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The Royal Flying Corps, the Western Front and the Control of the Air, 1914-1918

James Pugh



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By the middle of 1918 the British Army had successfully mastered the concept of ‘all arms’ warfare on the Western Front. This doctrine, integrating infantry, artillery, armoured vehicles and – crucially – air power, was to prove highly effective and formed the basis of major military operations for the next hundred years. Yet, whilst much has been written on the utilisation of ground forces, the air element still tends to be studied in isolation from the army as a whole. In order to move beyond the usual ‘aces and aircraft’ approach, this book explores the conceptual origins of the control of the air and the role of the Royal Flying Corps (RFC) within the British army. In so doing it addresses four key themes. First, it explores and defines the most fundamental air power concept – the control of the air – by examining its conceptual origins before and during the First World War. Second, it moves beyond the popular history of air power during the First World War to reveal the complexity of the topic. Third, it reintegrates the study of air power during the First World War, specifically that of the RFC, into the strategic, operational, organisational and intellectual contexts of the era, as well as embedding the study within the respective scholarly literatures of these contexts. Fourth, the book reinvigorates an entrenched historiography by challenging the usually critical interpretation of the RFC’s approach to the control of the air, providing new perspectives on air power during the First World War. This includes an exploration of the creation of the RAF and its impact on the development of air power concepts.

James Pugh is a Lecturer in Modern History at the University of Birmingham, UK. His research explores Modern British History in the era of the two World Wars. This includes the history of air power during both conflicts, and he has published on air power leadership and doctrine. His latest research explores the history of amphetamines in Britain between 1935 and 1945, which includes articles in the *Journal of Contemporary History* and *War in History*.

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Series editor's preface

On 17 December 1903 Orville and Wilbur Wright made the first controlled and sustained flight of a heavier-than-air aircraft at Kitty Hawk, North Carolina, inaugurating the Age of Aviation. Progress was astonishing. In 1909 a French pilot, Louis Blériot, flew his plane across the English Channel, giving – literally – a new dimension to Edwardian fears of invasion. Military officers, far from dismissing powered flight for fear it would ‘frighten the horses’, were among the first to engage with the new technology. Colonel John Capper, Superintendent of the Royal Balloon Factory, met the Wright Brothers in October 1904 and was favourably impressed. The Aero Club, founded in 1901 to encourage ballooning, embraced the aeroplane in 1908 after demonstrations of powered flight by the Wright brothers in France. In the same year the Asquith government appointed an ‘Advisory Committee for Aeronautics’ to investigate possible military and naval uses of aviation. In 1910 the Aero Club was granted a Royal title and began to issue ‘aviator’s certificates’. It issued thirty-nine certificates in 1910 and 130 in 1911. Military officers from both services and from different branches of the army were prominent among the early aviation pioneers. By the time the British army adopted aviation institutionally with the formation of the Royal Flying Corps (RFC) on 13 April 1912, many men who would be major figures in the history of British military aviation had already qualified as pilots, including Charles Samson (Certificate No. 71), Arthur Longmore (Certificate No. 72), Frederick Sykes (Certificate No. 95), Robert Brooke-Popham (Certificate No. 108), David Henderson (Certificate No. 118), Cyril Newall (Certificate No. 144), William Rhodes-Moorhouse (Certificate No. 147) and Robert Smith-Barry (Certificate No. 161). A Central Flying School was established at Upavon in Wiltshire on 12 May 1912 to provide pilots for the army and navy. In August 1914 the RFC was able to deploy four squadrons with the British Expeditionary Force, where they provided invaluable assistance, especially in reconnaissance. From these modest – though impressive – beginnings, Britain’s air arm grew exponentially during the war, evolving technologically, operationally, tactically and institutionally, eventually securing its independence as the Royal Air Force.

In this innovative, penetrating and impressive study, James Pugh reinvigorates our understanding of the Royal Flying Corps’ development within the wider strategic, intellectual, organisational and cultural contexts of the period. His

work sheds new light not only on the RFC but also on the British army, of which aviation was an integral part for most of the war, and of the close connection that still exists between the concept of 'air power' and the influence of public and political opinion.

John Bourne
University of Wolverhampton
September 2016

Foreword

Control of the air is an almost sacred concept to any aviator, of any age and in any country. It goes far beyond mere rhetoric. It is rather a core fundamental belief. It is easy for personnel in other services to assume that it is a given, or that an air force will provide control of the air at the drop of a hat. If a given level of control is lost, the anguish is all the more painful because the consequences are inevitably severe. Similarly, the general public, the press and the politicians all expect to be safe from the attentions of other air forces or other threats delivered through the third dimension; the events of 9/11 and the preparations for the London Olympics spring to mind as examples.

Control of the air, its principles, theory and its practice had to come from somewhere. They are not issues about which Napoleon, Clausewitz, Sun Tzu or the ancient Greeks were able to bequeath wisdom. The pioneer aviators themselves had to think many of the basics through from first principles. Once they had learned physically how to fly, their thought quickly turned to the military utility of air power and immediately alighted on reconnaissance as a key role for the fledgling capability. Once the benefits of watching the enemy from a very enhanced elevation became obvious, it was equally apparent that an enemy would attempt to deny this advantage and the airspace would become contested. Many previous works take this for granted or skirt around it in a perfunctory manner. In this invaluable contribution to the historiography of air power, Dr James Pugh chronicles with meticulously researched detail how this was done, how the lessons of early trials and manoeuvres were internalised and then how they were translated into teaching, regulations and, ultimately, doctrine. James discusses, at some necessary length, the roles of many of the key individuals, many of whom have been airbrushed from the tale, or have gently disappeared from history under the weight of their illustrious successors whose wartime endeavours have survived in the corporate memory of the Royal Air Force.

In this book James focuses his scrutiny on the Royal Flying Corps and the Western Front during the First World War. It was here that the initial thoughts of individuals like Sykes, Brooke-Popham and Henderson were put into practice in the air and, equally importantly, organisationally. He also charts how this new component of the British Army worked to integrate itself into the greater war effort and in so doing absorbed the culture and ethos of offensive action. This was

inevitably costly in terms of casualties, but as commanders at all levels became increasingly convinced of the necessity for control of the air, the sacrifices on all sides were considered essential contributions to winning the conflict.

Senior commanders, like Trenchard, have been criticised for this offensive mindset, and he has been ‘lumped’ with Haig by some into the donkey category of generalship. The reality was that his approach was the most appropriate and was eventually copied by the Germans with potentially disastrous effect. Part of the learning process showed that total control of the air was just not achievable against a peer opponent. It had to be fought for, renewed on a constant basis and was often achievable only to a partial degree. Air parity limited in time and space was often the best that could be achieved. Given the aircraft technology available at the time, this area of airspace could often be very localised. This, however, was not a popular message for the politicians, the press and the general public during the phases of the war when the United Kingdom homeland was under attack. London had to be defended. Although Haig and Trenchard saw this as a waste of precious resources that would have been better utilised helping to win the war, their complaints over what in a later conflict would be described as ‘panaceas’ fell on deaf ears. James navigates these complex issues with consummate skill.

This work represents an outstanding contribution to the historiography of the First World War and to the wider air power literature. It is essential reading for all air power professionals, practitioners, educators and students.

Dr Peter Gray, Director
Centre for War Studies,
University of Birmingham

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I would also like to offer special thanks to Dr Aimée Fox-Godden, who was kind enough to share her doctoral research and patient enough to survive the ordeal of sharing an office with me for the last year. Mr Adam Sutch, a graduate of Birmingham's MA in Air Power Studies, has become a close friend and confidant over the last three years. We have attended many lectures, museums and archives together and I am extremely grateful for his detailed thoughts on early drafts of this study. I must save my greatest thanks for the ongoing support of Air Commodore (Ret'd) Dr Peter Gray. Peter supervised the thesis upon which this study draws, and I continue to be amazed by his brilliant mind, endless patience and unceasing good humour. His critical insights on early drafts of the study have served only to sharpen and improve its arguments, and I am incredibly appreciative of his constant encouragement; not least in providing a foreword to this volume. Of course, any mistakes of fact or interpretation remain entirely my responsibility.

Lastly, I would like to thank my friends and family. Emma, Mélanie, Peter, Giorgia, Anton, Louis, Chris and Monica have helped and continue to help me grapple with the sacred, complex and interconnected nature of the World. You are all a source of strength, wonder and creativity. My sister Hannah, her husband Ian and my nephew Lennon continue to demonstrate that there is so much more to life than research and I am so grateful for their unflappable support. My parents, Ann and Roger, gave me the best possible start in life, and I am so thankful for all of their efforts in equipping me with the tools and opportunities that have enabled me to follow my long-held ambitions. Finally, to my own family unit: Maia and Rusko. You are the centre of my world. You help keep me grounded, balanced and energised, even in times of great pressure and stress. I hope you will forgive me for the time spent in researching and writing this book. This study is dedicated to you both with all the love that I and the Universe can muster.

Abbreviations

ADM	Admiralty Files, The National Archives
AHB	Air Historical Branch
AIR	Air Ministry Files, The National Archives
BEF	British Expeditionary Force
BL	British Library
CAB	Cabinet Files, The National Archives
CAS	Chief of the Air Staff
CIGS	Chief of the Imperial General Staff
C-in-C	Commander-in-Chief
CID	Committee of Imperial Defence
DDMA	Deputy Director of Military Aeronautics
DAO	Director of Air Organisation
DFO	Director of Flying Operations
DGMA	Director General of Military Aeronautics
DMT	Director of Military Training
GHQ	General Headquarters
GOC	General Officer Commanding
GQG	Grand Quartier Général
HSMO	Her/His Majesty's Stationary Office
IF	Independent Force
JWAC	Joint War Air Committee
<i>JRUSI</i>	<i>Journal of the Royal United Services Institute</i>
<i>FSR</i>	<i>Field Service Regulations</i>
LADA	London Air Defence Area
LHCMA	Liddell Hart Centre for Military Archives, King's College London
MoD	Ministry of Defence
TNA	The National Archives
NAM	Northcliffe Additional Manuscripts, British Library
OC	Officer Commanding
RAF	Royal Air Force
RAFM	Royal Air Force Museum, Hendon
RFC	Royal Flying Corps
RUSI	Royal United Services Institute

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SP	Sykes Papers, Royal Air Force Museum
TP	Trenchard Papers, Royal Air Force Museum
<i>WIA</i>	<i>The War in the Air</i>
WO	War Office Files, The National Archives

1 ‘By attacking and by continuing to attack’

The Royal Flying Corps, the Royal Air Force and the control of the air over the Western Front – an introduction¹

In 1918, the noted Scottish artist Louis Weirter painted *An Incident on the Western Front*; a work of oil on canvas, which depicted a swirling ‘dogfight’ of British and German aircraft. The painting, featuring two British fighting machines diving towards a vanquished German biplane trailing smoke, conveyed the speed, reach and manoeuvrability of aircraft, the technological character of war in the air, the vastness of the skies and the purportedly decisive nature of aerial combat.² It is such imagery, aircraft locked in mortal combat over the trench lines below, which has done much to shape popular perceptions of air power during this era. As Paris lamented, the ‘origins and early years of aerial warfare is a subject frequently ill-served by its historians ... [with] ... the tendency of many writers to focus undue attention on the individual combatant – to dwell at great length on the romantic icons of that first war in the air’.³ Paris’ analysis is supported by Kennett and by Molkentin, both of whom noted the distorting effects of focusing on the so-called ‘aces’; a small minority of fighter pilots who possessed large tallies of aerial victories.⁴ More recent studies of combat motivation, the sociology of pilots and their experience of aerial combat during the conflict, including narratives relating to chivalry and masculinity, have served to challenge and enrich our understanding of air power’s place in the era of the Great War.⁵

However, such analysis continues to draw attention to a ‘knights of the air’ perspective, a phrase popularised by David Lloyd George during the First World War, and scholars of First World War aviation must acknowledge their role in perpetuating these popular narratives.⁶ For example, the thousands of participants on the University of Birmingham’s Massive Open Online Course, ‘World War I: Aviation Comes of Age’, although enjoying a broader engagement with the cultural, social, theoretical and policy related aspects of air power during the conflict, were most interested in discussing fighter aircraft and the famous pilots – Ball, Mannock, McCudden, Rhys-Davids – who flew them.⁷ An interest in the ‘knights of the air’ serves two interconnected purposes: first, it clouds our understanding of the multiplicity of air power roles that developed and were conducted during the First World War. As Biddle argued, ‘virtually every important manifestation of twentieth-century air power was envisioned and worked out in a rudimentary form between 1914 and 1918’.⁸ Second, it ultimately serves to obscure the complex and multifaceted nature of controlling the air during the

2 *'By attacking and by continuing to attack'*

conflict, the contexts and processes that governed its conceptualisation and the significance and evolutionary nature of the policy and practices pursued.

This is not to suggest that historians have not addressed the subject of controlling the air in a scholarly fashion, and there is an acknowledgement that fighting in the air served to enable the activities of friendly air power while denying such freedoms to those of an opposing air force. As Morrow recorded, '[c]ontrol of the airspace over the battlefield became essential to victory in World War I, just as it would twenty years later in the next world war'.⁹ However, in general, three weaknesses exist in the literature: first, insufficient weight is attached to pre-war theorising, doctrine and policy relating to the control of the air; second, there is an unduly negative perception of the approach of the Royal Flying Corps (RFC)/Royal Air Force (RAF) to the control of the air, which does not acknowledge the intellectual, organisational and operational contexts in which air power was utilised over the Western Front nor the developments in the wider revisionist historiography of the First World War; and third, there is a marked level of imprecision in framing, articulating and analysing concepts and practices relating to the control of the air.

Therefore, the study seeks to address four overarching points: first, it reconceptualises British military air power on the Western Front by moving beyond the romantic, heroic, sporting and generally technical narratives that have for too long dominated our understanding of the subject. This is not to dismiss the value of these narratives, both historically and contemporarily, but without adjusting our focus there is a very real danger of underestimating the importance and seriousness of air power and control of the air before and during the conflict.¹⁰ Second, and linked to this point, the study strives to demonstrate the growing significance of controlling the air to the British army, the British government and to the press, the public and politicians in the United Kingdom. By so doing, it illuminates the interconnected nature of air power and its influence over both military and non-military domains. Third, it attempts to rebalance more critical interpretations of RFC/RAF approaches to control of the air. In this regard the primary motivation of the study is not to provide an evaluation of effectiveness, but rather to align the study of control of the air in keeping with recent literature on the development of policies and practices on the Western Front more generally. This involves a close study of language and rhetoric, a feature generally absent from other studies, which illustrates processes of both continuity and change at the heart of RFC/RAF theory, policy and practice. Fourth, the study attaches great significance to the organisational and intellectual values and ethos of the British army, which helped govern both theory and policy in the pre-war period. Aggression, moral superiority and offensive action proved to be the enduring aspects of British policy and practice; values that provided stability and coherence in a conflict of unprecedented size and scale.

Of course, there are a number of excellent studies that offer a close engagement with the theories, policies, practices and experience of the RFC/RAF on the