanders, understandably, wanted similar air advantages denied to their enemy; hence the rise of the interceptor fighter aircraft. At first, the role of fighters was to shield friendly land forces from enemy air operations. Mounting casualties to aircraft employed on army co-operation missions, namely aerial reconnaissance and artillery observation, led quite naturally to the introduction of "protective patrols." In this capacity fighters were deployed in an altogether new role: escorting observation aircraft to and from the front, and fighting off hostile enemy aircraft. Airmen on both sides were getting their first taste of what would become a long and arduous contest for air superiority.

Air-to-air fighting had the additional effect of stimulating the design and manufacture of more sophisticated fighter aircraft. Each side looked to rapidly advancing aeronautical technology to provide it with a decisive advantage in an escalating air war. Technological improvements in aeroplane performance and weapons systems also compelled air commanders in the field to devise new tactics, such as formation flying and staggered waves of attack, in order to press home offensive air operations in the face of increasing resistance. Pursuit of new air combat techniques as well as an ongoing search for alternative targets, especially for the bombing aircraft, which were increasingly reluctant to test the stronger fighter defences over the enemy's forward positions, served not only to widen the application of aircraft to war but also to expand the battlefield, thereby changing the very nature of war itself. Offensive fighter sweeps were the next stage in the development of air-to-air combat, followed shortly thereafter by independent bombing operations specifically directed at enemy airfields, storage facilities, and aircraft factories. The bombers soon extended their range of targets to include enemy cities and their civilian population. In less than two years airmen had engaged in close air support, direct air support, indirect air support, air superiority work, and independent bombing missions of a strategic nature. By the end of 1916, military aircraft had already performed all of the basic operational roles that would be developed in the years to come.¹⁶

For the airmen, the years 1917 and 1918 were characterised by intense efforts to hone their earlier achievements and to devise new tactical methods for prosecuting the air war more vigorously. Besides the experience they gained through trial and error, they also benefited from a steady production of increasingly sophisticated aircraft, which enhanced capability and accounted for much of the progress made. Technological advancements had the additional effect of stimulating more specialised applications over the battlefield.

In Flanders, during the battles of 1917, both the British and the Germans increased their use of low-flying fighter aircraft in support of ground offensives. On 11 May, at Arras, RFC aircraft were deployed in a co-ordinated operation with ground troops for the first time, strafing German strong points along the front in an attempt to clear a path through the defensive obstacles for the advancing infantry.¹⁷ This was not a joint operation as such but rather an operation of combined arms devised by the army commander and his staff. Airmen had no part in designing the plan of attack. They were assigned their air support tasks and performed them for the advancing infantry in the same way that the artillery was assigned and performed its ancillary duties.¹⁸ By summer's end, this rudimentary form of combined air and infantry assault was a regular feature both in pre-planned offensive operations and counter-attacks. Each successive engagement also brought new discoveries and further refinements in technique.

Casualties to air forces engaged in supporting a ground offensive continued to mount at a frightening pace, prompting a number of tactical changes. Some airmen began to question whether this form of warfare called for its own specialised types of aircraft and techniques. The French, for instance, thought that it did, and were the first to create separate ground-attack or assault aviation squadrons. Their *Division Aérienne* was established strictly for ground support missions. It was a specialty force that moved around the front to support French ground offensives where and when air support was needed. In applying their ground assault squadrons in this manner, the French were the first to put into practice an early form of the "concentration of force" concept in air operations.¹⁹

German close air support techniques were even more advanced. By the spring of 1918, the Germans had perfected their air-ground assault teams, called *Schlachtstaffeln*.²⁰ Each "battle" unit was a specialised formation equipped first with Halberstadt CL.II aircraft and later with either Halberstadt CL.IVs or the all-metal Junker J1 and trained in low-level ground attack. A single battle unit constituted four to six aircraft, and several units, up to a maximum of six, could be grouped together for an attack on a specific target. Battle flights were employed in close formation and only against objectives described as being "of the highest priority" to the success of the ground offensive. Their principal targets included strong points in the enemy's front line (where friendly ground troops were attempting to make a breakthrough), machine-gun positions, artillery batteries, and occasionally rear echelon communication and supply centres.

The Germans aimed to commit their special assault aircraft in sufficient concentration when and where their intervention could be decisive. Under no circumstances were they to be distributed singly over the whole front, or left to find their own roles in the battle as was the case with British close support aircraft.²¹ In a further effort to prevent unnecessary wastage of their aerial shock forces, the German high command published an instruction pamphlet

for infantry division and corps commanders. Entitled "The Employment of Battle Flights," it spelt out the approved tactical doctrine for the new battle formations.²² Close support had become a complicated business.

The German method of providing close air support for an attacking army was ambitious and sophisticated but it was also rigid and wholly dependent on the successful maintenance of the ground offensive's timetable. Close support at the forefront of the battlefield demanded considerable co-ordination between the advancing troops and their supporting aircraft to be effective. In an effort to achieve a high level of co-operation, and to offset limitations imposed by unfamiliar tactical techniques and insufficiently developed communications, the Germans relied on detailed instructions drawn up before the battle began to direct their offensive effort. But the very details, which enhanced the success of the specialised ground-attack squadrons in pre-planned attacks, had an equally negative effect once the offensive broke down. They were also totally ineffective when the army was on the defensive.²³

British policy differed substantially from that of the French and the Germans in that it emphasised flexibility and a more multi-role approach rather than prescriptive operations and the employment of highly specialised squadrons. Whereas French and German techniques were decidedly proactive, as opposed to reactive, British air support methods could be used with a reasonable degree of success in either offensive or defensive ground operations. Instead of employing specialised squadrons for specific tasks, the RFC preferred to use any nearby squadron for the task at hand.²⁴ This approach was possible because British squadrons, for the most part, were equipped with all-purpose aeroplanes rather than with highly specialised aircraft.

Senior RFC officers, and after 1 April 1918,²⁵ Royal Air Force (RAF) commanders, believed that the more squadrons were made interchangeable, the more aircraft there would be to concentrate and apply where and when they were most needed, whatever the task might be. They were encouraged to take this view by Major-General Hugh Trenchard, who made a number of strong pronouncements on the subject. Trenchard's experience as the head of the RFC in France throughout most of the war, and later as the Chief of the Air Staff (CAS), RAF, convinced him that there would never be enough aircraft available to meet every specific assignment. He believed that it was very important, therefore, that air forces avoid the limiting constraints imposed by rigid specialisation. Air forces, he emphasised, must be constructed in a manner that enabled their commanders to concentrate the maximum number of squadrons on whatever task received the highest priority at any given time. In its air support methods as well as all of its other air operations this is what the RAF aimed to do by the summer of 1918. RAF policy rejected specialisation and emphasised speed of response, flexibility of application, and concentration of maximum force at critical times and points in a battle.²⁶

Air power made a valuable contribution to the overall success of the British Army's war-winning campaign during the last hundred days of fighting on the Western Front. When the first major offensive began, just east of Amiens on 8 August 1918, over eight hundred RAF aircraft flew in support of the advancing ground forces. The sheer magnitude of this air operation was inconceivable only a summer or two earlier. It also marked the first operational experiment of more centralised control of air forces. Significantly, airmen were included in the staff at General Headquarters for the specific purpose of organising the maximum air effort possible from the squadrons concentrated for the assault.

Although no real object was laid down for the air action at Amiens, RAF squadrons first concentrated their efforts on winning air superiority over the battlefield. Afterwards they turned their attention *en masse* to a purely ground-attack role in order to "break the crust" for the advancing tanks and infantry.²⁷ Unlike the Germans, who selected specific targets for air-to-ground attack, the British preferred to overwhelm or saturate the enemy's defences with the total weight of their air offensive. The missions flown in support of the ground forces were many and varied. RAF aircraft were employed as a form of "flying artillery," attacking targets at the forefront of the battle and extending their offensive efforts back to the range of the German guns. Air action to isolate the battlefield, or to prevent German reserves from reaching the threatened point in their front, was neither planned nor performed; but the potential benefits to be gained from undertaking such missions were already being contemplated.²⁸

As the final year of the war ran its course, considerable disagreement emerged between soldiers and airmen over the optimum role of aircraft when supporting an army in the field.²⁹ In theory and in practice air support had concentrated on two separate categories of targets: objects along the enemy's heavily defended forward positions, which some generals called "the crust", and a whole range of targets extending twenty miles and more behind that crust. At the war's end many airmen held that the chief role of aircraft was to attack objects further back behind the front. Troops on the march, supply depots and dumps, communication centres and headquarters, were just a few of the examples cited. Targets such as the ones listed above were more visible and much more vulnerable to air attack than front-line troops often well protected in elaborate field fortifications. In addition, there was less danger of confusing enemy troops and positions well behind the lines with friendly ground forces.

The great land and air battles of 1918 also demonstrated the benefits to be had from centralised command and control of air forces. Moreover, more and more airmen openly favoured this approach. Centralised control accorded well with the mobility of air squadrons, and it also accelerated the prospects of a rapid and massive concentration of force at critical times and points in a battle. Decentralisation, when aircraft were sub-allotted to

army formations, was increasingly regarded as wasteful and inefficient, and more often than not it entailed a dispersion of effort on inconsequential objectives.³⁰ The soldiers, not surprisingly, disagreed with the assessment made by their “upstart air force colleagues.” They wanted to retain “their” military support aviation, and they were not inclined to pursue the development of its wider application.³¹

The sudden and unexpected armistice on 11 November 1918, brought the war to a conclusion before an agreed approach for the command and control of air forces had been established. Differences of opinion between soldiers and airmen over centralised command of air forces and the selection of their targets were two of the key problems to be resolved in the years of peace, once the lessons of the war had been analysed and digested. As a general rule airmen tended to see the benefits of centralised control while soldiers focused on its shortcomings. Army officers sought the ultimate in close air support—a ground-attack role in the immediate battle zone—to the exclusion of all other forms of combat aviation. Air force leaders despaired at the short-sightedness shown by their former army colleagues, and they increasingly espoused a yet unwritten doctrine that emphasised a more strategic application centred on air superiority, interdiction, and long-range bombing. The growing divergence of opinion over the proper employment of aircraft in war soon became the central core of bitter debates between the two services. Throughout the interwar years, in a climate of strict economy and great uncertainty over the future role of the armed services, the disputes between the Army and the RAF were conspicuous for their intensity and vehemence.