

CHAPTER 12

HISTORY OF BRITISH AIR POWER DOCTRINE

Adherence to dogma has destroyed more armies and cost more battles than anything in war.

J F C Fuller

Introduction

Doctrine is derived from a combination of history, theory and technology. The rapid change of technology associated with air and space power has been a compelling influence on the development of air power doctrine. Powered flight is still less than a century old, yet air power has had a profound influence on the history of conflict in the twentieth century. The aim of this chapter is to examine the history of air power doctrine to place it in the context of this volume.

The development of air power doctrine can be divided into four phases: the First World War; the inter-war years; the Second World War; and the Cold War and current doctrine.



World War I - BE2C aircraft of 1916.

The Birth of Air Power

Prior to the First World War, there was no air power doctrine and indeed no air strategy. However, because of the perceived offensive potential of air weapons, conferences on international law and disarmament considered banning aerial bombing. These proposals culminated in the signing of annexes to the Hague convention in 1907 which prohibited air attacks on towns, villages, churches and hospitals, even though the technology to do this did not exist. Four years later, technology had advanced to the extent that Italian aircrew fighting against Turkish forces in Libya employed the capabilities of powered flight during bombing, reconnaissance, artillery observation and leaflet dropping missions.



DH2 aircraft of No 29 Sqn.

The First World War

At the beginning of the First World War, Royal Naval Air Service aircraft were used to bomb Zeppelin sheds, whilst very soon afterwards these Zeppelins were engaged in bombing missions against British cities. Control of the air missions developed as a method of each side preventing the other from using its air vehicles freely or to allow friendly forces to attack ground targets without interference. Fighter and attack aircraft became an important element of force structures. Consequently, the need for control of the air and the use of aircraft as attack weapons for offensive operations were the two doctrinal concepts that emerged from the First World War.

The emphasis on offensive operations was not restricted to counter-air operations. As a direct consequence of the attack on London by German Gotha bombers in June and July of 1917, a strategic bombing unit, the Independent Force, was established in France and, in less than a year, the Royal Air Force was created as an independent service. By the end of the First World War almost every role performed by air vehicles in the Gulf War had emerged. Roles such as close air support, transport, reconnaissance, communications, interdiction, artillery spotting, re-supply and rescue, albeit in a primitive form, contributed to the ground campaign. Some of these roles were repeated in support of the maritime campaign together with anti-submarine warfare, convoy escort, search and rescue, maritime attack and minefield survey missions¹. Military aviation had entered the experience of only a very few, but had touched the imagination of many.

The Inter-war Period

The inter-war years saw further advances in the utility of aircraft and the development of long distance feats of navigation pioneered by popular figures such as Charles Lindbergh, Amy Johnson and Amelia Earhart. Aviation enjoyed a period of high profile and glamour, not only from the publicity given to epic flights, but also because of the publication of the works of Trenchard, Douhet and Mitchell, who prophesied immense changes in the way we plan to conduct warfare. These military thinkers are now regarded as the 'classical' theorists of air power.

These three major contributors to air power doctrine and their contemporaries raised many complex and contentious issues. Amongst these visionary thoughts was the belief that the offensive nature of air power, through the medium of bomber aircraft, would dominate future wars and alone could decide the outcome. Trenchard supported the concept of 'air control', or 'air method'. His concept of 'substitution' called for the replacement of land and sea forces by air power, which, he maintained, could do the same job at less cost. This concept fitted the straitened economic circumstances of the time and was used extensively in the inter-war years during periods of 'colonial policing' in the Middle East and on the north-west frontier of India.

Douhet and Mitchell were both advocates of the offensive qualities of air power. Douhet's book, *The Command of the Air*, expressed the concept of strategic bombing forcefully and broadened the accepted definition of the 'battlefield'. He argued that because of the characteristics of aircraft and their predicted ability to create fear and panic among civilian populations, aerial bombardment should be aimed against population centres and national infrastructure targets. Douhet also advocated the use of high explosives, incendiary and chemical weapons. Mitchell shared with Douhet an overriding faith in the dominance of air power through offensive action. Mitchell also

¹ *Raleigh and Jones, The War in the Air, Vol VI, p.329-396.*

believed that the technical superiority of air vehicles would improve compared to other weapons systems and that civilian morale was fragile. In the maritime environment, the First Provisional Air Brigade, commanded by Mitchell, demonstrated his theories in 1921 by bombing and sinking a German battleship, the *Ostfriesland*, which had been captured at the end of the war. From then on, surface ships operating without air cover were perceived to be at risk. Douhet's theories continued to have a strong influence on the development of theories and doctrine in the United States Air Corps and, by 1933, Douhet's book 'became the strategic bible of the Air Corps'².



Marshal of the Royal Air Force The Viscount Trenchard visits Germany in June 1950.

The Royal Air Force issued its first doctrine publication in July 1922, only 4 years after the formation of the Service. CD-22, the Operations Manual, was based to a large extent on the ideas that Trenchard had been expounding since 1917. He believed that air forces should cooperate with land forces to achieve the destruction of enemy main forces, which was usually the primary aim of a campaign based on the theories of Clausewitz. Other issues that the document emphasized were the importance of morale and of air superiority. CD-22 was superseded as the official doctrine manual in July 1928 by AP 1300, The Royal Air Force War Manual.

² *Claire Lee Chennault, Way of a Fighter, Putnam's New York, 1949, p.20.*

AP 1300 highlighted that air power was inherently an offensive weapon and that it would serve as part of a joint force in which all the services worked together towards the Government's intended aim. It also reiterated that the most effective use of air power was to defeat the enemy's army and that air superiority was crucial to military success.

During the inter-war years, the theories of the classic air power thinkers were put into practice with varying degrees of success in China by the Japanese, in Ethiopia by the Italians and in Spain, at Guernica, by the German Condor Legion fighting with Spanish forces during the Spanish Civil War. Although these attacks had strategic effect, they could not really be regarded as fully developed strategic bombing offensives. Indeed, the results from each campaign were inconclusive with regard to the contemporary claims being made for air power. Nonetheless, many air power exponents continued to claim 'the bomber will always get through'.

The Royal Air Force continued with the development of an offensive capability through the medium of bomber aircraft, whilst fighter aircraft were intended for short-range home defence. Inside the Service, the development of air power theory was carried forward by, among others, then Wing Commander, later Marshal of the Royal Air Force, Sir John Slessor. His work, *Air Power and Armies*, was based on lectures he delivered whilst an instructor at the Army Staff College at Camberley in the 1930s. His logical arguments were based on history, a recognized ingredient of doctrine today. He emphasised the need for a joint campaign, with air power being used to give protection to surface forces. His work discussed in detail the need for air superiority and air intelligence. He argued that air power should not just be used as a tactical weapon but should concentrate on the disruption, destruction and neutralization of enemy armaments and supplies. The volume, although influential, was not reflected in the RAF strategic doctrine of the day.

Towards the end of the 1930s there were several developments which influenced, to a greater or lesser extent, the development of air power doctrine. First, fighter aircraft were developed which were faster, more manoeuvrable and better armed than previous machines. These would make unescorted bombers much more vulnerable, challenging the notion that 'the bomber will always get through'. Secondly, although bombers had much success during the colonial policing period, British aircraft lacked navigation aids, any form of precision bombing capability and the ability to operate in all weathers. Thirdly, the Luftwaffe, using the experience which they had gained in Spain, developed methods for joint planning, air-ground communications and recognition devices which were crucial to effective close air support for ground operations, methods which were integral to the Blitzkrieg doctrine.

The Second World War

For the RAF, a new edition of AP 1300 was published just after the outbreak of the Second World War. This new publication again stressed the importance of national will and offensive action and it increased the emphasis placed on both the active and passive components of air defence. It suggested that a sense of war weariness could be instilled in a population by disrupting their normal lives through bombing enemy industrial and economic infrastructure such as public utilities, food and fuel supplies, transport and communications networks. However, as the war progressed, following the fall of France



Loading 12000 lb bomb onto the mighty Lancaster

and the campaigns in North Africa and Italy, doctrine and theories for joint operations and cooperation with sea and land forces were developed which culminated in the success of the Normandy campaign, joint operations in Europe and the end of the war. But the doctrine had to change - in some cases dramatically - to reflect real war experience.

Air power and air warfare matured during the Second World War. The requirement for a degree of control of the air was universally recognized. Although controversy surrounded the bombing campaigns against Germany and Japan for many years, there is no doubt that, at all levels, air power had been influential in shaping the outcome of global war. The impact of the war upon air power doctrine was profound. AP 1300 was extensively revised to cater for Second World War experience but, above all, air power appeared as the ultimate arbiter in military operations since, should nuclear war break out, atomic bombs would be dropped by manned bombers.



Typhoon line up - France 1945.

The Cold War

Following the Second World War, air power theory and doctrine were highly influenced by the change which nuclear weapons brought to warfare and the concept of deterrence. The UK continued with a distinct programme to develop nuclear weapons and the development of the RAF V-Force consumed a great deal of resources and undoubtedly had a great influence on RAF doctrine. In addition, the RAF retained a deep global commitment in the retreat from Empire which required the active exploitation and application of air power all over the world. The scale and range of operations varied, but the level of commitments required the RAF to be proficient in every role and mission of air power. On the international front, the Royal Air Force was committed to NATO operations and the Service took a leading role in the development of NATO air doctrine.



The term V-Force originated from the names of the bombers - Valiant, Victor, Vulcan - and was first used by the then Chief of Air Staff, Air Chief Marshal Sir John Slessor, in 1952. This is a Vulcan B1 at RAF Waddington.



Victor B2 with Blue Steel missile.

As defences against aircraft flying at high and medium altitude improved, the RAF became a low-level tactical air force tailored for high intensity operations in Europe against Warsaw Pact forces. This change of focus had a profound impact upon RAF doctrine. As NATO's strategy of 'flexible response' cascaded to influence tactical air doctrine, this strategic shift was accompanied by RAF withdrawal from the Far East and Middle East. As a result, AP 1300, which had last been issued in 1964, was withdrawn in the early 1970s, to be supplanted completely by NATO doctrine.

Since the Cold War

The need for commanders, planners, aircrews and airmen to understand the characteristics and fundamental tenets for the employment of air power were recognized and AP 3000, Air Power Doctrine, was first published in 1990. A second edition, designed to reflect the strategic changes wrought by the end of the Cold War and the Gulf War, was published in 1993. This third edition goes further and attempts to define the core capabilities of British air power into the next century. It reflects the changes in the strategic environment and how we might address these changes in concert with the other British services, friends and allies, multinationally or in coalition. Doctrine should never be static; doctrine which is rigidly interpreted runs the risk of becoming dogmatic. This doctrine, therefore, should be viewed as another step in the process of understanding the exploitation of the potential of air power across the spectrum of conflict.



Valiant - the first aircraft of the V-Force.



Vulcan B2 aircraft - RAF Scampton 1961