“The Bomber Will Always Get Through”: The Evolution of British Air Policy and Doctrine, 1914-1940

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This thesis titled
“The Bomber Will Always Get Through”: The Evolution of British Air Policy and
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ABSTRACT

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“The Bomber Will Always Get Through”: The Evolution of British Air Policy and Doctrine, 1914-1940

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The historiography of British grand strategy in the interwar years overlooks the importance air power had in determining Britain’s interwar strategy. Rather than acknowledging the newly developed third dimension of warfare, most historians attempt to place air power in the traditional debate between a Continental commitment and a strong navy. By examining the development of the Royal Air Force in the interwar years, this thesis will show that air power was extremely influential in developing Britain’s grand strategy. Moreover, this thesis will study the Royal Air Force’s reliance on strategic bombing to consider any legal or moral issues. Finally, this thesis will explore British air defenses in the 1930s as well as the first major air battle in World War II, the Battle of Britain, to see if the Royal Air Force’s almost uncompromising faith in strategic bombing was warranted.

Approved: _____________________________________________________________

Peter John Brobst

Associate Professor of History
To my family.
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INTRODUCTION

Everybody, everywhere, will be perpetually and constantly looking up, with a sense of loss and insecurity, with a vague stress of painful anticipations...no apparatus or camp shelter will any longer be safe.

--- Herbert George Wells, 1901

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The common historical debate concerning British grand strategy in the interwar years focuses on the question of national security. More specifically, the debate is over which branch of the armed service held the monopoly on security – the army or the navy. These arguments are derived from two different schools of strategic thought. The first school, based on the writings of Alfred Thayer Mahan and Sir Julian Corbett, is classified as ‘Blue-Water’ theory. ‘Blue-Water’ theorists argue that naval strength was the key to Britain’s strategic success starting with the defeat of the Spanish Armada in 1588. By expanding and strengthening the power of her Empire through the acquisition of key positions, the prowess of the Royal Navy grew. “Naval strength,” as argued by Mahan, “involves, unquestionably, the possession of strategic points, but its greatest constituent is the mobile navy.” With a mobile navy as well as strategic bases spread around the world, Great Britain was able to attain command of the world’s sea-lanes, thus projecting military and political influence throughout the world. The second school, described as Continentalist theory, developed their beliefs from the writings of Carl von Clausewitz. Continentalists “denied that Britain alone, even when she had a powerful navy and army,

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could expect to defeat a continental great power, or even safeguard her own security.\textsuperscript{3}

There had to be a balance of power on the Continent. It was through Britain’s acceptance of one or more continental ally acting in a coalition military force, not the solitary strength of the Royal Navy, that Britain was able to dominate the world in the late nineteenth and into the twentieth centuries.

Countless influential works have been published regarding these strategic questions. But what historians fail to consider is the introduction of one important type of warfare during the twentieth century – air power. The emerging technology and developments of air war theory during the interwar period forever changed Britain’s traditional grand strategy. These aspects enhanced Britain’s grand strategy and added a new dimension to the traditional binary strategy of war.

Officials in the interwar years did regard the potential influence of the emerging field of aerial warfare on grand strategy; there was a widespread belief that Great Britain was no longer an island. In fact, many believed Stanley Baldwin’s statement that “the bomber will always get through.”\textsuperscript{4} Most historians of British grand strategy in early twentieth century only concentrate on the hierarchy of strategy between naval and landed warfare; instead, historians such as Basil Henry Liddell Hart and Michael Howard, try to fit air power into the two predetermined categories rather than acknowledging the changing effects of air power. These historians need to include this new type of warfare into their studies of grand strategy in order to fully comprehend the decisions made by British strategists and military planners throughout World War II.


The strategic debate started with the publication of Sir Basil Henry Liddell Hart’s influential work, *The British Way in Warfare*. Writing in the 1930s and having fought in World War I, Liddell Hart was greatly influenced by the failure of trench warfare on the Western Front. Throughout *The British Way in Warfare*, Liddell Hart adamantly argues that while the allies won the war, there still were strategic lessons to be learned so as not to repeat the errors of World War I. The most important lesson, Liddell Hart postulates, is that in 1914 British military planners failed to rely solely on “[t]he historic British practice” of naval warfare, but instead opted to focus their resources on a large, stagnant military force on the continent. "Once British military planners decided to alter their traditional practice and allowed their policy and strategy to be tied to that of their French ally, the war lasted longer and expended more lives than necessary."

This theory of a historic practice to warfare developed through Liddell Hart’s study of previous wars, from the attack of the Spanish Armada in 1588 to the French Revolutionary Wars from 1783-1802. What his study demonstrates is that the British way in warfare encompasses more than just a strong navy advancing the political might of the British Empire. A strong Royal Navy also enables the British to exert economic pressure upon their enemies. Liddell Hart theorizes that the navy has “‘two arms; one financial, which embrace[s] the subsidizing and military provisioning of allies; the other military, which embrace[s] sea-borne expeditions against the enemy’s vulnerable

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extremities.” This indirect approach, engaging the enemy without committing a large landed force in heated battle, is what Liddell Hart believes to be the key to British success. By his historical assessment, “continental military expeditions had played only a minor role in British policy,” and are therefore a subsidiary part of Britain’s grand strategy.

According to Liddell Hart, the problem in 1914 is that British planners did not truly commit to the indirect approach. While the navy did blockade German ports in the North Sea, they failed to take it far enough. Liddell Hart asserts that

[i]n the last war the conditions of industrial civilization had made [Britain’s] enemy more susceptible to economic pressure than in the past. And because of [Britain’s] geography her navy was better able to supply [that pressure]. Yet for the first time in [British] history, [British strategists] made it a subsidiary weapon, and grasped the glittering sword of Continental manufacture.

History has proven that the British could defeat their enemy by disrupting that nation’s economy. Yet, instead of playing to that advantage, the British gambled on the Continent and got bogged down in a war of attrition.

Liddell Hart develops that one further lesson to learn from World War I is that stagnation equals death. A large army cannot move as quickly as a battle fleet, and therefore can get bogged down in battle. The proof was in the entrenched pudding; many devastating years were wasted in World War I fighting over the ‘no-man’s land’ in France and Belgium while neither side ever really gained the advantage. To be successful in the next war, preaches Liddell Hart, the British must be able to maintain a mobile, or

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9 French, British Way in Warfare, xv.
10 Liddell Hart, The British Way in Warfare, 32.
fluid, force. Additionally, he believes that the British must employ the element of surprise. It is useless for a military force to be able to quickly move about if their enemy suspects their movement and is waiting to attack them.

Many in the government agreed with Liddell Hart’s assessment. Consequently, the “strategic doctrine … developed in [the interwar years] was deeply affected … by opinions about the conduct of” World War I.\textsuperscript{11} After the World Wars, however, historians began to question Liddell Hart’s historic way in warfare. Did history accurately show that the British relied only on their naval strength, or was there more to the equation?

Historian Michael Howard published the first major critique of Liddell Hart’s assessment with his monograph \textit{The Continental Commitment: The Dilemma of British Defence Policy in the Era of the Two World Wars}. Originally delivered as a series of lectures in 1971, Howard follows and analyzes Britain’s defense policy from 1900 to 1942. While he claims that he did “not set out to prove any particular thesis,” a thesis does emerge from his analysis questioning Liddell Hart’s proposed historic way in warfare.\textsuperscript{12}

Howard’s controversial argument suggests that there was not a traditional British way in warfare, \textit{per se}. His original belief is that British strategists and military planners did not base British strategic efforts on naval mastery over that of a Continental commitment. For Howard, history has proven “that British security demanded that the balance of power in Europe should not be destroyed,” which would possibly enable an

\textsuperscript{12} Michael Howard, \textit{The Continental Commitment: The Dilemma of British Defence Policy in the Era of the Two World Wars}. (London: Maurice Temple Smith Ltd., 1972), 7.}
enemy to invade into the Low Countries. Ever since Philip II of Spain launched his Armada from the Spanish Netherlands in 1588, Britons have been fearful of an enemy gaining control of that territory. With access to the Low Countries, an enemy would only have a short jaunt across the English Channel to invade the home island. By maintaining the balance of power, the British ensured that the French army would protect the Low Countries, and therefore the British Isles, from invasion. In return for protection on the Continent, the British would provide their allies with naval and economic protection. And when war did break out, the British would patrol the seas, asserting their naval strength, while sending a small Expeditionary Force to the Continent to fight.

What happened in World War I, and subsequently World War II, was that the growth of German Power proved to be too much for the British and French alliance to handle. Howard insists that the threat of an enlarged German strength compelled the British to amass a much larger force on the Continent in order to maintain the balance of power. Therefore the lesson to learn from both World Wars is not to shy away from a Continental commitment, but to embrace it.

Howard does admit in his preface that time restraints kept him from a more detailed analysis into British grand strategy. Three years later, however, Howard was able to build upon his thesis with further research in another critique entitled *The British Way in Warfare: A Reappraisal*. Upon further study, Howard determines “[i]f there was indeed a ‘British way in warfare’ it was the outcome of a continuous dialectic between

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[the] maritime school and their ‘Continental’ opponents.” It was not how the British fought in battle, but that British planners argued over strategy. He further negates Liddell Hart’s thesis by arguing that while sea power was essential in “colonial conquest, trade war, help to allies in Central Europe, [and] minor amphibious operations,” in non-limited wars, reliance on sea-power was over shadowed by that of landed operations.

Historically, during non-limited warfare, British reliance on a maritime strategy was done so only as a last resort; true British strength came from an allied army on the Continent.

Furthermore, Howard argues against Liddell Hart’s faith in the indirect approach. Upon supplementary research, Howard deduces that when the British did use the elements of mobility and surprise, it “had resulted over the centuries in an almost unbroken record of expensive and humiliating failures,” rather than the successes promised by Liddell Hart. He uses the writings of Carl von Clausewitz to strengthen his argument. He cites Clausewitz’ conclusion that “[i]t would be a mistake to believe that surprise is a key element of success in war. In theory it is very promisin...” While Liddell Hart’s argument for mobility and surprise seemed to work on paper, it fell flat when acted upon.

Just as Howard predicted in the preface to The Continental Commitment, his thesis sparked continuous debate on the subject of Britain’s grand strategy.

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is one such historian who promotes and cultivates Howard’s ‘Continentalist’ argument. In his monograph, *British Military Policy between the Two World Wars*, Bond’s research corroborates that after World War I, the British needed to commit to a Continental army. He adds that preparedness and mobilization were the true lessons to take from World War I, however. In Bond’s assessment, Liddell Hart’s call for a return to maritime warfare was too popular amongst strategists. Military planners in the interwar period had to choose to increase funding to either the army or the navy.\(^{22}\) Due to Liddell Hart’s persuasive argument, they chose the latter. Bond argues that because of the lean towards the navy, “the Army was allowed to degenerate in the 1920s to the extent that by 1933 it was incapable of providing in reasonable time an Expeditionary Force equipped to meet even a second-class opponent outside Europe.”\(^{23}\) Unfortunately, the British failed to learn their lesson. Bond believes that instead of focusing on building up the Royal Navy, Parliament should have allocated the funds towards maintaining and advancing the strength of the British Army.

Throughout *British Military Policy between the Two World Wars*, Bond argues that British military planners unsuccessfully detected the many accumulating signs of an evident war with Germany. The culmination of the build up of German power, the Munich agreement in 1938, should have been the turning point for the British, but once again they missed the signs. Instead of Neville Chamberlain promising “peace for our time,” he should have mobilized the Army for a fight against the Germans.\(^{24}\)

\(^{22}\) After 1918, the addition of the independent Royal Air Force increased this fight for funding.  
distinguishes “that the Government’s reluctant move towards accepting a continental commitment in the months after Munich was not a revolution in strategy but merely a belated recognition of geographical and political realities.”

Rather than evolving from a failed Continental strategy in 1914 to successful maritime build up in the 1920s and 1930s, British strategists refused to open their eyes to what was happening on the Continent. A strong army, not a piece of paper, was the only thing that could stop Adolf Hitler from achieving Lebensraum.

Historian Paul Kennedy, in his monograph *The Rise and Fall of British Naval Mastery*, builds upon the Eurasian Heartland thesis of geopolitician Halford Mackinder to develop his ‘Continentalist’ argument. Kennedy’s scholarship is a comprehensive study of Great Britain’s naval strength from about 1588 until after World War II. Kennedy acknowledges that from about 1879 to 1905,

> [a] combination of genuine belief, political tactics and a regard for economy ensured that the existing ideas of what Liddell Hart later termed ‘the British way of warfare’ – naval actions and blockade, seizure of colonies, peripheral attacks on the continent – were to be preferred in any future conflict with a European enemy.

Accordingly, there was a balance of power on the Continent which allowed the British to focus on this maritime strategy versus that of a Continental commitment. Once again, it is argued that the British could not maintain their maritime offensive and defensive strategies without relative peace on the Continent through a balancing of powers.

The year 1904 marked a geopolitical turning point for the British, however. It was the year that geopolitician Halford Mackinder read his now famous “paper to the Royal

Geographical Society entitled ‘The Geographical Pivot of History.’ In it Mackinder argued that with the introduction of the internal combustion engine and the steam locomotive, it became easier and cheaper to ship goods over land instead of by sea. The era of British naval mastery was quickly approaching its end. Having control of the world’s sea lanes was no longer important. In fact, along with this move towards rail transportation, Mackinder saw a geopolitical shift towards the Eurasian Heartland. Whichever country could gain control of the Heartland would be the next great power. Mackinder feared that Britain’s long standing enemy, Imperial, and eventually Communist, Russia, would gain control of the Heartland. But there was another up-and-coming contender on the European stage that was strategically placed to make a grab for the Eurasian Heartland – Imperial Germany. In order to check the rising power of Imperial Germany, and to keep them from making a grab at the Heartland, Kennedy contends British strategists felt a need to strengthen the balance of power on the Continent.

Once it became apparent that Britain would have to go to war against a belligerent Germany, both in World War I and II, the planned strategic role for the Royal Navy “was to keep open the sea routes to Britain from the outside world… This was a quite vital function…yet basically it remained a negative, defensive contribution.” While it was important for the British to keep their trade routes open to enable the influx of foodstuffs

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27 Kennedy, British Naval Mastery, 183.
28 The Eurasian Heartland consists of most of Modern day Russia.
30 Kennedy, British Naval Mastery, 302.
and war goods from allied and neutral countries, Kennedy sees this action as a defensive rather than the offensive strategies performed by the Royal Navy in the past. For Kennedy, “[t]he value of seapower was a major asset for British foreign policy until…[this] geopolitical shift occurred.”

Historian Corelli Barnett, another ardent ‘Contenentalist’ considers how Britain’s financial woes affected Britain’s grand strategy his monograph, *The Collapse of British Power*. Barnett’s thesis focuses on how the refusal of Britain’s strategists to learn the lessons of World War I, led to confusion as to the defense of Britain. Barnett considers that this confusion developed because there had arisen in British history the blue water ‘myth’, ‘that small bodies of British troops fighting limited campaigns in distant theatres against detachments of a continental enemy isolated by the Royal Navy have a disproportionately large effect on a war; much larger than direct intervention in a continental campaign’.

For Barnett, the true British way in warfare was that of a sole Continental commitment. Barnett insists that “the obvious lesson of the Great War [was] that the security of France and the Low Countries [and subsequently the British Isles,] depended on there being a powerful British army on the Western Front.” Because influential thinkers, like Liddell Hart, were perpetuating the myth, the British refused to learn this lesson and continued to shrink back from committing a large force to the Continent. Instead, they relied on the strength of the French army for protection on the Continent.

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In his article published in *The Historical Review* entitled “The British Way in Warfare Revisited,” Hew Strachan addresses the traditional historiography of British strategy. His study focuses on the influence of four primary authors – Michael Howard, Paul Kennedy, John Terraine, and Corelli Barnett – to see if their ‘Continentalist’ assessment rings true. For Strachan, the ‘Continentalist’ theory had become too extreme; they relied too much on the importance of the British Army and disregard the value of the Royal Navy. He believes “that the choice between the maritime and the continental strategies is, in historical terms, a false one. In practice, the two have been blended.”³⁵ For Strachan, history has shown that it was never an either or question, but that each force had to adapt to the other. He further argues that no military strategist believed that “Britain’s military position could rest on the navy alone. Command of the sea was conceived in defensive terms: the navy was the bar to invasion, the army…‘the spear to strike.”³⁶

Why then was there a shift in the interwar years towards a more maritime grand strategy? For Strachan, what dictated British policy during the interwar years was not a decision to favor one military branch over the other, but Britain’s economy. During World War I, it became apparent to strategists that any further “large scale rearmament required for European war would have caused…economic collapse.”³⁷ Therefore, military planners and politicians were doing there best in the 1920s and 1930s to keep Britain afloat while projecting some semblance of protection. Unfortunately, by 1942-43

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it was clear that they were right; Britain’s economy had collapsed and British power was in decline.\footnote{Strachan, “The British Way in Warfare Revisited,” 458.}

Historian David French, on the other hand, believes that historically the British \textit{did} choose one military force over the other. In his monograph \textit{The British Way in Warfare 1688-2000}, French sets about to reexamine the traditional strategic debate of Britain. As the title suggests, this book is an expansive study of British policy and strategy in various war and peacetime situations since 1688, and projected into the new Millennium. Unlike traditional military histories, French does not just focus on battles and the strategies and tactics practiced during war, but instead he also examines the “way in which Parliament voted to divide the money it was willing to spend on defence from between sea services and land services.”\footnote{French, \textit{The British Way in Warfare}, xvii.}

By studying which service policy makers chose to fund, one can determine where their strategic priorities lie. For example, if Parliament stood by Liddell Hart’s theory, then “the Royal Navy should have continued to absorb the lion’s share of the defence spending [while t]he army should have remained a Cinderella service.”\footnote{French, \textit{The British Way in Warfare}, xvii.} The Royal Navy would have been able to build up its fleet with the newest maritime technologies, while the Army was used as a glorified police force at home and within the colonies. If the ‘Continentalists’ were correct, then Parliament should have used the Royal Navy to transport “some troops to occupy the enemy’s colonies or to raid his coast and they may have spent some funds subsidizing European partners,” while the bulk of the funding was used to advance and send “the largest possible landforce to Europe to operate in
conjunction with their allies.”\textsuperscript{41} Therefore the army would be prepared to defeat any potential threat to the balance of power.

From his research, French concludes that the British switched between both theories. In the late nineteenth century, for example, “the British opted for a ‘blue water’ solution to the problem of how to defend their empire at reasonable coast.”\textsuperscript{42} For French, World War I marked a turning point in British strategy. He finds that

the commitment of the bulk of the army to the western front by 1916 was the death-knell of a ‘blue water’ defence policy and, together with the ratio of spending on land and sea services, it marked the clearest acceptance ever by the British of a continental commitment and rejection of the ‘British way in warfare.’\textsuperscript{43}

But, British planners did not focus only on the Continental force, however. Once it became clear that they would have to fight a second war against a growing German power, the British decided to focus more on a land force, “although [they] continued to place a considerable reliance on economic blockade.”\textsuperscript{44} Military planners still chose to utilize Britain’s naval strength even though the rise of the Third Reich foreshadowed that the outcome of the next war would be decided on land. It was this acceptance of a mixing of strategies that enabled the British to hold out until the Soviets and Americans entered the war in 1941.

The emergence of aircraft forever changed how wars were fought; nature no longer provided sufficient protection via natural barriers. Due to the advent of this new technology at the beginning of the twentieth century, Britain was “no longer [considered]

\textsuperscript{41} French, \textit{The British Way in Warfare}, xvii.
\textsuperscript{42} French, \textit{The British Way in Warfare}, 174.
\textsuperscript{43} French, \textit{The British Way in Warfare}, 174.
\textsuperscript{44} French, \textit{The British Way in Warfare}, 201.
the island that [it was] a generation ago. [The populace could now] be starved out by a blockaded power and invaded by a power which [did] not possess a single warship."

Contemporaries from all over the world, such as Gulio Douhet, William “Billy” Mitchell, and Hugh Trenchard, saw the possibilities air power offered. In a treatise predicting how air power would change the next war, Douhet wrote that

[a] nation which has command of the air is in a position to protect its own territory from enemy aerial attack and even to put a halt to the enemy’s auxiliary actions in support of his land and sea operations, leaving him powerless to do much of anything. Such offensive actions can cut off an opponent’s army and navy from their bases of operations, but can also bomb the interior of the enemy’s country so devastatingly that the physical and moral resistance of the people would collapse.

With this change to warfare, strategy had to adapt, and it did. The previously discussed historiography overlooks the strategic importance of aircraft, however. Liddell Hart, Howard, Bond, etc. acknowledge the emergence of air power, but they try to fit it into their particular ‘British way of warfare.’ For example, Liddell Hart saw air power fitting nicely into his indirect approach. While a few historians have studied how air power changed strategy, e.g. Eugene Emme, more need to do so.

In an article, “Technical Change and Western Military Thought – 1914-1945,” published in 1960, Eugene Emme suggests that technology did in fact change military thought and strategy. He argues that “[w]hen rapid technical change came into the art of warfare, historical experience began to decline as a reliable teacher of military strategy,

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45 Fuller, “British Strategy,” 297.
doctrine and tactics.47 He continues to show how new technologies, including air power, changed British grand strategy. Unfortunately, his thesis was overlooked once Howard’s Continentalist theory came into play; later scholarship reversed back to discussing the conventional types of warfare.

Recent scholarship, however, has once again downplayed the importance of air power on British grand strategy. In doing so, historians fail to take into account the prevailing thoughts of the time; they rely too much on the advantage of hindsight and failed to look at grand strategy through the eyes of someone living in the 1920s or 1930s. Strategists and civilians alike believed in, and feared, the threat of a catastrophic air attack. By trying to place interwar strategy into either an army or navy category, historians ignore this fear altogether. It is the aim of this thesis to show that the emergence of air warfare did alter British grand strategy throughout the interwar years; that in fact, the third dimension allotted by the airplane made it necessary for countries to develop a new kind of grand strategy.

The first chapter will examine the development of air theory in Great Britain during World War I, correlating with the development and expansion of the Royal Air Force. The influences of the German Zeppelin and Gotha bomber raids during World War I, as well as the perceived success of Air Control in the early 1920s, convinced Air Ministry and Royal Air Force officials to develop a strategy focusing on the strength of the bomber. They believed that if a country could bomb and destroy its enemy’s industrial and military capacity, then they could win the war without having to fight on

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land. Moreover, there was no way of protecting against a bomber attack, nor could a country survive such a devastating attack. It was soon determined that the best defense was a good offense; that a country needed to build up their air force with a large bomber force in order to preemptively attack ones enemy. Additionally, this chapter will look at the development of air strategy in two of Britain’s fellow countries – the United States and Germany – to determine why the Royal Air Force developed differently than its international counterparts.

The second chapter will study alternative questions to the strategic bombardment debate, such as the legal and moral aspects of aerial bombardment. Due to the destruction of World War I, many throughout the world wanted to cap the devastation of war. One way of doing so was to regulate the emergent ideas of warfare, i.e. set up rules banning the use airplanes. In spite of various attempts to codify different rules and regulations of air warfare, there was no concrete law once war broke out in 1939. By studying the life and career of lawyer and Air Ministry official James Molony Spaight, this chapter will analyze the various attempts towards codification in the early twentieth century.

Additionally, many saw air war and strategic bombing to be a more humane type of warfare than sending out armies to fight over a barren no-man’s land. While strategic bombardment would breed casualties, after the first destructive blow, the war would be over; eliminating the high casualty rates seen in World War I. Attacks of this nature would bring about the deaths of civilians as well as those of members of the military, however. Many viewed this theory to be appalling – civilian casualties did not warrant the idea of a quick, decisive victory. By studying the works of Bishop George Bell and
pacifist Vera Brittain, this chapter will analyze the various moral arguments against strategic bombing.

The British Government’s legal and moral justifications of their strategic bombing policies will also be discussed throughout. Air Ministry and Royal Air Force officials argued against the critics of strategic bombing, stating that they would only attack military targets, such as munitions factories. And while innocent women and children were not targeted, those civilians who worked in the munitions factories were seen to be belligerents and therefore legitimate targets.

Finally, chapter three will explore Britain’s defenses leading up to the Battle of Britain, July 1940 to September 1940 (after mid September, the engagement is commonly referred to as the Blitz). For the first part of the interwar years, the British government focused its efforts on trying to prevent and outlaw future wars through various pacts and treaties, such as the League of Nations, the Locarno treaties, and the Kellog-Briand Pact. Diplomacy offered an inexpensive and publicly acceptable alternative to large-scale rearmament. Many believe that these measures would detract aggressors and therefore national armies, navies, and air forces were no longer needed. Unfortunately, aggressive attacks by the Japanese, Italian, and German armies showed the weakness and the ineffectiveness of the League of Nations and diplomacy.

By the mid 1930s, the increased threat of the German Luftwaffe and the failure of the various diplomatic measures, convinced the British Government that war was inevitable. Thus, Parliament approved various Royal Air Force rearmament schemes. Instead of building up a large bomber force, the Air Ministry focused on amassing
Britain’s aerial defenses. By building up a strong Fighter Command as well as developing the Chain Home System, the British were able to survive the onslaught by the German bombers in the summer and fall of 1940. The Battle of Britain once and for all disproves Baldwin’s theory that “the bomber will always get through.”
CHAPTER 1: WAR IN THE THIRD DIMENSION: THE DEVELOPMENT OF BRITISH AIR STRATEGY DURING THE INTERWAR YEARS

Already, and manifestly so, the surface of political waters is being disturbed by this ascendency of Air Power. Warfare in the third dimension, with all its compelling power of offence, has unroofed the world, which lies exposed beneath it as bare and vulnerable as if the chicken-coop were removed from a sitting hen.

--- Lionel Evelyn Oswald Charlton, 1938

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At the outbreak of war in 1914, the airplane was still in its infancy, having been in use for only eleven years. For those nations who had aerial capabilities, the airplane was not viewed as a strategic weapon, but rather as a tactical implement to obtain intelligence. By the end of World War I, however, the use of airplanes had evolved to include both bombing and air-to-air fighting capabilities. While all noted the importance of the airplane, the British were the only belligerents to end the war with an independent air force – the Royal Air Force, created in April 1918. Along with changes to the British armed services, the end of the war brought about changes to Britain’s economic policy. Because the war had cost much more than anyone had expected, the British government borrowed money from another nation for the first time in over a century. Thus, by the signing of the Armistice on 11 November 1918, the British economy was in shambles. The economic strain felt by the British government led Parliament to search for a less expensive way to defend against future attack. They decided upon the newly discovered third dimension of war – the air. Government officials “came to see bomber aircraft as a means of fighting wars at relatively low cost to themselves, avoiding a repetition of the

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harrowing experience of the 1914-18 war." The government’s new reliance on the Royal Air Force created tension between it and the two traditional armed services as they vied for a shrinking military budget. The Army and the Royal Navy tried to squash the infant air force, yet both services were unsuccessful.

Two major occurrences during World War I and the early 1920s compelled Parliament to favor the Royal Air Force over the two traditional armed services. The German Zeppelin and Gotha bomber raids during the war had brought the enemy to the Home Islands for the first time since the Norman Conquest in 1066. The British no longer felt their insular sense of security, which had been strengthened for centuries by the preponderance of the Royal Navy. The Gotha bomber raids had shown the potential destruction caused by an attack on the enemy’s capital and vital cities. Consequently, the government, relying on the findings of the Smuts Committee – a committee assembled to study the effectiveness of British air power in World War I – believed that a catastrophic strike on an enemy’s cities could bring about a quick and inexpensive victory. This belief in the capabilities of the bomber became so ingrained in the minds of the British, that in 1932 former and future Prime Minister Stanley Baldwin, speaking in the House of Commons, exclaimed that “[t]he bomber will always get through.” Finally, the pre-war influence of Chief of the Air Hugh Trenchard, and the purported success of air control in Britain’s Middle Eastern holdings, helped to strengthened Britain’s reliance on strategic bombardment. With the dropping of only a few bombs, the Royal Air Force stopped

tribal uprisings and maintained stability in the region. Additionally, it cost much less to bomb a few tribal villages here and there than sustaining a standing army in the region. These experiences aided in developing Britain’s apocalyptic outlook on war and their subsequent interwar strategy.

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During the first few years of World War I, there was little harmonization in the air. Each of the armed services had their own air branch to direct aerial operations as needed – the Army had the Royal Flying Corps (RFC), whereas the Royal Navy had the Royal Naval Air Service (RNAS). At the outbreak of the war, RFC planes “attached to the British Expeditionary Force were used exclusively for reconnaissance, but with the emergence of trench warfare their duties were extended to include, among other things, photography, artillery spotting and patrolling.” As the war progressed, the RFC started relying on “offensive elements of air co-operation [such as] air fighting.” The RNAS, conversely, was “focused on fleet reconnaissance and patrol of the coastlines in the hunt for submarines and ships,” and eventually used bomber planes for small, offensive bombing raids against coastal Germany. From the beginning, there was often competition between the two services over the allocation of men, money, and material.

By the winter of 1915-1916 substantial losses of airplanes by the RFC in France resulted in further competition for aircraft, which increased the tensions between the two

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services. While the British were losing aircraft at a considerable rate, “[t]he…aircraft industry was not expanding enough to supply both services, with the result that each service was not only competing with the other for resources, but also looking to a bemused government to settle their individual claims to preferment.”

Furthermore, the German air ship, or Zeppelin attacks on the Home Islands created tension between the two services and between the British public. Historian Sydney Wise, in his article “The Royal Air Force and the Origins of Strategic Bombing,” references that throughout the country

[t]here were many signs of fear and demoralization: factory workers downed tools and many stayed away from their shops for several days following a raid. There were a number of incidents in which uniformed members of the [RFC] were mobbed in the streets, apparently because the RFC had been ineffectual in its efforts to come to grips with the airships.

The people of Britain also focused their anger at the government. Public outcry erupted over the incompetence of the government and their ability to successfully administer the air effort. It seemed to the public that the government was unable to control the military services, and they were therefore unable protect the people of Great Britain.

To bring to an end to the tension between the RFC and the RNAS, and to placate public opinion, Parliament decided to create an institution to regulate the production and distribution of aircraft throughout the armed services as well as organize air missions.

After one failed attempt and a change in government, Parliament created the Cowdray
Air Board in February 1917.\textsuperscript{57} The Cowdray Air Board was “responsible for approving programmes of [airplane] construction and for allocating the available supply between the [RNAs] and the [RFC],” but in reality, its creation did little to soothe the resource competition between the two air services.\textsuperscript{58} Additionally, the Cowdray Air Board was unable to fully administer air missions; its members were “‘free to discuss matters of policy in relation to the air and to make recommendations to the Admiralty’” and to the Army, yet the two services seldom accepted these recommendations.\textsuperscript{59}

Despite the air board’s growing pains, it has been argued that “[t]he winter of 1915-16 witnessed the real beginning of the movement for reform, which culminated in the creation of the Air Ministry and the Royal Air Force in 1918.”\textsuperscript{60} The next monumental step occurred in the aftermath of the German Gotha bomber raids on 13 June and 07 July 1917. Unlike the Zeppelins, the Gothas attacked during the day. In fact, upon first glance, many believed that the airplanes were British.\textsuperscript{61} The Gotha bombers, however, were “larger than any aeroplane [the British] had ever seen before.”\textsuperscript{62} They were the stereotypical World War I biplane, but with a “long slender fuselage [which] stretched for over forty feet, and ended with a high monoplane-type tail. The longer upper wing measured nearly seventy-eight feet, a span greater than that of any German aircraft sent against England in World War II.”\textsuperscript{63} In his description of the Gotha attacks in his

\begin{itemize}
\item \textsuperscript{57} J. M. Spaight, \textit{The Beginnings of Organised Air Power} (London: Longmans, Green and Co. Ltd., 1927), 97.
\item \textsuperscript{58} Spaight, \textit{Beginnings of Organised Air Power}, 110-111.
\item \textsuperscript{59} Spaight, \textit{Beginnings of Organised Air Power}, 116.
\item \textsuperscript{60} Spaight, \textit{Beginnings of Organised Air Power}, 56.
\item \textsuperscript{62} Fredette, \textit{The Sky on Fire}, 38.
\item \textsuperscript{63} Fredette, \textit{The Sky on Fire}, 38-39.
\end{itemize}
In relation to the casualties on the Western Front up to this point, those from the
Gotha Raids were insignificant; less than 1,000 civilians were killed or injured in the two
raids compared to the thousands of soldiers killed daily in the trenches along the Western
Front.\textsuperscript{65} As Fredette explains, “[t]he compelling thing was not the number killed and
injured, but that this could happen at all, suddenly and unexpected, far away from the
trenches.”\textsuperscript{66} In contrast to the French and the Germans citizens, Britons felt a sense of
separation from the war – the average citizen did not have to deal with the daily death
and destruction on the Western Front. Many believed that event “[t]hough the war was
raging just across the Channel, there seemed to be little reason for concern… Zeppelins
had prowled over [England] before… [Yet, m]ost of their bombs had fallen in open
country or off shore. Only one death had been reported.”\textsuperscript{67} With the Gotha raids,
however, the Germans terrifyingly brought the war home to London. As a result of the
raids, panic-stricken civilians stayed home from work, refrained from carrying out their
daily activities, and fled the city. In his multivolume study of the air war during World
War I \textit{The War in the Air}, H. A. Jones argues that

‘[o]fficial figures…for some raids show that when an attack was in progress,
seventy-five per cent. of munition workers in areas warned of the attack ceased

\textsuperscript{64} Fredette, \textit{The Sky on Fire}, 21.
\textsuperscript{65} Cooper, “Blueprint for Confusion,” 440.
\textsuperscript{66} Fredette, \textit{The Sky on Fire}, 66.
\textsuperscript{67} Fredette, \textit{The Sky on Fire}, 17.
work, and that the output continued to be restricted for about twenty-four hours after the raid had ceased.68

More often than not, however, the German attacks angered the citizens of London. In their “description of the [June] raid, subtitled ‘No Warning of Midday Attack,’ [the Times] pointed out that the German attack had ‘made London quiver, not with fear, but with sorrow and anger.’”69 In order to appease their mounting anger, the British people called upon the military to make retaliatory attacks upon the German populace – the small raids performed by the RNAS were not sufficient enough.70

In response to the public outcry, the War Cabinet formed a committee, consisting of Prime Minister David Lloyd George and the South African Member of the Imperial War Cabinet, General Jan Christian Smuts, to analyze the British air effort in July 1917.71 While Lloyd George was the nominal head of the committee, he was unable to participate; therefore Smuts is often considered to be the true head of the committee that now bears his name.72 Through their findings, the Smuts Committee alleged that air power would have a significant effect on the outcome of the war. The Committee even prophesized that

the day may not be far off when aerial operations with their devastation of enemy lands and destruction of industrial and populous centres on a vast scale may

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become the principal operations of war, to which the older forms of military and naval operations may become secondary and subordinate.\textsuperscript{73}

Unfortunately, up to this point, the British had failed to properly grasp the potential of the airplane. The judgments of the Smuts Committee would go on to influence Britain’s aerial organization and operations for the rest of the war and into the interwar years.

In one report, which would later be called the ‘Magna Carta’ of British Air Power, the Smuts Committee determined “that [the British] should not only secure air predominance, but secure it on a very large scale; and having secured it in this war [they] should make every effort and sacrifice to maintain it for the future.”\textsuperscript{74} For Smuts, only through command of the skies could the British win the war. They way to achieve command of the air, they argued, was through strategic bombing raids behind enemy lines. By attacking targets that limited an enemy’s ability to wage war, such as munitions factories, one could ground the enemy’s air force and control the skies.\textsuperscript{75} Furthermore, maintenance of air supremacy would not only allow the British to ensure peace after the war, but it would give them the upper hand in any future conflict(s).

The Smuts Committee determined that the military’s organization of aerial operations hindered the British war effort. In order to secure air predominance, they laid out a litany of recommendations, two of which stand out as the most important. The first, recommended

\[\text{that an Air Ministry be instituted as soon as possible, consisting of a Minister with a consultative Board on the lines of the Army Council or Admiralty Board,}\]

\textsuperscript{74} The Smuts Committee, “‘Magna Carta’ of British Air Power,” 37.
\textsuperscript{75} Neville Jones, The Beginnings of Strategic Air Power, xi.
on which the several departmental activities will be represented. This Ministry [should] control and administer all matters in connexion with aerial warfare of all kinds...\textsuperscript{76}

In other words, the Smuts Committee concluded that the existing advisory practices of the Cowdray Air Board led to the failures of the RFC and the RNAS. Only through an Air Ministry in charge of all aerial operations, would the British air effort become successful. Furthermore, the Smuts committee recommended “[t]hat the Air Ministry and Staff proceed to work out the arrangements necessary for the amalgamation of the Royal Naval Air Service and Royal Flying Corps...”\textsuperscript{77} Not only was it important for a single Air Ministry to determine aerial strategy on land and over sea, it was also important to have a single, independent air force to carry out these missions. Sydney Wise, explains that the principle behind

Smuts’ advocacy of an independent air force was his belief that the air had added a new dimension to war which the British, because of organizational confusion, had not yet adequately exploited. The major weakness was the failure to develop an air offensive against the German homeland.\textsuperscript{78}

The attacks on German cities, led by the new independent air force, would not only allow the British to gain command of the air, but also bring the war to a speedy end.

Parliament agreed with the Smuts Committee’s assessment, and by the beginning of 1918, they had enacted the Air Force (Constitution) Bill, which established an Air Ministry and planned for the creation of the first independent air force.\textsuperscript{79} Not everyone in Britain approved of the Bill, however. Members of both the Army and the Royal Navy vehemently opposed the formation of an independent air force. Neither of the services,

\textsuperscript{76} The Smuts Committee, “‘Magna Carta’ of British Air Power,” 36.
\textsuperscript{77} The Smuts Committee, “‘Magna Carta’ of British Air Power,” 36.
\textsuperscript{79} Dyndal, Trenchard and Slessor, 14-15.
especially the Royal Navy, wanted to give up their control of aerial operations. Furthermore, the competition for men, money, and machinery would only increase once there was a new service vying for resources. These issues would continue to fester throughout the interwar years.

Brigadier-General Hugh Trenchard, commander of the RFC in France, was one leader who argued against the creation of an independent air force. Trenchard started his military career with the Royal Scots Fusiliers before joining the RFC upon its creation in 1912. Once World War I broke out in August 1914, he took a rear command position in Farnborough, Hampshire, but moved to the front after becoming an operational commander that November. In August 1915, Trenchard ascended to head of RFC forces in France and was accordingly promoted to brigadier-general. As head of the RFC France, Trenchard worked intimately with Commander-in-Chief of British Forces General Sir Douglas Haig and his armies. Trenchard greatly admired General Haig and vice versa. Haig would later declare that World War I “had produced only two new things of importance: ‘barbed wire and Trenchard.’”

Having worked closely with army leaders throughout the war, he believed that creation of a force to act independently of military objectives threatened the Army’s offensive strategy in the West. The main principle of the Army’s offensive doctrine stressed “constant and relentless [attacks] which [would carry] the fight to the enemy and

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[force] him on the defensive.” The unfortunate conditions on the Western Front did not allow for such offensive action, however. The advent of air power allowed the Army to maintain constant attacks against the enemy even though the landed troops were bogged down in the trenches. Therefore, Trenchard, along with many of his military colleagues, such as General Haig, “regarded the [RFC] as an integral part of the Army and opposed the use of aircraft other than in direct co-operation with the land forces.”

Additionally, Trenchard, aware of the blossoming competition for resources between the RFC and the RNAS, believed, “that every available aircraft should be committed to the battle on the Western Front. This was a corollary of the prevailing military view that the war could only be won on this front and that any diversion of strength to other theatres merely weakened the power of the attack in the vital sector.”

An independent air force, tasked with reprisal attacks on German cities, would pull a significant number of aircraft away from the front, which further weakened the offensive capabilities of the British Expeditionary Force in France. Despite the opposition from the traditional forces, Parliament retained the plan for an independent air force set forth in the Air Force (Constitution Bill), and the Royal Air Force (RAF) was born on 01 April 1918.

Historian Malcolm Cooper, in his article “The Blueprint for Confusion: The Administrative Background to the Formation of the Royal Air Force,” argues that in the beginning, the RAF was really only independent in name. He states that “[r]ight up to the Armistice, the RAF remained overwhelmingly committed to the support of the army on the Western Front, functioning as the RFC before it as a tactical ancillary of the service.

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83 Neville Jones, *Beginnings of Strategic Air Power*, xv.
84 Neville Jones, *Origins of Strategic Bombing*, 16-17.
from which predecessor. The similarities between the RFC and the early RAF were not coincidental. With the merging of the two air branches, the commanding officers in the RFC and the RNAS became the commanding officers in the RAF. The RFC, having been the larger air branch, fostered more of the new service’s leaders. Loyalty to one’s mother service was difficult to break, however, and due to the majority of Army born leaders, the RAF continued to be an auxiliary to the Army.\(^{86}\)

Unlike his RFC colleagues who remained in the field, Hugh Trenchard started his stint with the new Air Ministry behind a desk. In January 1918, the newly appointed Air Minister, Lord Rothermere, selected Trenchard to be the first Chief of Air Staff (CAS).\(^{87}\) Personality clashes prevented the two men from working together and a few months after his appointment, Trenchard, followed by Rothermere a month later, resigned from the Air Staff. Upon his resignation, Trenchard had asked to be returned to the Army, but, as fate would have it, his work for the RAF was just beginning.\(^{88}\) In mid-June, Rothermere’s replacement Sir William Weir, appointed Trenchard as General-Officer-Commander (GOC) of a Brigade of the RAF called the Independent Force.\(^{89}\) The Air Ministry created the Independent Force to carry out the strategic bombing raids on Germany’s war industry described by the Smuts Committee. While the Independent Force “was intended

\(^{86}\) Cooper, “Blueprint for Confusion,” 447.
\(^{87}\) Jordan, “The Battle for the Skies,” 82.
\(^{89}\) The use of the term Independent Force comes from Neville Jones’ book *Origins of Strategic Bombing*, 18. This division of the RAF has also been referred to as the Independent Bombing Force (Harry Howe Ransom, “The Politics of Air Power: A Comparative Essay,” *Public Policy* 8 (1958): 95) and the Independent Air Force (David Jordan “The Battle for the Skies” 84). In order to stem confusion, throughout this paper, this division will be referred to using Jones’ term.
to operate completely independent of Haig’s armies,” Trenchard, as GOC, did all that he could to continue supporting the Army in France.\textsuperscript{90}

For the remainder of the war, “Trenchard’s first priority was to ‘obliterate’ the German Chemical industry; not until it had been ‘completely crippled’ was he to turn to steel and other industrial targets.”\textsuperscript{91} Instead, Trenchard “paid little heed to [the] directives [of the Air Ministry] and constantly employed his force against tactical targets, such as railways and aerodromes, in support of the land campaign,” rather than the industrial targets.\textsuperscript{92} Every so often, Trenchard did plan an attack on a strategic target. His choice of target greatly varied from those of the air ministry, however. As an alternative to industrial targets, he strongly believed that the attacks should be directed against the industrial cities themselves, with the object of breaking the morale of the civilian population. He based his reasoning in the premise that the morale of the civilian population was the most vulnerable element in a nation at war, and believed that if massive air attacks were launched against these centres of population, causing heavy casualties and destroying homes and disrupting public services, the war-will of the people could be broken and the government forced to sue for peace.\textsuperscript{93}

The perceived interruption to civilian life after the Zeppelin and Gotha Raids had strongly influenced Trenchard’s viewpoint.\textsuperscript{94} Before the Independent Force could achieve any decisive victories, however, the war ended and post-war demobilization led to its dissolution.

For some, Trenchard appears to be contradictory at best. In a matter of two years, Trenchard rebuts his own views – in 1917 he strongly opposed the formation of an

\textsuperscript{90} Fredette, The Sky on Fire, 221.
\textsuperscript{92} Neville Jones, The Beginnings of Strategic Air Power, xix.
\textsuperscript{93} Neville Jones, The Beginnings of Strategic Air Power, xix.
\textsuperscript{94} Meilinger, “Trenchard, Slessor, and Royal Air Force Doctrine Before World War II,” 46.
independent air force while in 1919 he advocated its continued existence. Histories writing about the RAF’s development during World War I frequently add to this confusion. They often “forget” or try to explain away Trenchard’s early opposition to the strategic bombing of German industry and the RAF. Instead, Hugh Trenchard is more commonly known today as one of the great prophets of strategic bombing and/or as the “Father of the Royal Air Force.”

Some historians, such as Eric Ash and Robin Higham, believe that Trenchard should not be called the “Father of the Royal Air Force.” For example, Lord Beaverbrook, former Minister of Aircraft Production, wrote in 1956 that Trenchard “‘was a father who tried to strangle the infant at birth though he got credit for the grown man.’”95 Instead they believe that the title should go to Sir Frederick Sykes. Sykes started his military career as an imperial yeomanry scouts trooper during the Boer War before joining the regular army in 1901. He learned how to fly in 1911, earning the 96th pilots certificate in Britain. In 1912, he became commander of the military wing of the RFC. In November 1914, Sykes was promoted to commander of the RFC in France. Trenchard, just promoted to an operational commander in France was subordinate to Sykes. From the beginning of their interaction in the RFC, Trenchard and Sykes did not get along. After Trenchard’s resignation from the position of CAS in 1918, Sykes was given the position. After the war, many in the government, especially newly appointed Air Minister Winston Churchill, viewed Sykes’s vision for the RAF as too grandiose; he wanted to build up a

force too large for the post-war economy to allow. Churchill therefore removed Sykes, putting him in charge of civil aviation, and replaced him with Trenchard who would fashion the RAF “as an economical auxiliary for police work in the less civilized parts of the Empire.”

Historian Eric Ash argues that “[t]he ‘Trenchard school’ has dominated the story of early British air power, while Sykes has been labeled both insignificant and a ‘scheming intriguer,’ driven by personal ambition to maneuver his way into positions of leadership. [In actuality.] Sykes’ influence in the air war was [quite] significant.” For example, from the very beginning, Sykes argued that “the Air Force should be treated as an independent Service.” Moreover, it was Sykes who, in 1914 newspaper articles, developed the ideas that Trenchard eventually adopted. Historian Robin Higham, in his monograph The Military Intellectuals in Britain: 1918-1939, explains that Sykes was quoted as foreseeing a struggle for mastery in the air in the future and that bombing would have psychological implications for a whole nation, which might well be brought to its knees by a much smaller force than that traditionally employed.

Furthermore, Higham argues that immediately after World War I, Sykes developed a scheme for the peacetime RAF, which put forth the idea that “it may be possible to deal

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99 Sykes, From Many Angles, 3.
a paralyzing blow at some vital nerve centre.’ This was a theme that was to be…adopted by Trenchard and the Royal Air Force.”

The orthodox view of RAF development, or ‘the Trenchard school,’ argues that Trenchard’s strong belief in the offensive inevitably grew into his post-war strategic bombing doctrine. For example, Historian David Jordan, in his biographical article “The Battle for the Skies: Sir Hugh Trenchard as Commander of the Royal Flying Corps,” claims that “[s]trategic bombardment was a logical progression of the offensive that Trenchard so valued, but without the means to bomb properly, he chose to co-operate with the army.” While he did argue against the formation of the RAF, Trenchard was not opposed to the theory behind the force. Rather “[h]e pointed out that the new service would be another competitor for resources…” For Jordan, Trenchard decided to favor cooperation with the British Expeditionary Force due to inadequate technology and a shortage of aircraft, not an inherent attachment to the army.

Moreover, the resistance Trenchard had to the creation of the Independent Force stemmed from a similar organizational perspective, not an operational one. Once again, the impending threat of competition over resources affected Trenchard’s line of reasoning. For an offensive air attack to work, Trenchard argued, the enemy had to be under constant bombardment. If a commander separated the forces, subsequently reducing the strength of each force, he would minimize the effectiveness of the barrage. Instead of the division of forces, Trenchard “would rather have seen the RAF and the [Independent Force] operating under one command…and employed where the need was

101 Higham, The Military Intellectuals in Britain, 159.
greatest.”\textsuperscript{104} Thus, the solitary commander of the RAF could send in a concentrated air strike, either to aid the British Expeditionary Force in the field or to raid German cities as needed.

What the orthodox historians habitually fail to consider is that Trenchard’s strategic bombing doctrine, which he continued to develop in the interwar years, is different than what the Smuts Committee called for in 1917. Later strategic bombing doctrine called for attacks on moral and economic tactics rather than primarily industrial ones. In his monographs \textit{The Beginnings of Strategic Air Power: A History of the British Bomber Force 1923-1939} and \textit{The Origins of Strategic Bombing: A Study of British Air Strategic Thought and Practice upto 1918}, Neville Jones is one historian who argues against this traditional view of Trenchard’s policies. While he does agree that Trenchard favored the offensive, he argues that it did not inevitably lead to his bombing policies later on. In fact, Jones believes that “in spite of his involvement with the [RAF and the] Independent Force he had in no way abandoned his opposition to strategic bombing” of targets aimed at the enemy’s ability to wage war.\textsuperscript{105}

Trenchard’s advocacy for cooperation with the Army was evident throughout his time with the Air Ministry and Independent Force. Major Fredette argues that the reason Trenchard accepted the position of CAS in 1917 was to prevent Rothermere from mucking up the war effort – Trenchard strongly believed “that ‘the expansion of the air service’ should not ‘jeopardise the whole of the Western Front.’”\textsuperscript{106} Sydney Wise argues that from the beginning, “Trenchard’s position [on air warfare] was straightforward. He

\textsuperscript{104} Jordan, “The Battle for the Skies,” 85.
\textsuperscript{105} Neville Jones, \textit{Beginnings of Strategic Air Power}, 21.
\textsuperscript{106} Boyle, \textit{Trenchard}, 254, quoted in Fredette, \textit{The Sky on Fire}, 201.
continued to believe, as his…conduct of bombing operations [demonstrated], that the first priority of air power was to serve the army."¹⁰⁷ Historian Tami Davis Biddle, in her book *Rhetoric and Reality In Air Warfare: The Evolution of British and American Ideas about Strategic Bombing, 1914-1945*, adds that the reason why Trenchard even agreed to head the Independent Force was because he was a pragmatist, and “he probably felt that he was the best man for the job: it would give him an opportunity, at least, to prevent too much harm from being done.”¹⁰⁸ Rather than ally himself with the strategic bombing doctrine espoused by the Air Ministry, he headed the force to make sure that the war was still won on the Western Front. Subsequently, by returning as CAS after the war, Trenchard could shape the interwar RAF into the force he envisioned.

Unfortunately for Trenchard, the future of the RAF remained unclear once the fighting ceased. Members of both the Army and the Royal Navy “thought of the [RAF] as [nothing] more than a wartime expedient, and they confidently expected that the Air Ministry, like the Ministry of Munitions, would disappear.”¹⁰⁹ On top of that, both services “had little doubt that they would be allowed to divide British air power between them, and re-establish the Royal Flying Corps and the Royal Naval Air Service, in fact, if not in name.”¹¹⁰ The call for the dissolution was not just in the military. In fact, “[b]y January 1921…many civilian officials and politicians, including the Prime Minister, David Lloyd George, seriously flirted with the idea of abolishing the RAF.”¹¹¹

Further complicating the matter was the combination of an appalling post-war economy and general war weariness amongst the British people. The sizable cost of the protracted war of attrition caused the British coffers to quickly dry up.\textsuperscript{112} Rather than bow out of the fray, the British government decided to borrow money from the United States. By the end of the war, the British government was broke and in debt. The government could no longer afford to maintain a large military, nor did the British people want one. A majority of the British touted World War I, or the Great War, as the “war to end all wars;” many believed that in the future, war would be obsolete. Parliament therefore decided to stop military spending and precipitated a rapid demobilization of the armed forces, amplified by the Ten Year Rule of 1919. This rule stated that “[i]t should be assumed for framing revised estimates, that the British Empire will not be engaged in any great war during the next ten years, and that no Expeditionary Force is required for this purpose.”\textsuperscript{113} For example, “[i]n a matter of months, the Aircraft Disposal Company Limited, formed under government authority, had disposed of material amounting to £5.7 million, including over 10,000 aircraft and 30,000 engines.”\textsuperscript{114}

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For the most part, Britain’s neighbors in Europe and across the Atlantic also subscribed to the belief that the Great War had been the last war. Thus, “[i]t seemed reasonable for [many] governments, following the undeniable wishes of their people, to


\textsuperscript{114} Longoria, \textit{A Historical View of Air Policing Doctrine}, 8.
turn their backs on fighting and to concentrate on domestic matters and the pursuit of peace.” As a result, throughout the 1920s and into the 1930s, the British attached themselves to a multitude of international organizations, treaties, pacts, and disarmament conferences aimed at reducing the possibility for any future wars. Politicians subsequently argued that any future international discrepancies could be solved diplomatically rather than militarily. While the general population in Britain was on board with the government’s decision to restrict war, the majority of military leaders were not. Each service now had to compete for a portion of an already decimated martial budget, from a government whose prevailing belief was that the armed services were unnecessary.

The proponents of the Army and the Royal Navy tried to convince Parliament that the protection of the Empire rested with the traditional forces either via a continental commitment or command of the seas. It was difficult for Trenchard, reinstated as CAS in February 1919, to counteract these arguments. Both the Royal Navy and the Army were considered to be prominent defensive institutions in peace and wartime, while the infant RAF had no history to fall back on. Trenchard knew that in order for the RAF to remain an independent service, he had to find a peacetime role for the RAF. Fortunately for Trenchard and the RAF, Imperial obligations at the beginning of the interwar period promised to upset the pre-war status quo.

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The Treaty of Versailles had granted the British Empire control of the majority of the Middle Eastern territory from the disassembled Ottoman-Turkish Empire, but it had done little to ensure peace in the region. In only two years after the cessation of fighting, the British were once again facing military intervention. The growth of Nationalism in the Middle East led to an influx of tribal rebellions, especially in Mesopotamia (modern day Iraq). In order to stop these rebellions, “a British garrison would cost £25 million per year,” much more than the British could afford to spend.\footnote{Philip Anthony Towle, \textit{Pilots and Rebels: The Use of Aircraft in Unconventional Warfare 1918-1988} (London: Brassey’s, UK, 1989), 15.} In addition, the Army, already engaged elsewhere throughout the Empire, could not spare the manpower needed to suppress the rebels. The government was desperate to find a less costly way to put down these insurrections, and Trenchard offered them such a strategy. Trenchard argued that by using his newly developed strategy of air control instead of military occupation, the RAF would be able to put down the rebellions at a fraction of the cost. Winston Churchill, the post war Minister of War and the Air, decided to accept Trenchard’s offer. In doing so, Churchill granted the RAF a unique opportunity to prove itself capable of playing a cheap and efficient peacekeeping role in Iraq. If successful, it [would] consolidate [the RAF’s] claim to equal treatment with the [Royal N]avy and [A]rmy, and thereby help to ensure its own future as a permanent and independent branch of the British armed forces.\footnote{Jafna L. Cox, “A Splendid Training Ground: The Importance to the Royal Air Force of its Role in Iraq, 1919-32,” \textit{Journal of Imperial and Commonwealth History} 13, no. 2 (1985): 136}

Trenchard previously developed his strategy of air control to combat the continued threat of Mohammed bin Abdullah Hassan, a.k.a. the Mad Mullah. The Mullah had been wreaking havoc on British Somaliland since the late nineteenth century. After
years of insurrection, the Colonial Secretary, Lord Milner, finally turned to Trenchard for help in May 1919. Trenchard opted to use an early form of strategic bombing to neutralize the Mullah and his forces. The swiftness afforded to air operations meant that “[r]etribution for misdeeds could fall from the skies within twelve to twenty-four hours of the act. In military terms, this allowed an almost immediate response to challenges to government authority...” More importantly, it worked; by bombing the Mullah’s strongholds, the RAF forced the Mullah’s men out of hiding as Somaliland Field Forces stood waiting to capture the fleeing horde. It took the RAF three weeks and cost the government £77,000 to accomplish what the Army could not complete in twenty years.

Trenchard altered his strategy after Churchill agreed to use air control in Mesopotamia. Instead of bombing insurgent strongholds, the RAF would bomb the problem tribe’s village. Because of the potential harm to civilians, however, the British would first drop leaflets warning of the impending raid. The RAF used bombs to force compliance, not to kill. Rather, “[t]he ideal was to secure submission as quickly as possible without a single human casualty on either side...” In his autobiography The Central Blue, Trenchard protégé and future Air Marshal John Slessor mentions that “[t]he aeroplane and the bomb enabled [the British] for the first time to enforce submission upon people without killing them.”

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122 Towle, Pilots and Rebels, 20.
124 John Slessor, The Central Blue, 54.
Despite its novel application, Trenchard’s use of aircraft to bomb tribal villages until they surrendered resembled a more traditional British strategy – that of the Royal Navy. Historian Noble Frankland, in his monograph *The Bombing Offensive against Germany: Outlines and Perspectives*, argues that “[t]he idea of strategic bombing had a close historical parallel with the ancient weapon of naval blockade.” Traditionally, the Royal Navy would attack the livelihood of the enemy’s civilians by blockading enemy ports, which prevented the import of much-needed foodstuffs and other resources. Slessor, explains that, like the naval blockade of German ports during World War I, air control was designed to force [the offending tribe] to abandon their grazing grounds, wells or villages; …to prevent the watering of cattle or camels, or at least make it difficult or arduous; to prevent ploughing or harvesting or any form of cultivation of crops; …to force the tribe to scatter itself and its flocks over cold uplands, to hide in caves or billet themselves and their flocks as unwelcome guests on the inhabitants of neighbouring villages; …and to go on doing all these things until they got so fed up with the hardship and inconvenience involved that they decided that submission to [the offered] terms was the lesser evil.

In Mesopotamia, the rebels submitted to the lesser evil. Churchill’s gamble had paid off. In fact, Trenchard’s policy proved to be so successful that the British employed air control against additional rebellions that formed in other parts of their Middle Eastern territories.

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While most historians of British air power agree on the efficacy of air control, they often dispute the importance of air control. Imperial historian David Omissi, in his

book *Air Power and Colonial Control: The Royal Air Force 1919-1939*, has argued that “[b]y 1925 it was clear that air control had successfully maintained British influence in [Mesopotamia] without the heavy expenditure implied by an army garrison.” Where they tend to disagree is over air control’s influence on the developing air strategy. Some, like historians Jafna Cox and Priya Satia, view the RAF’s time in the Middle East as “a splendid training ground” for the RAF where “the British first practiced, if never perfected, the technology of bombardment, [and where] they first attempted to fully theorize the value of airpower as an independent arm of the military.” It was also in the Middle East that Trenchard was able to hone the guiding principles behind Britain’s strategic bombing policy. Some historians completely gloss over the significance of the early 1920s altogether.

Historian Scot Robertson, in his article “Hugh Trenchard: Making the Unorthodox Orthodox,” has noted that

the trend has been to discuss the emergence of the theory of strategic bombing during the Great War, and then leap over the next two decades to discuss the strategic bombing campaign of World War II. [Moreover, w]hen historians have paused to consider the interwar years, they have done so through a peculiar set of lenses that focus almost entirely on the frustrations of limited finance, interservice bickering, the pressures to disarm, and general political malfeasance.

David Omissi’s work exemplifies Robertson’s claim. Omissi argues throughout his book “that the training, doctrine and technology of the RAF in Europe developed for the most

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Omissi correctly attributed the foundation of Trenchard’s strategic bombing doctrine to the uncertainty of the airplane’s technical capabilities as well as inter-service rivalries, but he failed to grasp the crucial influence of air control. It must be remembered that one major tenent of Trenchard’s policy was the devastating effect of bombing on the enemy’s civilian population. The willingness of the rebelling tribes to yield to British air power just cemented the idea. John Salmond, the Commanding Air Officer in Iraq, verified Trenchard’s conviction in 1924 when he stated that “[i]t is commonplace [in Mesopotamia] that aircraft achieve their effect on morale, by the material damage they do, by the interference they cause of the daily routine of life and not through the infliction of casualties.” This belief that air power could considerably disrupt a civilization’s daily activities would go on to influence foreign policy in the 1930s as well as the early strategic bombing campaigns against Germany in World War II.

Under Hugh Trenchard’s tutelage, the RAF grew to assert itself as Britain’s third armed service. Having already proved the RAF’s peacetime strategy, the next step was to develop a wartime initiative. While many in Britain argued that World War I had been the “war to end all wars,” the Air Ministry developed a contingency strategy based on

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133 Omissi, *Air Power and Colonial Control*, 211.
their assessment that any future war would be fought primarily in the air. Therefore, Trenchard and the Air Ministry developed a doctrine focused principally on the strength of the bomber, which stressed that a knock-out blow on an enemy’s vital cities would determine the outcome of any future war. They equated the knock-out blow to a “heart attack” against the enemy’s war material and, above all, morale.135

In fact, air enthusiasts believed that “[t]he heart of a nation at war is the towns and villages, perhaps far from the fields of battle, where live and work the civilian population; where supplies are gathered and sent to the army; whence comes the moral driving force which alone can support and encourage the fighters.”136 Rooted in Trenchard’s perceived success of the Independent Force against German morale, only to be strengthened with post-war success in the Middle East, Trenchard and the rest of the Air Staff believed “that aircraft carrying bombs to an enemy’s ‘vital centers’ can undermine its ability and will to fight.”137 Therefore, Trenchard molded the RAF’s strategy to assault an enemy’s civil will to the point that the civilians would either petition their government to sue for peace, or overthrow their negligent Government.138

In a country such as Great Britain, it was inappropriate for Trenchard and the Air Staff to overemphasize attacks against civilians, however. Neville Jones, in The Beginnings of Strategic Air Power, explains that “[i]f they had openly proclaimed their object to be the terrorization of unarmed civilians, they could not have hoped to secure

approval for their policy either from the Government or from the other two services." If the RAF blatantly terrorized an enemy’s civilian population, the public outcry would be tremendous. Terror attacks on civilians were viewed as an uncivilized form of warfare. The Air Staff therefore wanted to distance themselves from such ideas. Instead, they utilized rhetoric to frame their policies in such a way that it was acceptable to the general public. They argued that “[a]ir power was novel not brutish. The morality of using air power lay in its alleged mercy.” Instead of wasting valuable lives in the trenches of France, air power afforded a quick end to any future war, which would save more lives in the long run.

The interwar years saw the technological development of the bomber to the extent that it could fly much faster over longer distances, as well as carry heavier bomb loads. With a force consisting of these faster, more destructive bombers, it would be easier to destroy enemy cities and devastate enemy populations. The potential threat of the bomber scared the general population in Britain. Air enthusiast only heightened this fear through their rhetoric and writings published in this period. For example, in 1936, former member of the RAF Air Commodore Lionel Evelyn Oswald Charlton, in his cautionary book *War over England*, predicted that “[t]he air raids over England during the Great War were but a foretaste, the merest nibble, of what lies in wait… Victims were only counted by

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139 Neville Jones, *The Beginnings of Strategic Air Power*, 43.
140 Dodge, *Inventing Iraq*, 146. Italics added for emphasis.
141 Dodge and other questions of the morality of the Royal Air Force’s strategic bombing policies will be further discussed in chapter 2.
hundreds on the last occasion. Hundreds of thousands will be the toll when the fury
breaks loose again.”

Two years later he argued that

[a]ir [p]ower can be applied with, literally, the unexpectedness of a bolt from the
blue. It requires no mobilisation period, or time for other preparation, and it need
not advertise it intention. The squadrons stand always ready to depart, as poised
for action as an arrow strung to the bent bow. And no military or naval force,
whatever their size or disposition, can avail to hinder the progress of the bomber
or prevent it from reaching its destination.

Trenchard also reasoned that one would be unable to protect oneself from such a
raid once it was under way. Instead, he believed the best defense was a strong offense.
The Air Ministry argued that in order to prevent an enemy from attacking, Britain needed
to be able to attack and destroy the enemy’s morale first. In a March 1921 Air Ministry
Pamphlet entitled “The Future of the Air Force in National and Imperial Defence,” the
Air Ministry Director of Research Robert Brooke-Popham wrote “[i]n attack is our best
defence, and we must have powerful air squadrons to carry the war into the enemy’s
country, to attack his forces in the air and his personnel and establishments on the
ground, and thus establish out aerial supremacy.”

Another way to prevent such an
attack was by building up a strong bomber force. If the British had a large bomber force
that could preemptively attack, it would deter any potential enemy from building up a
large force themselves.

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143 L. E. O. Charlton, War over England (London: Longmans, Green and Co., Ltd., 1936), 125-
126.
144 L. E. O. Charlton, “Air Power and Parity,” International Affairs 17, no. 4 (July-August 1938):
500.
146 Robert Brooke-Popham, “The Future of the Air Force in National and Imperial Defence” (Air
Ministry Pamphlet, March 1921), 12.
Two of Britain’s counterparts derived different lessons about the role of air power after World War I. After the war, most Americans fervently believed that the war had been the “war to end all wars.” In response to overwhelming popular demand to stay out of European conflicts, government officials decided to withdraw from the international scene. Consequently, the majority of government and military officials quashed any argument advocating the independent strategic capabilities of air power. In fact, “[t]he nation felt reasonably secure in its splendid isolation and had little desire to ‘learn of war.’”148 Instead, they maintained that the airplane’s proper role was as an auxiliary to army and/or navy operations.

The potential for independent aerial operations and the influence of the RAF had not been lost on all Americans, however, “[i]t was [viewed as] the province of lunatics and crackpots.”149 The most infamous proponent for an independent American air force was Brigadier-General William “Billy” Mitchell. As opposed to his contemporaries in the United States Army, Mitchell contended that “[t]he air force has ceased to remain a mere auxiliary service for the purpose of assisting an army or navy in the execution of its task.”150 Like Trenchard in his later years, Mitchell insisted that a swift, decisive air attack, aimed at incapacitating the livelihood of civilians, would determine the next war. In his 200+ page treatise advocating the possibilities of air power, Winged Warfare: The Development and Possibilities of Modern Air Power – Economic and Military, Mitchell contends that

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149 Eddie V. Rickenbacker, Seven Came Through: Rickenbacker’s Full Story (Garden City, NY: Doubleday, Doran and Co., Inc., 1945), 103.
[n]o longer will the tedious and expensive processes of wearing down the enemy’s land forces by continuous attacks be resorted to. The air forces will strike immediately at the enemy’s manufacturing and food centers, railways, bridges, canals and harbors. The saving of lives, man power and expenditures will be tremendous to the winning side. The losing side will have to accept without question the dominating conditions of its adversary.151

In addition to attacks aimed at discouraging the enemy’s “desire to renew the combat at a later date,” Mitchell, unlike Trenchard, believed that in order “[t]o gain lasting victory in war, the hostile nation’s power to make war must be destroyed.”152 Mitchell believed that bombers should target “the manufactories, the means of communication, the food products…the fuel and oil.”153

Mitchell even attempted to sway public opinion away from using air power as an auxiliary force. Apart from writing many books and articles on the subject, Mitchell attempted to prove his thesis. In July 1921, Mitchell used aircraft to sink the Ostfriesland, a commandeered German battleship. While Mitchell’s airplanes successfully sunk the battleship, his experiment did little to persuade Congress to create an independent air force.154 Unfortunately for Mitchell, “the Army and Navy joined hands to block the onslaught against traditional doctrine of the Army and Navy by the air service ‘radicals.’”155 Furthermore, Mitchell’s shenanigans led to his demotion and subsequent court-martial in 1925. In spite of prominent defense witnesses, such as World War I Flying Ace and air power proponent Eddie Rickenbacker,156 “[h]e was convicted…by the Army court for unbecoming conduct and given little alternative but to resign his

151 Mitchell, Winged Defense, 8.
152 Mitchell, Winged Warfare, 126-127.
153 Mitchell, Winged Warfare, 126-127.
155 Ransom, “The Battleship meets the Airplane,” 23.
156 Rickenbacker, Seven Came Through, 103.
commission, which he did early in 1926.”\(^{157}\) His zeal for the formation of an independent air force continued until his death ten years later, however.\(^{158}\) Despite his best efforts, Mitchell was unable to convince military and political officials to create an independent air force. It was not until after World War II that the United States Air Force was established.

For Germany, World War I exemplified the importance of air cooperation with the ground forces. Military officials in Germany strongly believed that the airplane was an auxiliary to the landed operations.\(^{159}\) Unfortunately for German air power, the Versailles Treaty severely limited Germany’s armed services. The Germans were allowed to maintain “an army with a strength of 100,000 officers and men, but denied this army any aircraft at all.”\(^{160}\) Even though the Treaty denied Germany a military air force, they still recognized the importance of air power. In fact, chief of the general staff Hans von Seeckt, “a strong believer in air power, ensured that 180 of the most experienced aviation officers were retained for the new, 100,000 men army, and organized into a shadow force. [Additionally, a] shadow air staff was set up within the reorganized general staff,” which was used “to study the lessons of the War and develop and operational air doctrine.”\(^{161}\)

The shadow air staff decided that once Germany was allowed to rearm, the Germans would build an independent air force. Until then, the shadow air staff prepared

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161 Corum, “From Biplanes to Blitzkrieg,” 87.
an air strategy for the new force, which focused on obtaining air superiority. They concluded that the air force had to achieve air superiority before any other aerial missions could take place. Unlike what occurred in World War I, “[i]n the future, the air force would…aggressively seek to destroy the enemy air force on the ground and in the air over enemy territory.”  

Additionally, the shadow air staff “insisted that support of the other services would remain as a primary mission of the air force.”  

Rather than independently bomb an enemy’s cities, the new German air force would attack an enemy’s defensive air force in the air in support of landed operations. Once the enemy’s air force was destroyed, then the German air force could then bomb other lucrative targets.

In 1934, after the rise of Adolf Hitler, the shadow air staff became an official Air Ministry. A year later, the New Air Ministry published their first operational doctrine, “The Conduct of Air Operations” (Luftkriegführung), Air Field Manual No. 16. The Air Field Manual further solidified the shadow air staff’s strategic vision by listing the various missions envisioned for the new air force, or the Luftwaffe, including

- a) Combat action to secure and maintain air superiority…
- e) Strategic operations against hostile sources of military power.
- f) Attacks against targets located within large cities as centers of government and administration, and as centers of military control and training; in certain circumstances attacks for retaliatory purposes.

Unlike Trenchard’s later thinking, the German Air Ministry considered bombing an enemy’s cities as an indirect support of Army operations. They believed that the

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162 Corum, “From Biplanes to Blitzkrieg,” 89.
163 Corum, “From Biplanes to Blitzkrieg,” 89.
164 Deichmann, German Air Force Operations in Support of the Army, 9.
165 Deichmann, German Air Force Operations in Support of the Army, 9-10.
Luftwaffe was the first step in conquering an enemy nation. First CAS of the Luftwaffe Max Wever claimed that “[t]he army cannot occupy an enemy country until the enemy has been defeated and the way cleared.”167 The Germans retained this strategy throughout World War II, only deviating from it during the Battle of Britain when, then Commander-in-Chief of the Luftwaffe, “Hermann Göring violated the Luftwaffe’s principle of first crippling the enemy air force before concentrating on other targets.”168

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In the interwar years, the prevailing thought in the Air Ministry and amongst RAF strategists, not to mention the general public, was that if there were any more wars, the next one would be determined in the air. In his monograph The Shadow of the Bomber: The Fear of Air Attack and British Politics 1932-1939, historian Uri Bialer confirms that World War I had itself fostered the acceptance by the British Air Staff of a strategic doctrine which emphasized the potentially decisive effect of a strategic bombing offensive on the nature of a future conflict. During the interwar period, the members of that body became persistent and influential prophets both inside and outside Government circles, and their prophecy was of destruction by an aerial ‘knock-out blow.’169

Experts and public alike soon came to fear the potential threat of aerial bombardment – the Air Ministry’s rhetoric chronicling the bomber’s potential proved to be very effective. Tami Davis Biddle argues that “[w]hile bold interwar claims about the power of bombers and the vulnerability of enemy societies had helped preserve the RAF’s instrumental

166 Deichmann, German Air Force Operations in Support of the Army, 10.
168 Corum, “From Biplanes to Blitzkrieg,” 99-100. Italics added for emphasis.
autonomy, they had also contributed to deep public anxiety about future wars.” And once the dreaded war did come, it proved that almost all of the RAF’s interwar projections had been wrong.

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CHAPTER 2: DOES MIGHT MAKE RIGHT? THE LEGAL AND MORAL
JUSTIFICATIONS FOR STRATEGIC BOMBING

*If this tendency to shorten a war be the final justification of military proceedings, the ground begins to slip from under us against the use of aconitine or of clothes infected with smallpox.*

--- James Anson Farrer, 1885

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World War I had been fought very differently than the wars of the past. Not only did one see the introduction and use of new technology, such as the airplane and the submarine, but also the role of the civilian changed drastically. Historian Michael Howard, in his article “Total War in the Twentieth Century: Participation and Consensus in the Second World War,” argues that “[t]he experience of what was still known as the Great War had shown that in the twentieth century wars had to be fought with the full resources of the entire community,” whether it be financial and moral backing, industrial production, or foodstuffs. As the size and scope of war became larger, the roles of civilians on the home front became more important to the war effort, and the lines between the two started to blur.

In the wars of the nineteenth century and earlier, there was a clear distinction between combatants – those who fought in uniform – and non-combatants – those who did not. Additionally, nineteenth century armies were not as large or technologically advanced as their twentieth century counterparts. With the Industrial Revolution and the emergence of massed produced weaponry, more and more people were involved in the

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manufacturing of weapons. What was the difference between the soldier shooting the rifle or the man or woman who assembled the rifle? One theorist postulated that “[t]he reasons for giving [the manufacturers of weaponry] a privileged position in regard to hostile action are losing much of their force. Fundamentally these people are in exactly the same situation as men engaged in the auxiliary services of the armies.”

Even Prime Minister Winston Churchill noted:

‘The whole of the warring nations are engaged, not only soldiers, but the entire population, men, women, and children…The trenches are dug in the towns and streets…The front lines run through the factories. The workmen are soldiers with different weapons but the same courage.’

Furthermore, in the slower and smaller wars of the nineteenth century, “[n]on-combatants were generally aware of the areas where battles were likely and could, therefore, leave the scene.” Earlier battles were confined to a battlefield and focused on military targets. The various strategies and tactics utilized during World War I, however, were aimed at breaking the civilians’ will to continue the war. The bombing raids performed by the German Zeppelin and Gothers, and to an extent the British Independent Force, were directed towards towns and cities rather than military targets, such as depots, bivouacs, and armories. Both the Royal Navy’s blockade of German ports and the unrestricted German U-boat raids on British and American shipping targeted food and other vital resources imported into Germany or Great Britain. In fact, the premise behind


a naval blockade, and Trenchard’s subsequent bombing strategies, was the disruption of
civilian life and morale to such an extent that those civilians would force their
government to sue for peace.

In response to the inclusion of civilians in war, many in Britain began to question
the legality and morality behind such attacks, especially attacks from the air. They
viewed it to be unlawful and immoral to bombard cities that appeared to be unassociated
with the war effort or other military matters. Others, however, argued that any factory or
plant that supplied the armed forces during war was a legitimate target. In 1923, a
Commission of Jurists was assembled at The Hague to discuss these matters and to
regulate of air warfare. The British Government sent lawyer and air ministry official
James M. Spaight to represent the British Isles. Spaight, who had written extensively on
the various legal aspects of air warfare, is considered by some to be “the most important
and influential expert of his era on the law of air war.”176 He played a pivotal role in the
formation of the Commission’s proposed rules of air warfare.

In spite of the questions regarding the validity of air warfare, the leaders of the
Royal Air Force continued to develop their strategic bombing policy. The leaders of the
Royal Air Force utilized Spaight’s arguments to justify their use of strategic bombing
both publicly and within the service. His arguments, however, did not dictate their use of
strategic bombing. Instead, the brutality of World War II ensured that the RAF would
continue to employ strategic bombing, regardless of lingering legal and ethical questions.

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Starting in the late nineteenth century, European and American leaders wanted to regulate various types of warfare with the hopes of eventual global disarmament. In 1899, delegates from Europe and the United States convened at the first Hague Peace Conference “to address issues relating to disarmament, the regulation of modern methods of war, and the arbitration of international disputes.”\(^{177}\) The majority of the rules created had to do with wars on land; however, delegates did spend some time discussing air warfare. Even before the Wright Brothers made their historic flight in 1903, many leaders feared an attack from the sky. Since 1794, men had been able to fly above cities and launch projectiles from non-dirigible balloons, i.e., hot air balloons.\(^{178}\) Early bombing attacks of this nature were not valuable to the war effort, but a few believed that one day aerial bombardment could become “an effective battlefield tool – capable of making war more decisive and shorter.”\(^{179}\) Consequently, delegates “placed a five-year moratorium on the launching of projectiles and/or explosives from the air.”\(^{180}\) Additionally, there were three articles specifically directed to air warfare in the Hague Règlement, the Convention’s codification of war law. The most important of these articles was Article XXV, which stated that “[t]he attack or bombardment of towns, villages, habitations or buildings which are not defended are prohibited.”\(^{181}\) The delegates did not specify what constituted a defended town, however, which led to uncertainty about the laws.

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\(^{179}\) Biddle, “Air Power,” 141.

\(^{180}\) Biddle, “Air Power,” 141.

Moreover, “[t]he fact that it was approved as an annex to a Convention instead of being made part of the Convention itself has militated against its effect. The Powers who sanctioned the Règlement [were] not bound by its terms” like they were with other conventions on war.182

Eight years later, in 1907, delegates once again met in the Netherlands for the second Hague Peace Conference. After much debate, delegates from the various countries decided to amend Article XXV from the 1899 Règlement. The amended article now read: “‘The attack or bombardment, by whatever means, of towns, villages, dwellings or buildings which are undefended is prohibited.’”183 While the delegates added words in order to encompass the newly flown airplane, they still did not define what they considered to be an undefended town. This had to do with the fact that a majority of governments were less enthusiastic about restricting air power. The technological developments in the field of aviation meant “that countries with strong aviation programs were unwilling to restrict their deployment options. But weaker countries were quite willing to accept prohibitions, since they possessed virtually no offensive air capability.”184 The changing political climate in Europe also added to the hesitation to limit air warfare. And unlike at the first Hague Conference, general disarmament was not discussed. An embarrassing loss to the Japanese in the Russo-Japanese War (1907) and an increased militaristic mentality resulted in the Russian and

German Governments, respectively, to decline disarmament talks.\textsuperscript{185} With disarmament off the table, air power could afford countries protection from a potential enemy.

The delegates also wanted to codify rules of maritime war in addition to the rules of landed warfare. They envisioned “‘applying to this operation of war the principles of the Regulations of 1899 respecting the Laws and Customs of Land War.’”\textsuperscript{186} The maritime laws on bombardment tended to contradict with those drawn up at the previous assembly. For example, “Article [II] of the Naval Convention identified particular military objects that were to be considered lawful targets for bombardment, including ‘military works, military or naval establishments, depots of arms or war materiel, workshops or plants which could be utilized for the needs of the hostile fleet or army, and the ships of war in the harbor.’”\textsuperscript{187} In other words, it was legitimate for naval vessels to bombard any city as long as it contained military objectives, whether that city was guarded or not, while the \textit{Règlement} prohibited the aerial bombardment of all undefended cities. The debate regarding legitimate targets would continue for decades after the Hague Conferences.

There was supposed to be a third meeting of the Hague Conference in either 1914 or 1915, but the outbreak of World War I in the summer of 1914 prevented the countries from meeting. World War I was unlike any war Europeans had ever seen. The devastation of stalemate and trench warfare on the Western Front led to massive

\textsuperscript{185} Biddle, “Air Power,” 142.
casualties. The war also saw the expansion of air power for military use. Despite the pre-war fears of attack from the air, The Hague Rules “were not adopted by [all of the] governments” involved in the Hague Conferences.\(^\text{188}\) Thus, during the war, the combatants disregarded the moratorium limiting the launching of projectiles from the air, and launched attacks on “undefended” cities. Also, the belligerents developed “the tactic of deliberately bombing cities to terrorize civilian populations.”\(^\text{189}\) Historian Tami Davis Biddle, in her chapter “Air Power” from the edited work *The Laws of War: Constraints on Warfare in the Western World*, explains that “[i]n the confusion [after the various air raids throughout the war] each side saw its own raids as legitimate and those of its enemy as indiscriminate.”\(^\text{190}\)

In the aftermath of the death and destruction brought about by World War I, world leaders once again wanted to regulate all dimensions of warfare. Due to the brutality seen from the air, “most military experts and world jurists concluded that existing regulations could not satisfactorily control air warfare.”\(^\text{191}\) From 11 December 1922 until 19 February 1923, representatives from Great Britain, the United States, the Netherlands, France, Italy, and Japan convened at The Hague to discuss the previously determined rules of war and how they applied to the new technology utilized in World


\(^{190}\) Biddle, “Air Power,” 145.

War I. Britain’s representative to the meeting, now known as the Commission of Jurists at The Hague, was James M. Spaight.

James Spaight graduated with his Legum Doctorate (LL.D.) from Trinity College in 1905. He began his legal career exploring the international law of war. In 1911, he published his first monograph *War Rights on Land;* an analysis of the laws and regulations determined at the various conferences throughout the nineteenth and twentieth centuries, particularly the 1899 and 1907 Hague Conventions. While this work focused primarily on the rules of landed war, Spaight did focus a chapter specifically on bombardment – specifically the Hague *Règlement* Articles XXV to XXVII. In *War Rights on Land,* Spaight favored those arguments against bombardment altogether. He believes that it is illogical to bomb any city, even those that are qualified as defended. Furthermore, he argues that “[i]t is to set back the clock of International Law to allow a belligerent a war right to employ any measure at his own sweet will because it will abbreviate fighting.”

Shortly thereafter Spaight switched his focus to study the law of air war. Spaight wrote his first legal treatise on air power, *Aircraft in War,* in 1914 before the outbreak of World War I. In *Aircraft in War,* Spaight argues against banning air warfare – claiming, “the prohibition of aircraft in war appears nothing more or less than a beautiful

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dream.”

Even if a law prohibited the development of military aircraft, countries still had civilian aircraft that could be armed in times of war. Instead of condemning aerial bombardment, Spaight focused on establishing rules and regulations for air warfare. He argues that the rules determined in the 1899 Règlement were weak. They only applied in wars between the signatories, including Great Britain and the United States. Therefore, the non-signatory countries, such as Germany and France, “reserve the right to discharge projectiles or explosives from aircraft against such places as cannot be considered ‘‘undefended.’” Instead, Spaight proposed his own, conclusive “Code for Aircraft in War” in the appendix of Aircraft in War.

European governments did not accept Spaight’s published code, however. By the outbreak of war in late summer 1914, there was not a universal code of air war. Consequently, those countries equipped with aerial capabilities, even Great Britain, engaged in the indiscriminate bombings of cities, aimed at civilians’ morale. In fact, in a post-war dispatch, Brigadier-General Hugh Trenchard, head of the Independent Force, claimed that “‘the moral effect of bombing stands undoubtedly to the material effect in a proportion of 20 to 1.’”

Spaïght again took up the cause during his participation at the 1923 Commission of Jurists. The commission published a myriad of laws relating to war, including five

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197 Spaight, Aircraft in War, 3.
198 Spaight, Aircraft in War, 6.
200 Spaight, Aircraft in War, 114-121. For Spaight’s complete “Code for Aircraft in War,” see Appendix A.
specific articles on aerial bombardment. The jurists determined that “[a]erial bombardment is legitimate only when directed at a military objective, that is to say, an object of which the destruction or injury would constitute a distinct military advantage to the belligerent.” For the jurists, military targets included factories and lines of communication or transportation as long as they had a military significance – the targets that Hugh Trenchard’s Independent Force tactically attacked in the latter months of the war. It was prohibited for air forces to attack “cities, towns, villages, dwellings or buildings not in the immediate neighborhood of the operations of land forces,” yet those located within “the immediate neighborhood of the operations of land forces…” were considered legitimate targets.

Major Oliver Stewart, who, shortly after the War, retired from the Royal Air Force (RAF) to become a journalist, did not believe in the rules developed by the jurists at The Hague. In his 1925 work, *The Strategy and Tactics of Air Fighting*, Stewart warns that

The devastating effect of frequent heavy attacks by…high explosive-bombs will be made full use of for the first time in the next war. And the rules of the Hague Commission will not prevent those attacks from being directed against the civilian populations; for the nations which start wars are not commonly worried by scruples as to the propriety of their subsequent actions.

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204 “General Report of the Commission of the Jurists at the Hague,” 250. For a discussion of Hugh Trenchard and the Independent Force, see Chapter 1, pg. __.


For Stewart, the fighting in World War I proved that if a country had the technology, the military leaders would not refrain from using it against civilians, even if there were rules against it. The polices and practices developed during the later interwar years and during World War II would substantiate Stewart’s hypothesis. Not only did the *Luftwaffe* bomb cities in order to upset civilian morale, but so did the RAF.

James Spaight did not stop writing on and developing his ideas towards the laws of aerial warfare with the publication of the “General Report of the Commission of the Jurists at the Hague.” Spaight would be influential in the Air Ministries legal justifications for the use of air control in the Middle East and the interwar years. For example, in his later monographs *Air Power and War Rights*, *Air Power and the Cities*, and *Air Power in the Next War*, “Spaight argued that it was permissible to destroy ‘private’ property, that bombing was legal even though civilian deaths would occur as a result, and that it was permissible to induce war weariness in the population and desire to surrender.”\(^{207}\) Furthermore, in *Air Power and War Rights*, Spaight argued “that the air force should be permitted to attack the economic life of a belligerent country.”\(^{208}\) Both of these arguments embraced the policy of air control developed by, now Chief of the Air Staff (CAS), Hugh Trenchard.

Despite his advocacy of Trenchard’s policy of air control, Spaight maintained that those cities without military targets or those with military targets located within the city walls were not legitimate targets.\(^{209}\) Ironically, Spaight’s views would change once

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\(^{207}\) Meilinger, “James Molony Spaight,” 1.


\(^{209}\) Meilinger, “James Molony Spaight,” 2.
World War II was underway. In two of his wartime books, *Bombing Vindicated* and *Air Power Can Disarm*, Spaight argued “that war had become so total and so dependent on mass industrialization that the line between military and civilian objectives had blurred.” While these monographs were more of an analysis of air power than legal treatises, Spaight now legitimized the RAF’s policy of bombing German cities. Air historian Philip Meilinger believes that even though Spaight had long retired from the Air Ministry, “his defence of allied bombing strategy could be seen as motivated more by loyalty to his government than by a rigorous interpretation of the law that he himself had helped to establish.”

The experience of the Zeppelin and Gotha raids also affected many civilians’ outlook on strategic bombing, especially those in London. Due to the German Gothas, “London and its civilian population…had become pawns of war.” In the immediate aftermath of the daylight raids in June and July 1917, many in England called for revenge upon the German Huns, the baby killers. At a June meeting held at the London Opera House, those present urged the Prime Minister “to initiate immediately a policy of ceaseless air attacks on German towns and cities.” Not everyone agreed with this view, however. Churchmen as well as other civilians argued that such attacks on German cities and civilians were immoral. The dissenters of strategic bombing made up a small portion of the population, however. For the most part, people feared attacks from the air whether they were immoral or not. The war- apathy and pacifism felt after the war, in

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211 Meilinger, “James Molony Spaight,” 2.
addition to RAF’s policy of air control in the Middle East, added to the minority’s abhorrence of strategic bombing.

Officials within the Air Ministry and the RAF viewed the policy of air control as a success in the interwar years. Air control enabled the British to maintain imperial control in the Middle East inexpensively, and without large casualties. Instead of attacking and killing people, the RAF bombed empty villages in order to “scare” hostile tribes into capitulating. In fact, an official stated that “[t]here was hardly a bomb that was not within 20 or 25 yards of the spot aimed at…from what I heard the effect on the populace was very marked.” In the Middle East in the 1920s, unlike in World War II, the bombs dropped accurately hit their targets. Air historian Philip Anthony Towle explains the difference in his monograph *Pilots and Rebels: The Use of Aircraft in Unconventional Warfare*:

\[\text{[i]n [Mesopotamia], bombs were dropped from tens or hundreds of feet, not thousands. The aircraft involved flew slowly and in the daytime. There was no opposition from the air though there was some on the ground.}\]

If the RAF was able to accurately bomb Mesopotamia with little to no casualties, then why was there opposition from British civilians?

One explanation is that “[s]ome [civilians] felt that there was something ‘unsporting’ about using aircraft against tribes which did not possess them.” Additionally, historian Toby Dodge, in his monograph *Inventing Iraq: The Failure of Nation-building and a History Denied*, argues that

\[\text{215 Towle, *Pilots and Rebels*, 19.}\]
\[\text{216 Towle, *Pilots and Rebels*, 20.}\]
The deployment of air power was clearly a blunt weapon; bombs dropped from above 200 feet were wholesale in their effect. The power deployed was authoritative but ultimately despotic. Air power could not explain, it could no negotiate, and it could not distribute largesse.  

Attacks from the sky were a lot more traumatic than the Air Ministry thought. One Mesopotamian tribesman, speaking to a Special Services Officer in 1924, declared that “there are only two things to fear – Allah and the Hakumet al tayarrat [government by aircraft].”  In her *American Historical Review* article “The Defense of Inhumanity: Air Control and the British Idea of Arabia,” Priya Satia adds, “[a]ir control…was designed to work in a region believed to systematically exaggerate information: where there was one plane, Arabs would spread news of dozens; a few casualties would instill fear of hundreds.”

Trenchard was not oblivious to the arguments against air control, or strategic bombing in general. In addition to “terrorizing” Mesopotamian tribesmen, Trenchard “regarded it as entirely legitimate to terrorize munitions workers into ceasing their work or stevedores to stop loading arms onto ships. ‘Moral effect,’ he said, ‘is created by the bombing in such circumstances but it is the inevitable result of a lawful operation of war…”  In his monograph *The Military Intellectuals in Britain: 1918-1939*, Robin Higham explains that Trenchard would defend his argument by pointing to the Hague draft code of rules for aerial warfare, which specifically permitted the bombing of military objectives. Moreover, he pointed out that – and the influence of J. M. Spaight shows through here – naval bombardment had

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218 Quoted in Dodge, *Inventing Iraq*, 132.
damaged civilians and their property, but that was bound to happen when military
targets were situated in populous areas.

Thus, Trenchard and the Air Ministry developed an interwar strategy aimed at bombing
military targets and disrupting civilian morale.

Popular sentiment got behind the war effort because they viewed it as both
necessary and justified. Once war broke out in 1939, many in Britain and the other allied
nations viewed the war as a necessity. In his influential work Among the Dead Cities: The
History and Moral Legacy of the WWII Bombing of Civilians in Germany and Japan,
historian A. C. Grayling explains that people did not object to the war because they
viewed World War II to be a just war. World War II “was justified because it consisted in
resistance to the unarguable fact of military aggression by jack-footed Fascism.”

Additionally, “there were people for whom it mattered that the war should be not
only a justified one, but a justly fought one…” The Air Ministry considered strategic
bombing to be justified because it supposedly shortened the war. Instead of sending a
new generation of young boys to the front to be slaughtered, air power promised a swift
and decisive victory before the casualties could amass. Throughout World War II,
members of the RAF and the government would rely on additional justifications for
strategic bombing. Officials claimed

that…bombing undermined enemy civilian morale; that it reduced the capacity
and efficiency of enemy war industries; that it created logistical difficulties for the
German economy and administration by obliging them to deal constantly with
repairs and refugees; that it kept soldiers, guns and fighter planes away from the

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221 Robin Higham, The Military Intellectuals in Britain: 1918-1939 (New Brunswick, NJ: Rutgers
University Press, 1966), 179.
222 A. C. Grayling, Among the Dead Cities: The History and Moral Legacy of the WWII Bombing
223 Grayling, Among the Dead Cities, 179.
battlefronts to protect the cities instead; and that it distracted enemy soldiers at the
front by making them worry about what was happening to their families at
home.\footnote{Grayling, \textit{Among the Dead Cities}, 248.}

In fact, Winston Churchill considered attacks on civilian populations to be “a grim
necessity of a just war.”\footnote{Christopher C. Harmon, \textit{“Are We Beasts?” Churchill and the Moral Question of World War II “Area Bombing,”} Newport Papers 1 (Newport, RI: Naval War College, 1991), 3.}

Some did not believe that strategic bombing was a just practice, however. One
such civilian dissenter was pacifist Vera Brittain. Starting in 1941 Brittain, a member of
the Committee for the Abolition of Night Bombing, spoke out against strategic
bombing.\footnote{Grayling, \textit{Among the Dead Cities}, 179.} Having lived through the horrors of the Gotha raids and then the German
nighttime attacks on London starting in September 1940, commonly referred to as the
Blitz, Brittain knew the affect bombing raids had on civilians. In 1944, Brittain published
Means}, which attempted to counter the official justifications for strategic bombing. In
response to claim that the war would be shortened, Brittain argued “that there is no
certainty that such a shortening of the war will result; and that nothing less than absolute
certainty entitles even the most ardent of the War’s supporters to use these dreadful
accomplished was the destruction of innocent lives and the obliteration of historic
treasures, which “WILL APPEAR TO FUTURE CIVILISATION AS AN EXTREME
FORM OF CRIMINAL LUNACY WITH WHICH OUR POLITICAL AND MILITARY
LEADERS DELIBERATELY ALLOWED THEMSELVES TO BECOME AFFLICTED. Her argument was received by a few influential people within Britain, such as George Bernard Shaw, but on the whole did not make much headway.

Paradoxically, the majority of clergymen approved of the Allied bombing strategy during the war. In fact, Reverend Paul Koslowksi, a Catholic priest from Connecticut, commended the Allies. He claimed that “‘[t]here is no other way but to attack these beasts in the lairs – that is, in the German cities – where they plan further mass murders of innocent people. Christ’s saying, ‘if one smite thee on one cheek, give him the other’ is a beautiful theory, but not with human beasts, drunk with vengeance and conquest.’”

The majority of clerics, both Anglican and Catholic cited the Christian just war theory as grounds for strategic bombing.

British Bishop of Chichester George Bell, of the Anglican Church, on the other hand, was an outspoken critic of strategic bombing from the outbreak of war. LikeBrittain, Bell spoke out against bombing from the beginning. In 1941, he spoke out against the nighttime bombing of civilians, arguing that it was a “‘degradation of the spirit for all who take part in it.’” On 09 February 1944, he gave a speech to the House of Lords in which he questioned the Government’s strategic bombing policy. He strongly disapproved of the RAF’s attacks on the civilian population of Germany. Citing the rules developed by the Commission of the Jurists at The Hague, Bell contended that Britain’s

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228 Brittain, Seeds of Chaos, 116.
229 Grayling, Among the Dead Cities, 194-208.
232 Quoted in Calder, The People’s War, 492.
bomiting policy was both unlawful and immoral. Like Brittain, however, Bell did not receive much support from his fellow members of the House of Lords. In fact, historians argue that because of his political dissent, he lost an almost certain nomination for the Archbishopric of Canterbury.

Even though the Allied strategic bombing policy had its critics during wartime, it was not until after the war that people really began to question the government’s rationalization. In fact, the moral argument surrounding the Allied strategic bombing strategy rages on today. The majority of recent works, including Grayling’s *Among the Dead Cities*, Michael Bess’ *Choices Under Fire: Moral Dimensions of World War II*, and Tami Davis Biddle’s “Dresden, Reality, History, and Memory,” view the policy as morally wrong. Historian Stephen A. Garrett, in his monograph *Ethics and Airpower in World War II: The British Bombing of German Cities*, adds “that one of the reasons the British bombing of German cities has remained morally controversial is that it failed in its proclaimed purposes.”

Contrastingly, older works tend to believe the later bombings of Germany as necessary. In his *Journal of Contemporary History* article entitled “The Strategic Bombing Debate: The Second World War and Vietnam,” historian Melden E. Smith argues that

> [i]f bombing targets of legitimate military significance is immoral, then numerous other methods of warfare practised by all belligerents in the twentieth century are equally immoral. The notion that citizens of a totally mobilized modern nation-state should be immune from war’s suffering is a survival of eighteenth century military traditions; it is an absurdity that fails to recognize fully all the implications of the modern nation-state in arms or the inevitability of the wider

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applications of modern military technology. What is immoral, if anything, perhaps, is warfare itself.\textsuperscript{236}

An explanation for this paradigm shift can be best summed up by World War II Veteran, and prison of war Dr. Gifford Doxy: Those who were old enough to remember World War II believed the bombing was justified, while those who were younger did not.\textsuperscript{237}

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In spite of the legal and moral arguments against aerial bombardment, officials within the Royal Air Force and the Air Ministry continued to plan a wartime strategy centered on strategic bombing. While officials utilized the legal arguments of British lawyer James M. Spaight to justify their interwar policy of air control and strategy, once war broke out in 1939, leaders did not necessarily heed to those arguments. Nor did officials take notice of the minority of dissenters in Britain, such as pacifist Vera Brittain and Anglican Bishop George Bell, who argued that the bombing policy utilized during the war was immoral. Historian Michael Bess, in his monograph \textit{Choices Under Fire: Moral Dimensions of World War II}, reasons that

\textit{[I]ong before Niccolò Machiavelli put pen to paper in writing The Prince, the idea had already been firmly established that in times of war the principles of morality [and legality] tend to take a back seat. In warfare, as Thucydides famously put it, ‘the strong take what they can, and the weak yield what they must.’ Warfare is all about winning, and what therefore matters most for a nation at war is the calculus of effective force.}\textsuperscript{238}

\begin{footnotesize}
\begin{enumerate}
\item Dr. Gifford Doxy, guest lecture to the author, 16 May 2011.
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In other words, officials in Britain were not the first to ignore legal and moral arguments against war technology. Rather, since the early years of warfare, man would do what was necessary to win, even if that meant breaking a law or acting morally reprehensible.

But what would be the security of the good, if the bad could at pleasure invade them from the sky? Against an army sailing through the clouds neither walls, nor mountains, nor seas, could afford them any security. A flight of northern savages might hover in the wind, and light upon the capital of a fruitful region that was rolling under them.

--- Samuel Johnson, 1759

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The countless prophecies of a future cataclysmic war in the air frightened many in Parliament and throughout Britain during the interwar years. Therefore, “[t]he need to counter ‘the peril from the sky’ then became a prominent consideration, which preoccupied the minds of the men who formulated Britain’s defence and foreign policy.” While men in the Air Ministry, such as Chief of the Air Staff Hugh Trenchard, espoused the virtue of a strong bomber force to discourage potential enemies, the post-war apathy felt by many in Britain, the passing of the Ten Year Rule in 1919, and the eventual global depression impeded the creation of that force. Instead, members of Parliament in the interwar years turned to a less expensive, not to mention a more desirable, alternative – diplomacy. Even though military spending was placed on the back burner, Trenchard and other Air Ministry officials still prepared a strategy relying heavily on the bomber. The inflexibility of Parliament’s and the Royal Air Forces’ early interwar strategies almost prevented the institutions from adapting to wartime actions. By the outbreak of war in 1939, Parliament and the Royal Air Force were able to modify their

policies, enabling the British to thwart the impending German invasion – the Battle of Britain.

Historian Basil Collier, in his monograph *The Defence of the United Kingdom*, written in 1957, claims that

the danger of air attack [was] real…[therefore] the only action which seemed open to the Government was either to build a bomber force strong enough to deter aggression, or alternatively to strike for immunity by diplomatic means. The first course would be expensive and might entail the creation of an expeditionary force sufficiently numerous and well-equipped to hold or capture bases on the Continent…The second promised to be cheaper, and might appeal more strongly to a public already heavily taxed and judged unlikely to support a major programme of rearmament.²⁴¹

During the 1920s, therefore, the Government attached Britain to a myriad of organizations and treaties designed to maintain a post-war peace and to mediate any quarrels. Regrettably, the interwar diplomatic institutions proved to be extremely weak when faced with opposition by a strong enemy. Once threats to the desired peace emerged in the early 1930s, the British Government, like an ostrich with its head in the sand, continued to hide behind those weak organizations and empty promises until it was almost too late. By 1938 it became apparent to most in Britain that there would be another war; Parliament’s policy of diplomacy had failed. As a result, the Government initiated full-scale rearmament in the hopes of making up for the neglected years. In spite of their best efforts, the British war effort was still unprepared for war once Germany invaded Poland in September 1939.

Parliament was not the only British institution to have an inflexible strategy in the interwar period. The Royal Air Force, having focused on a bomber-laden strategy in the

interwar years, was also unprepared for the onslaught by the German *Luftwaffe* in 1940. The Germans, unlike the British, did not depend on a policy of strategic bombing, but rather they considered the *Luftwaffe* to be a tactical support for the German *Wehrmacht*. In spite of the policy mistakes made in the early interwar years, the Royal Air Force emerged victorious once the Germans finally attacked in the summer and early fall of 1940. Fortunately, by the late 1930s officials within the Royal Air Force and the Air Ministry realized their mistake and attempted to rehabilitate their policies. Because of the British Government’s hesitancy to rearm, Commander-in-Chief of the German *Luftwaffe* Herman Göring, in the lead-up to Germany’s air attack, boasted that he could destroy the Royal Air Force in a matter of two to four weeks; in less than a month, the Royal Air Force proved Göring wrong. The development of radio direction finding, also known as radar, in 1935, and the creation and increased reliance on Fighter Command, starting in 1936, enabled the British to triumph over the Germans in the Battle of Britain.

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After the close of the Versailles Conference in 1919, the British and the governments of the other major signatories of the resulting Peace Treaty joined the League of Nations – an international forum, or “an incorporated society of nations, for the preservation of [the post-war] peace and [for] the peaceful settlements of disputes.”

Moreover, in addition to an urging for universal disarmament, the Covenant of the League of Nations guaranteed “the territorial integrity and political independence of the members of the League.”

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League would issue sanctions, instead of military actions, against the aggressor.\textsuperscript{244} Thus, the League was attempting to prevent the melee that occurred in the months before the outbreak of World War I due to the various alliances and arms races.

In hindsight it is easy to see that the League was a very weak organization, which many did realize at the time – both friend and foe. James M. Spaight argued, in his monograph, \textit{Pseudo-Security}, that the League only offered a false sense of security. The League had no real military weight to deter any opposition to its principles. Spaight contends that “[s]anctions are only penalties, and penalties, however drastic, can never be an absolute deterrent and, therefore, can never wholly replace measures of protection.”\textsuperscript{245} The threat of sanctions, or economic punishments, would not prevent a hostile nation from acting out. And due to the League’s call for disarmament, a country would be unable to protect itself if such an event transpired. According to Spaight, “[t]o try to substitute sanctions for defence is to mistake the fundamental needs of the case.”\textsuperscript{246} The threat of sanctions would not provide adequate defense to the British. Hence, the Government’s reliance of the League of Nations was in vain.

There did develop a faction of military and political strategists who argued that the League should have an international military force if need be. One strategist, Sir Basil Henry Liddell Hart, in his 1933 \textit{International Affairs} article “An International Force,” argues that

\begin{quote}
f\textit{orce is not merely punitive but protective. If a State repudiates the Covenant, defies the pacific intervention of the League, and plunges into aggressive action against a Covenant-abiding State, the latter is entitled to protections. The moral
\end{quote}

\textsuperscript{244} Spaight, \textit{Pseudo-Security}, 5.
\textsuperscript{245} Spaight, \textit{Pseudo-Security}, 12.
authority of the League would be shaken…by the proof of its physical helplessness.\textsuperscript{247}

In other words, without the backing of a defense force, the League of Nations could crumble if a member nation was faced with a strong aggressor.

Spaigh agreed with arming the League in theory, but believed that it would be difficult to do at the time. In his 1932 treatise \textit{An International Air Force}, Spaight asserts that

\begin{quote}
[a]n international police…is an impossibility without an international government. You cannot ‘hang’ an international police upon an arbitration tribunal or even an executive Council[, like the League of Nations,] which is subject to no such checks and counterchecks as those which limit the executive power in all free countries.\textsuperscript{248}
\end{quote}

The League of Nations was not a strong enough institution in the 1920s and 1930s to administer such a force. Instead, he petitioned that countries should be in charge of their own defense. Air Commodore J. A. Chamier also argued against an international force. In his \textit{Army Quarterly} article “Air Bombing and Air Disarmament, Part II,” Chamier argues that “[t]he League of Nations as constituted has no executive authority; to set it up as a super-Power above all Powers, to arm in the name of peace with one of the deadliest of weapons [(air power)], and to use those weapons to enforce peace is surely a Gilbertian fantasy.”\textsuperscript{249} This opposition view proved correct – the combined international force never came to fruition. Only a few years after Liddell Hart, Spaight, and Chamier voiced their opinions, a strong Germany, under the leadership of Adolf Hitler, demonstrated just how weak the League’s authority was.

\textsuperscript{248} James Spaight, \textit{An International Air Force} (London: Gale & Polden, LTD., 1932), 17.
\textsuperscript{249} J. A. Chamier, “Air Bombing and Air Disarmament. Part II.” \textit{The Army Quarterly} 27, no. 2 (January 1934): 284.
Due to Germany’s post-war status, they were not invited to join the League of Nations. Moreover, many of the other European countries viewed Germany as an international pariah – they blamed Germany for starting World War I. By signing the Treaty of Versailles, Germany accepted that blame; one of the clauses in the Treaty acknowledged Germany’s guilt. Germany’s acceptance of the Versailles Treaty did little to bolster public opinion and international relations, however. In an attempt to revitalize Germany’s international relations, German Foreign Minister Gustav Stresemann signed the Locarno Treaties in October 1925. These Treaties, agreed upon by Germany, France, Belgium, Italy, and Great Britain, finalized the Franco-German and the Belgian-German borders put forth at the Versailles Conference. The plenipotentiary from France and Germany, and from Belgium, agreed that their countries would not attack each other and, they reaffirmed the demilitarized zones set forth in the Treaty of Versailles. If France, Germany, or Belgium did violate the Treaty, the matter would be brought before the League of Nations, which the Germans were subsequently invited to join in 1926. Additionally, the Treaty specified “that in case of a flagrant violation of the undertaking each party shall come immediately to the help of the victim as soon as it is able to satisfy itself…that the violation constitutes an unprovoked act of aggression…” The other signatories did not have to wait for the League of Nations to issue their ruling before they could assist the injured party.

Many in Britain viewed the signing of the Locarno Treaties as a success. Delegates from the various European countries involved were able to peacefully and

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diplomatically prevent any potential conflicts. Foreign Secretary Austen Chamberlain, the central British negotiator at Locarno, is quoted as saying that “Locarno marked ‘the real dividing line between the years of war and the years of peace.’” Spaight also strongly believed in the Locarno Treaties. He viewed them to be an “antidote” to the League of Nations; that “[a]ction taken under each pact by the parties thereto will replace and make unnecessary action by the League under the Covenant.” Rather than trying to maintain peace through large, “international guarantees and sanctions,” the Locarno Treaties allowed Europeans to seek peace through limited, regional pacts.

Another diplomatic success occurred three years later with the signing of the Kellog-Briand Pact, a treaty designed to outlaw aggressive war. The Kellog-Briand Pact began as a Franco-American agreement, but “was eventually transformed…into a multilateral war-denying ordinance, and made applicable to all the signatories of the Treaties of Locarno.” This Pact received widespread public acceptance in Britain. Spaight argued that “[t]he Kellog[-Briand] Pact reflects truly a changed outlook on war.” Furthermore, in a *Fortnightly Review* article entitled “The Outlawry of War,” author J. H. Harley contends many Britons opined it “[b]etter to seize the opportunity at once when it is offered…and settle the future of war by a single stroke of the pen.”

While the Pact intended to outlaw all aggressive war, as with the League of Nations and

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the Locarno Treaties, there was no way to assure all would adhere to the Pact. Yet, some Britons still did not worry about the possibility of war. For the most part, they “believed that no ‘rational’ statesman would embark on war in view of the terrors of [World War I].”258 And “[i]f they [did] resort to war the impulse would be rather fear than deliberate design.”259 Air Commodore Chamier was not as optimistic, however. In his “Air Bombing and Air Disarmament, Part I,” Chamier insists that “[n]o sane person, soldier or civilian, can really believe that a pact offers sufficient security.”260 Chamier’s conjecture was correct – starting in the 1930s, Japan, Italy, and Germany all tried to undermine European diplomacy through calculated force.

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During World War I, the Japanese fought on the side of the British and her allies. After the war, many in the Japanese Government and military believed that they would be able to retain German Imperial territory they seized in China as well as gain new territory. Unfortunately for the Japanese, a wave of anti-Imperial sentiment, promoted by American diplomacy, spread throughout the Versailles Conference; therefore the Japanese were denied any territorial acquisitions. In spite of the obstruction at the Versailles Conference, the Japanese Government, controlled throughout the early twentieth century by a strong military faction, still intended to create a Pacific Empire, what they called the Greater East Asian Co-prosperity Sphere. In 1931, the Japanese

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embarked on the creation of their Empire through a feigned terrorist attack on a Japanese railroad in Manchuria. Using the attack as an excuse to invade the country, the Japanese Army quickly took over the Chinese Province. The League of Nations, of which Japan was still a member in 1931, condemned the attack, yet no retaliatory action was taken against the Japanese. The Japanese were able to continue to seize land in China as well as the surrounding Pacific region without any significant repercussions.

Italy had also been allied with the Allies during World War I, and like their Japanese counterpart, they were disappointed with the Versailles Treaty. Three years after the signing of the Treaty, fascist leader Benito Mussolini marched on Rome and seized control of the Italian Government. Mussolini aimed to restore the glory of the Roman Empire by overrunning much of the Mediterranean region. Mussolini’s first step towards building his new Empire was an invasion of the African country of Ethiopia in 1935. In the European scramble for Africa in the nineteenth century, Italy had attempted to capture Ethiopia, but the Imperial Ethiopians thwarted their attempt. This time, with the help of airpower, Mussolini’s army was able to crush the Ethiopian Government and overrun the country. Once again, the League of Nations denounced Mussolini’s actions but did not retaliate militarily. The League of Nations proved to be all bark and no bite.

In between the threats posed from former allies, a former enemy, Germany, started to regain power. In 1933 German President Paul von Hindenburg invited National Socialist German Workers Party (Nazi) leader, Adolf Hitler, to become Chancellor of Germany. In a little over a year, Hitler was able to amass his power so that when Hindenburg died in August 1934, he was able to merge the positions of Chancellor and
Presidency into one position – the Führer. A year later, Hitler and his newly created Air Ministry (1934) announced the formation of the independent German Air Force, the Luftwaffe. Additionally, he declared that the previously non-existent force was already equal in size and strength to the Royal Air Force (RAF), which both “shocked British public opinion and British leadership...”\(^{261}\) Unbeknownst to the European community, however, Hitler had falsified his claim of parity.\(^ {262}\) Fourteen years earlier, the British Government was faced with another exaggerated claim of air parity. How they dealt with the 1921 crisis would foreshadow the response to the German threat.

In October, the Committee of Imperial Defence (CID) had gathered a tabular comparison of the world’s air strength. Three years earlier, at the end of World War I, Great Britain had, and planned on maintaining, the world’s largest independent air force. CID’s comparison showed that France had their own “‘Air Division’ [which] commanded all [of] the French bomber squadrons and that France planned to maintain a far larger air strength than did Britain.”\(^ {263}\) Not only did France have an independent air force, the French Air Force (FAF), but they also intended on developing a larger bomber force than the RAF. Furthermore, due to location and aerial technology, it would be easier for a French bomber force to attack London than it would be for the RAF to attack Paris. A fear of a ‘French air menace’ quickly emerged throughout the British Government.


Hugh Trenchard, Chief of the Air Staff (CAS) of a faltering force, seized on this fear and exploited it in order to further convince Parliament of the need to retain the RAF. He tried to convince many that the possibility of a French attack from the air meant that “[s]ecurity no longer exist[ed] in the older meaning of the word…”264 In “[o]ne Air Staff memorandum [he] warned of ruthless attacks on London, comprised of ‘high explosives or incendiary bombs’ and ‘chemical warfare in the most horrible form’ including ‘lethal or toxic gas containers’ and even ‘infection by bacilli.’”265 There would be no way of defending oneself once such an attack was underway. Therefore, the only way to protect England from such an attack, argued Trenchard, was through a large bomber force that could preemptively attack an enemy and destroy their vital cities first.

Some in the RAF disagreed with Trenchard’s claims, however. In his treatise, The Strategy and Tactics of Air Fighting, Major Oliver Stewart argues that a nation can, and will, defend against air attack; therefore, securing air supremacy is the key to victory in the next war. In fact,

[a] nation possessing complete air supremacy has put out the eyes of its opponent; it is fighting a blind man. But not only is it fighting a blind man, for air supremacy reaches further than the prosecution and prevention of observation, it also maims the opponent and stifles his will to fight.266

Before the RAF could send its bomber force out to strike an enemy’s vital cities, the RAF needed to gain air supremacy over the enemy nation by destroying their defenses.

Therefore, fighters were just as important as bombers. After much debate, the members

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of Parliament determined that the strength of the RAF should be increased. While they agreed with Trenchard regarding the importance of a large bomber force, they refused to eliminate a fighter force. Consequently, “[b]y June 1923, [Parliament] approved an expanded [H]ome [D]efence [A]ir [F]orce (to include both fighters and bombers) allowing for the formation of fifty-two squadrons by the end of 1928.”267

The fifty-two-squadron force never came to fruition, however. Production of the force “fell behind schedule,” and the threat of a ‘French air menace’ disappeared with the signing of the Locarno Treaties in 1925.268 In his 1961 monograph *Air Bombardment: The Story of its Development*, Air Marshal Robert Saundby argues that

> [t]he main reasons for the slow build-up of the bomber force, apart from the usual financial difficulties, were to be found in the reluctance of the British Government and people to appear to be building an aggressive force, and in their hopes of abolishing or limiting air bombardment, as part of a plan of general disarmament.269

In 1928, Parliament, under the leadership of Prime Minister Stanley Baldwin, wanted to focus on strengthening the economy rather than the military forces, thus they further postponed the completion date for the fifty-two-squadron scheme until 1938.270 The RAF had only forty-two squadrons of the planned fifty-two when Hitler boasted air parity.271

In response to Hitler’s claim, Parliament attempted to deter Hitler and pacify public opinion by once again rearming the RAF.272 The early rearmament schemes were

269 Saundby, *Air Bombardment*, 56.
“not so much preparation for war as the reinforcement of peace.”

Moreover, “[t]he early stages of rearmament were…dominated by the need for a ‘deterrent’ display – a first-line strength impressive on paper but not necessarily backed by sufficient establishments or by industrial reserves.”

In addition, historian Malcolm Smith, in his article “The Royal Air Force, Air Power and British Foreign Policy, 1932-37,” argues that the rearmament policies were “not designed to regain air supremacy over Germany. [They] sought only to neutralize the dangers of greater numbers in the hope of securing an agreement to limit air armaments…” Once again, the Government fashioned a large force on paper, but did not actually follow through with their rearmament plans due to the overriding need for diplomatic security. Air Marshal Saundby explains that from 1934 on,

[t]he British Government was extremely reluctant to start rearming. The financial position had somewhat improved, but there was a strong anti-war movement in the country. There is little doubt that the appalling conditions of trench warfare on the Western Front in [World War I], and the loss of nearly a million men in the armed forces, had created a horror and a hatred of war that was deep and widespread. The threat of air bombardment of populated centres in any future war tended to increase this very natural aversion, and many worried people were inclined to take refuge in an unreasoning ‘anti-war’ attitude.

In fact, many in Parliament believed that by appeasing Hitler’s requests, they could still avert the air war heralded by air enthusiasts.

With his power cemented and the strength of the Luftwaffe behind him, Hitler did everything he could to return Germany to its professed greatness. As it happened, “[b]y

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273 Postan, British War Production, 10.
274 Postan, British War Production, 10.
276 Saundby, Air Bombardment, 63-64.
the time Hitler came to power much of the Versailles Treaty had been eroded away, and he proceeded to tear up what remained of it.”

From 1936 to 1939, Hitler remilitarized the Rhineland, merged the countries of Germany and Austria, annexed the Sudetenland area of Czechoslovakia, and invaded Poland. Historian Eugene M. Emme, in his article “Some Fallacies Concerning Air Power,” explains that these revelations, “aroused in Britain a feeling of helplessness and a fear of air attack which thereafter were to congeal in British political appeasement…” The British Government would not start thoroughly rearming the RAF until late in 1936, and it would take two more years before Parliament engaged in full-scale rearmament of the other armed services. The first volume of the official history of the RAF during World War II adds that

[...]

In 1937, an opportunity presented itself that allowed Hitler to display the strength of the Luftwaffe. Hitler tasked Commander-in-chief of the Luftwaffe, Hermann Göring, to aid General Francisco Franco’s Nationalists troops during the Spanish Civil War. Göring, like his interwar predecessors, envisioned his force as a tactical support to land operations. Various bombing raids made on Spanish troops confirmed Germany’s air

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280 Postan, *British War Production*, 10-12.
The Spanish Civil War validated “that the proper function of an air force was to pave the way for an advancing army,” and Göring would continue this strategy once the German *Wehrmacht* headed west in the spring of 1940. In his monograph, *The Battle of Britain*, Basil Collier argues that “the Germans went too far by making their air force…an instrument of tactical support,” which would become apparent in the summer and fall of 1940. The German High Command lacked the strategic knowledge needed to carry out their attack on the British Home Islands. Collier adds that “[i]n spite of the German reputation for thoroughness, and the British reputation for muddling through, Fighter Command’s victory was the triumph of foresight and organisation over improvisation and muddled thinking.”

Germany’s involvement in the Spanish Civil War also proved to many in Britain that attack from the air was not as detrimental as previously imagined. While *Luftwaffe* bombing raids had decimated cities, such as the Basque stronghold of Guernica, they did not bring about a swift end to the war. Furthermore, the war convinced officials that a country could actually protect itself against a bombing attack. In fact, Spaight, in his 1940 monograph, *The Sky’s the Limit: A Study of British Air Power*, commented that “[t]he idea that the bomber has not much to fear from the fighter prevailed for some years before the civil war in Spain came to throw doubt upon it.” Moreover, Liddell Hart in his 1939 monograph, *The Defence of Britain*, argues that the “experience in Spain, slight

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as it is, shows signs that air attack is not so overwhelming as popular fears anticipated.”

While the Spanish Civil War granted those fearful of a decisive air attack some reprieve, it finally convinced those in the British Government that the peace they tried to preserve in the interwar years was swiftly deteriorating. In fact, “if the deterioration continued, the outbreak of full-scale war was probable.” The British Government was not prepared for that war and the armed forces were far from up to date. Historians Brian Bond and Williamson Murray, in their study of the British military during the interwar years, argue that throughout the early interwar years the military “forces were too small, ill trained, and lacking in all modern weapons and reserves to meet a sudden crisis.”

In his monograph, The Air War 1939-1945, historian Richard J. Overy recounts that “[i]n 1935 the RAF, under pressure from politicians and senior soldiers, accepted the Re-orientation Plan under which greater emphasis than hitherto was placed on air defence and on the production of defensive fighters and anti-aircraft weapons.” A year later, the Air Ministry reorganized the divisions within the RAF, by creating “Bomber, Fighter and Costal Commands, supported by Training Command and a Maintenance Group (later Maintenance Command).” The Air Ministry placed Air Council member, Air Chief Marshal Hugh Dowding in charge of the fledgling Fighter Command.

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290 Saundby, Air Bombardment, 66-67.
291 Saundby, Air Bombardment, 73.
At the age of eighteen, Hugh Dowding “was commissioned in the Royal Garrison Artillery on 10 August 1900.” After serving around the British Empire, “he transferred in 1904 to the mountain artillery based in Rawalpindi, India.” In 1913, then Captain, Dowding learned to fly, and upon the outbreak of World War I, joined the Royal Flying Corps. While stationed at Brooklands aerodrome in Surrey, Dowding commanded a “wireless experimental establishment. This appointment introduced him to the exciting challenges of rapid communication,” which would become imperative later on. In 1926, Dowding became director of training in the Air Ministry, and four years later, “[h]e joined the Air Council…as a member for supply and research.” Three very important developments got underway while Dowding was a member of the Air Council. In 1934, both the Hawker Hurricane and the Supermarine Spitfire, the heroes of the Battle of Britain “were under development,” and a year later research began on the Radio Direction Finding (RDF) system.

Historian Vincent Orange argues that upon receiving command of Fighter Command, Dowding prepared the world’s first effective air defence system, based on two excellent fighter aircraft…, two chains of coastal [RDF] stations…, and operations rooms, equipped to receive information not only from [RDF] stations but also from members of a revived and ever-expanding observer corps.

There is a historical debate surrounding air defenses in the interwar years, however. John Ferris is one historian who believes that RAF and Air Ministry officials did have faith in

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air defense in the interwar years; that Dowding just built upon an already functional system. Ferris insists that “[a]ir defence did its duty during the first Battle of Britain, and this shaped victory in the second…one. [London Air Defence Area] in 1918 was structurally identical to Fighter Command in 1940 with but a few exceptions: two new features, radar and the filtering room…”  

Additionally, in his article, “Fighter Defence Before Fighter Command: The Rise of Strategic Air Defence in Great Britain, 1917-1934,” Ferris insists that this belief regarding Britain’s air defenses is untrue and was only propagated after World War II by two of the heroes of the Battle of Britain, Sirs Hugh Dowding and Robert Watson-Watt. He contends that Trenchard argued against fighter defense, but only a minority within the Air Ministry shared his views. Instead, Ferris argues that “[v]irtually every other discussant assumed that air defence could be made effective and that the Home Defence Air Force must pursue that aim as a first priority, equalling the development of a bomber force.” For Ferris, the prevailing theory of air defense had been in place since the creation of the London Air Defence Area (LADA) after the German bombing raids of World War I. 

Fighter enthusiast Oliver Stewart, in his *Army Quarterly* analyses of the 1927–1930 air exercises seem to help strengthen Ferris’ assessment of interwar defences. Stewart determined that the air exercises proved the efficacy of fighter forces against

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bomber attack. He asserted, “that the ‘all-bomber’ theory of air war, in which fighters form an almost negligible part of the total force, is discredited. The suggestion is that the ‘all-fighter’ theory is much more nearly right than the ‘all-bomber’ theory.” 306 But his analysis The Royal Air Force Exercises of 1931, intimates as to why Ferris’ evaluation is mistaken. In spite of Stewart’s postulations, there maintained “a tendency [amongst the public and Air Ministry officials] to say: ‘air defence is impracticable, therefore it is not worth devoting much attention to it; let us concentrate on the attack.’”307

Stewart and Ferris, however, underestimated the power and influence of Hugh Trenchard. Historian Barry D. Powers, in his work Strategy Without Slide-Rule: British Air Strategy 1914-1939, indicates that

“Throughout his interwar years of service as CAS, Trenchard was wholly pessimistic about the fighter airplane. He recognised that popular pressure would make the employment of fighters a political necessity but he considered this to be their sole value, a sop to the demands of an ignorant populace and an accommodation to political reality.”308 Trenchard had no faith in the fighter airplane as an effective defense force, and as CAS, he influenced the formation of the RAF. Trenchard and the Air Ministry disregarded the outcome of the exercises to focus on a bomber strategy.

Fortunately for the British, Dowding was one member of the RAF who had disagreed with Trenchard’s offensive strategy since 1918.309 More importantly, however, Dowding believed that aircraft could be defeated in the air through a strong system of

defense. And “[a]t the heart of the air defence system was a technology that was invented just five years before the [Battle of Britain] – RDF.”\(^{310}\) In November 1934, Dowding, following a suggestion by Director of Scientific Research H. E. Wimperis, formed “a sub-committee of the [CID]” entitled the Committee for the Scientific Survey of Air Defence.\(^{311}\) The Committee, later to be called the Tizard Committee after its head, Dr. Henry Tizard, was made up of prominent scientists and Wimperis.

Prior to the formation of the Tizard Committee, however,

the Air Ministry began to seek scientific help to counter [the bomber]. One of the wildest proposals was to direct beams of high frequency radio energy at the bomber so that its metal components would be heated, if not to destruction, at least so as to set off explosions in its bombs, or make conditions intolerable for the crew by heating their body tissue.\(^{312}\)

Consequently, in January 1935, Wimperis contacted scientist Robert Watson-Watt to determine if such a “death-ray” was possible. Watson-Watt determined that, while the “death-ray” was improbable, one could use waves to detect incoming aircraft.\(^{313}\) Thus, “towards the end of the [first meeting of the Tizard Committee on 28 January 1935,] Wimperis intimated that [Watson-Watt] had prepared a memorandum on the uses of short-wave electromagnetic radiation for defence purposes…”\(^{314}\) About one month later, “after a successful experiment to detect an aircraft in flight at

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Daventry...[Dowding]...agreed to spend £10,000 on experiments at Orford Ness, Suffolk.”¹³¹⁵ Watson-Watt’s discovery would develop into the RDF system.

Dowding and the Tizard Committee envisioned a chain of RDF stations, later called the Chain Home (CH) System, running the length of Britain’s eastern coast as well as on the small islands located in the English Channel.¹³¹⁶ After a series of exercises testing RDF stations in 1936, Dowding discovered that the influx of a plethora of information led to confusion amongst the pilots, the controllers, etc. As a result, Dowding developed operational steps that would increase productivity and decrease confusion.

The first step was to route the various radar and ground observer sightings to a filter center at Bentley Priory, Fighter Command Headquarters, to evaluate them for veracity. Filtering these observations...produced the information sent on to the three Fighter Command Groups. There the air situation was also presented to markers designating enemy and friendly units, moved on great map-tables by women and men members of the Air Force...Above, watching the movement of the pieces on the table, sat the controllers, themselves fliers, who sent orders to the pilots by radio-telephone. Command functioned with Dowding making decisions day by day, Group leaders hour by hour, and squadron controllers minute by minute.¹³¹⁷

Tizard biographer Ronald W. Clark argues that RDF and CH “enabled the RAF to win its own Thermopylae” in 1940.¹³¹⁸

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In May 1940, the Germans started their assault on Belgium and France. By June 1940, the French Government had fallen under Nazi control, and the British Expeditionary Force, sent to the Continent to aid the French, was stranded at the French

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¹³¹⁶ For a chart showing the various RDF stations, see Appendix C.
town of Dunkirk. In the aftermath of the fall of France, “it was obvious...that an attack was coming, and that it would be mounted from airfields extending from Brittany to Scandinavia.”\footnote{Sebastian Cox, “A Comparative Analysis of RAF and Luftwaffe Intelligence in the Battle of Britain, 1940,” \textit{Intelligence and National Security} 5, no. 2 (1990): 428.} Despite the Air Ministry’s earlier trust in bombers, “Bomber Command was not fully in a position to deliver major attacks on Germany until 1942, and even then it was 1943 before its campaign was able to reach the levels...of the kind desired by its planners and prosecutors.”\footnote{A. C. Grayling, \textit{Among the Dead Cities: The History and Moral Legacy of the WWII Bombing of Civilians in Germany and Japan} (New York: Walker & Company, 2006), 24.} Thus, it was up to Hugh Dowding and Fighter Command to save Britain.

Prior to 1940, Hitler had no intentions of attacking the British Isles. He believed that he would be able to come to a separate peace with the British. Once it became clear that the British would not give up the fight, Hitler issued Directive No. 16, which called for the preparation of an invasion of Great Britain, named \textit{Unternehmen Seelöwe} (Operation Sea Lion).\footnote{Cooper, \textit{The German Air Force 1933-1945}, 130.} Due to the strength of the Royal Navy, Hitler knew that before he could dispatch an invasion force, the German military needed to defeat any military opposition remaining in the English Channel or on the Home Island itself. The Air Ministry’s published account of the Battle explained to the readers that “[b]efore the German Army could land it was necessary to destroy [British] coastal convoys, to sink or immobilise such units of the Royal Navy as would dispute its passage, and above all to drive the [RAF] from the sky.”\footnote{The Battle of Britain: \textit{An Air Ministry Account of the Great Days from 8th August – 31st October 1940} (London: His Majesty’s Stationary Office, 1941), 10.}
The dates regarding the Battle of Britain are often debated amongst historians and those involved in the fighting. This paper will separate the Battle into four different phases, lasting from July 1940 to mid-September 1940. During the first phase of the Battle of Britain, July to August, the German Luftwaffe attacked British shipping. Basil Collier explains that with this first phase, Kanalkampf, the Luftwaffe intended to “establish local superiority over the Straits of Dover, temporarily close the Straits to British shipping in daylight, test Dowding’s strength and induce him to wear out his forces prematurely.” Unfortunately for Göring, the Luftwaffe did not accomplish any of these tasks. The majority of the attacks on the Channel did not tempt Dowding to send out his fighters. In fact, “[o]nly when targets on the mainland were threatened…would the RAF give combat, and then its pilots took care only to engage enemy bombers, and to avoid fighters whenever possible.” Dowding preferred to preserve his fighter force “for the great onslaught which was believed to be coming.” And by 8 August, Luftwaffe pilot’s “were no longer in doubt that the RAF would prove a most formidable opponent.”

Dowding’s theory was correct – the Germans had planned for a massive attack. Göring’s plan of air attack for the British mainland, named Adlerangriff (Eagle Attack), called for a combination of Luftwaffe fighter and bomber craft to destroy the British fighters…in the air and on the ground by concentric attacks moving progressively inland, starting for the first five days with targets within a radius of

323 Collier, The Battle of Britain, 24 and 165-166.
324 Collier, The Battle of Britain, 24.
325 Cooper, The German Air Force 1933-1945, 129.
326 Cooper, The German Air Force 1933-1945, 129.
150 to 100 km south of London. For the next three days they would [then] concentrate on targets between 100 and 50 km from London, and for the final five days, on the area within 50 km. After this fortnight of assault, it was hoped, the invasion could be launched.\textsuperscript{328}

Göring initiated these attacks on 13 August, which he named \textit{Adler-Tag}, or Eagle Day. The \textit{Luftwaffe} targeted British aerodromes and aircraft factories in Southeast England as well as periodic attacks on RDF stations.\textsuperscript{329}

German High Command underestimated Britain’s defense through CH. In a memo circulated to the different German air divisions on 8 August, Colonel ‘Beppo’ Schmid, head of the 5th \textit{Abteilung}, or the Air Intelligence Department within the \textit{Luftwaffe} General Staff, predicted\textsuperscript{330}:

\begin{quote}
'As the British fighters are controlled from the ground by [radio-telephones] their forces are tied to their respective ground stations and are thereby restricted in mobility… Consequently the assembly of strong fighter forces at determined points and at short notice is not to be expected. A massed German attack on a target area can therefore count on the same conditions of light fighter opposition as in attacks on widely scattered targets.'\textsuperscript{331}
\end{quote}

Moreover, Schmid “concluded that mass attacks would swamp the system, whereas they were in fact easier to detect as they formed up over the Continent and easier to track on their way to their targets, which made it easier to concentrate defending squadrons

\begin{flushright}
\textsuperscript{330} Cox, “A Comparative Analysis of RAF and Luftwaffe Intelligence in the Battle of Britain, 1940,” 426-427.
\end{flushright}
against them.”

In the midst of the second phase, 15 August, RDF “had its greatest moment” – Fighter Command was able to surprise Luftwaffe forces and inflict massive casualties while sustaining scarcely any themselves. Historian Angus Calder, in his monograph The People’s War: Britain 1939–1945, posits that “[h]ad the radar chain not existed, Fighter Command would have wasted its strength ineffectually in standing patrols; as it was, the British planes could rise relatively late to anticipate the intruders.”

The third phase of attack began on 24 August with “intensified attacks on British airfields…”. These attacks did weaken Fighter Command, but the “British fighters concentrated on intercepting the German bombers and avoided engagements merely with German fighters.” In addition, due to two errors made by the Germans, one intentional and one accidental, the third phase would be Sea Lion’s undoing. First, Göring decided that the RDF stations were “difficult to destroy because of their construction, [therefore they] would [no longer] be a target for the Luftwaffe.” Unfortunately for the Germans, Göring “failed to appreciate the crucial role of the air defence system when making their target selection.” If they had, then they would have sustained their attacks. Ironically,
the German attacks had knocked out the RDF station on the Isle of Wight, which remained inoperable for the remainder of the war.\footnote{Cooper, The German Air Force 1933-1945, 144.}  

Second, as part of the renewed attacks on 24 August, the Luftwaffe flew a bombing sortie that night “seeking to bomb oil tanks at Thameshaven and Rochester.” Instead, the dozen German aircraft “dropped their explosives on central London, the first [attack] since 1918.”\footnote{Fredette, The Sky on Fire, 248.} While this bombing attack on London was unintentional, the government in London had no way of knowing the German’s true intentions – they only had historical precedent to fall back on. In fact, Hitler “forbade terror bombing raids” on London and ordered Göring to avoid large casualties among the civilian population.\footnote{Boog, “The Luftwaffe and the Battle of Britain,” 19.} In response to the supposed attacks on London, Prime Minister Winston Churchill and the Air Ministry sanctioned a weeklong, nighttime bombing raid on Berlin.\footnote{Fredette, The Sky on Fire, 248.}  

Historian A. C. Grayling, in his monograph Among the Dead Cities: The History and Moral Legacy of the WWII Bombing of Civilians in Germany and Japan, reasons that “[t]he material effect of the raid was that a few bombs fell on the outskirts of Berlin, doing scarcely any harm to anything other than G[ö]ring’s reputation, for he had been adamant beforehand that the RAF would never be able to bomb the city.”\footnote{Grayling, Among the Dead Cities, 38.} More importantly, however, the raids shocked Berliners and “[m]orale plummeted.”\footnote{Grayling, Among the Dead Cities, 38.} In a 4 September speech, “Hitler announced to a wildly emotional crowd that ‘such attacks on our cities’ would be met by ‘razing their cities to the ground.’”\footnote{Fredette, The Sky on Fire, 248.} The final phase of the
Battle of Britain commenced on 7 September, with a daylight-bombing raid on London’s docks. Simultaneously, the Luftwaffe, in what would be called the Blitz, launched nighttime raids on London. Göring’s forces were unable to unnerve the RAF, however. In fact, “[d]uring the afternoon raid [on 15 September,] the long-awaited all-out fighter battle at last took place…over London and its outskirts.” The Air Ministry’s pamphlet on the Battle of Britain exclaimed that “[t]he enemy soon realised that out defence was awake and active, for the German pilots could be heard calling out to each other over their wireless ’phones ‘Achtung, Schpitfeuer!’” By 17 September 1940, Hitler, having accepted that the Luftwaffe had failed to gain air supremacy, postponed the invasion of England. Fighter Command, the Cinderella force, had defeated the German bomber.

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Throughout the interwar years in Britain, there was a very real fear of an attack from the sky. Air enthusiasts, such as Chief of the Air Staff Hugh Trenchard, used apocalyptic rhetoric to draw on these fears, and to advocate a build up in the Royal Air Force in order to deter any potential enemy. Air power historian, Tami Davis Biddle, argues that those frightening descriptions of air war, published in popular books and journals all through the 1920s and 1930s, undermined faith that Britain’s existing bomber force might serve as an adequate deterrent to war, helping to create an outspoken public campaign supporting disarmament. Ironically, if the fear of strategic bombing had earlier helped to secure the independence of the RAF, it later lent energy and urgency to international [diplomatic] efforts. 

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350 Biddle, Rhetoric and Reality in Air Warfare, 102-103.
The British Government, instead of granting Trenchard the bomber force he desired, decided to try to prevent future wars through international diplomacy. And once Parliament finally agreed to rearm the nation in the late 1930s, they focused on building up Britain’s home defenses and Fighter Command, not Bomber Command. Despite Britain’s early diplomatic and strategic inflexibility, the Royal Air Force was able to defeat the dreaded bomber due to strong defensive system, especially the Chain Home System, and Fighter Command.
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APPENDIX A: JAMES M. SPAIGHT’S CODE FOR AIRCRAFT IN WAR⁵⁵¹

ARTICLE 1

An aircraft shall be considered to be a military aircraft and its crew to be belligerents provided the aircraft is under the direct authority, immediate control, and responsibility of a belligerent Power, that it bears the distinctive sign of its character as a military aircraft of the said Power, irremovable and recognisable at a distance, and that its crew are subject to military discipline, observe the laws and customs or war and wear the uniform or other distinguishing emblem of their national forces.

ARTICLE 2

The crews of all other aircraft engaging in any act of hostilities may be brought before the courts as unqualified belligerents, and the aircraft may be confiscated.

An ‘act of hostilities’ includes the conveyance of individual passengers who are embodied in the armed forces of the enemy, the transmission of intelligence in the interest of the enemy (whether by carrying messages or dispatches, or by the use of code lamps, signals, or wireless telegraphy), and the carriage of munitions of any kind.

ARTICLE 3

The crews of military aircraft are, in respect of everything that concerns them as individuals in the armed service of a belligerent, under the domain of the various Declarations and Conventions which regulate war and neutrality, so far as the said Declarations and Conventions are not inconsistent with the provisions of the present code.

ARTICLE 4

Private enemy aircraft may be seized by a belligerent, but they must be restored at the peace without indemnity; or, if their destruction be imperatively demanded by the necessities of war, the compensation to be paid shall be arranged at the peace.

The above provision applies equally to private aircraft designed or equipped for war and to aircraft not so designed or equipped.

ARTICLE 5

The neutral or enemy character of an aircraft is determined by the distinctive sign of nationality which it has the right to bear.

ARTICLE 6

Private enemy aircraft may be confiscated: –
(1) if they circulate in a belligerent’s zone of operations, on land or seas, or in the vicinity of his troops, warships, military aircraft, transports, military works, military or naval establishments, stores, depots, workshops, etc.;
(2) if they disobey a belligerent’s orders or his prescribed signal or warning to land.

ARTICLE 7

Private enemy aircraft may only be fired upon, endangered, or destroyed in flight:
(1) if they engage in any act of hostilities, as defined in Article 2, or of espionage;
(2) if they disobey a belligerent’s orders or his prescribed signal or warning to land;
(3) if the circumstances of the case are such that a belligerent is forced by imperative military necessity to omit the signal or warning to land which humanity demands.

ARTICLE 8

The crew of a private enemy aircraft can only be considered suspected of espionage if they obtain or seek to obtain information above the territory or territorial waters of a belligerent, or above territory or territorial waters occupied or held by his military or naval forces, or above his squadrons, warships, transports, or aircraft, or, generally, in the zone of his operations, with the intention of communicating the information to the hostile party.

In the case of enemy military aircraft acting in the same way, the crew can only be considered suspected of espionage if they disguise or try to disguise their aircraft’s real character as an enemy military aircraft, or otherwise act on false pretences.

When an individual lands from aircraft to carry out a service of espionage, his case falls, in accordance with the general principle, under the rules of governing espionage in land warfare.

Persons suspected of espionage may be brought before the courts; they cannot be punished without previous trial, and cannot, after rejoining their forces, be punished on subsequent capture for past acts of espionage.

Aircraft concerned in espionage may be confiscated.

ARTICLE 10

The provisions of the Hague Convention of Bombardment by Naval Forces in Time of War shall be applied, as far as possible, to bombardments by aircraft.
Bombardments by aircraft must in all cases be authorised by the Admiral or General in command of the force to which the aircraft are attached.

**ARTICLE 11**

Belligerent military aircraft are forbidden to enter the territory, territorial waters, or atmosphere of a neutral Power.

**ARTICLE 12**

A neutral Power is bound to exercise such vigilance as the means at its disposal permit to prevent any violation of the provisions of Article 11. It is bound to take such measures as are necessary and possible to take possession of belligerent military aircraft entering its territory, territorial waters, or atmosphere, whether voluntarily or under *force majeure*, and to detain the aircraft under the peace. The crew of such aircraft shall be dealt with in the same way as the land forces of a belligerent entering neutral territory.

**ARTICLE 13**

As an exception to the provisions of Articles 11 and 12, an aircraft which is permanently assigned to a battleship and usually accompanies it, shall be regarded as forming part of the battleship so long as it remains in actual combat therewith.

**ARTICLE 14**

The supply in any manner, directly or indirectly, by a neutral Power to a belligerent Power, of aircraft, or the parts, materials, accessories, or anything which can be used in the manufacture, fitting, and arming of aircraft, is forbidden.

**ARTICLE 15**

A neutral Power is not bound to prevent the export or transit, on behalf of either belligerent, or aircraft or their parts, materials, accessories, or fittings.

**ARTICLE 16**

A neutral Power, whose frontiers border a belligerent’s frontiers, is bound to exercise such vigilance as the means at its disposal permit to prevent its atmosphere from being used for the purpose of observation, on behalf of one belligerent, of the movements, defences, etc., of the other.
 ARTICLE 17

As regards the use by belligerent military aircraft of wireless telegraphy stations (or other signalling apparatus) erected on neutral territory, the provisions of Articles 3, 8, and 9 of the Hague Convention on the Rights and Duties of Neutral Powers and Persons in Land War, and of Article 5 of the Hague Convention on the Rights and Duties of Neutral Powers in Maritime War, are applicable.

 ARTICLE 18

Neutral aircraft found by a belligerent in the territory or territorial waters of the enemy may be treated as private enemy aircraft.

The release of such aircraft, with or without conditions, may, however, be made the subject of arrangement between the belligerent and the Government of the neutral owner’s State.

 ARTICLE 19

An aircraft consigned by a neutral contractor, by way of air, to the territory or territorial waters of a belligerent, or to the territory occupied by his troops, or to his fleet or aircraft, may be seized by the other belligerent (but must be restored, without indemnity, at the peace), provided either

(1) that it is designed or fitted for use in war, or, if it is not so designed or fitted,
(2) that it is proved to be destined for the use of the armed forces or of a Governmental Department of the enemy.

Such aircraft may only be destroyed if imperative military demands, and in this case the compensation to be paid shall be arranged at the peace.

 ARTICLE 20

The provisions of Articles 2, 6, 7, and 8 apply also to neutral aircraft.

The crews of such aircraft may be brought before the courts in the same circumstances as private enemy airmen (see Articles 2 and 8), but they shall not be liable to be made prisoners of war by a belligerent unless they are nationals of the other belligerent State.

Such members of the crews of private enemy aircraft confiscated under Article 6, or sequestrated under Article 4, as are national of a neutral State, shall not be made prisoners of war, provided they give a formal promise in writing not to return to the enemy country nor to serve the enemy in any way while the war lasts.

Their names shall be notified by the belligerent captor to the other belligerent, who is forbidden knowingly to employ them.
APPENDIX B: GENERAL REPORT OF THE COMMISSION OF THE JURISTS AT

THE HAGUE\textsuperscript{352}

PART II

CHAPTER IV

Bombardment

The subject of bombardment by aircraft is one of the most difficult to deal with in framing any code of rules for aerial warfare.

The experiences of the recent war have left in the mind of the world at large a lively horror of the havoc which can be wrought by the indiscriminate launching of bombs and projectiles on the non-combatant populations of towns and cities. The conscience of mankind revolts against this form of making war in places outside the actual theatre of military operations, and the feeling is universal that limitations must be imposed.

On the other hand, it is equally clear that the aircraft is a potent engine of war, an no state which realizes the possibility that it may itself be attacked, and the use to which its adversary may put his air forces can take the risk of fettering its own liberty of action to an extent which would restrict it from attacking its enemy where that adversary may legitimately be attacked with effect. It is useless, therefore, to enact prohibitions unless there is an equally clear understanding of what constitutes legitimate objects of attack, and it is precisely in this respect that agreement was difficult to reach.

Before passing to a consideration of the articles which have been agreed, mention must be made of the Declaration Prohibiting the Discharge of Projectiles and Explosives from Balloons, signed at the Hague in 1907. Three of the states represented on the Commission\textsuperscript{353} are parties to that declaration; the other three are not. Under the terms of this declaration the contracting powers agree to prohibit the discharge of projectiles and explosives from balloons or by other new methods of similar nature. Its terms are, therefore, wide enough to cover bombardment by aircraft. On the other hand, the scope of the declaration is very limited; in duration it is to last only until the close of the third peace conference, a conference which was to have been summoned for 1914 or 1915, and its application is confined to a war between contracting states without the participation of a non-contracting state.

The existence of this declaration can afford no solution of the problems out of the question of bombardment from the air, even for the states which are parties to it.

The number of parties is so small that, even if the declaration were renewed, no confidence could ever be felt that when a war broke out it would apply. A general agreement, therefore, on the subject of bombardment from the air is much to be desired.


\textsuperscript{353} United States of America, Great Britain and the Netherlands.
For the states which are parties to it, however, the declaration exists and it is well that the legal situation should be clearly understood.

As between the parties it will continue in force and will operate in the event of a war between them, unless by mutual agreement its terms are modified, or an understanding reached that it shall be regarded as replaced by some new conventional stipulation; but it will in any case cease to operate at the moment when a third peace conference concludes its labors, or if any state which is not a party to the declaration intervenes in the war as a belligerent.

**ARTICLE 22**

Aerial bombardment for the purpose of terrorizing the civilian population, of destroying or damaging private property not of military character, or of injuring non-combatants is prohibited.

**ARTICLE 23**

Aerial bombardment for the purpose of enforcing compliance with requisitions in kind or payment of contributions in money is prohibited.

**ARTICLE 24**

(1) Aerial bombardment is legitimate only when directed at a military objective, that is to say, an object of which the destruction or injury would constitute a distinct military advantage to the belligerent.

(2) Such bombardment is legitimate only when directed exclusively at the following objectives: military forces; military works; military establishments or depots; factories constituting important and well-known centres engaged in the manufacture of arms, ammunition, or distinctively military supplies; lines of communication or transportation used for military purposes.

(3) The bombardment of cities, towns, villages, dwellings or buildings not in the immediate neighborhood of the operations of land forces is prohibited. In cases where the objectives specified in paragraph 2 are so situated, that they cannot be bombarded without the indiscriminate bombardment of the civilian population, the aircraft must abstain from bombardment.

(4) In the immediate neighborhood of the operations of land forces, the bombardment of cities towns, villages, dwellings or buildings is legitimate provided that there exists a reasonable presumption that the military concentration is sufficiently important to justify such bombardment, having regard to the danger thus caused to the civilian population.

(5) A belligerent state is liable to pay compensation for injuries to person or to property caused by the violation by any of its officers or forces of the provisions of this article.
ARTICLE 25

In bombardment by aircraft, all necessary steps must be taken by the commander to spare as far as possible buildings dedicated to public worship, art, science, or charitable purposes, historic monuments, hospital ships, hospitals and other places where the sick and wounded are collected, provided such buildings, objects or places are not at the time used for military purposes. Such buildings, objects and places must by day be indicated by marks visible to aircraft. The use of marks to indicate other buildings, objects, or places than those specified above is to be deemed an act of perfidy. The marks used as aforesaid shall be in the case of buildings protected under the Geneva Convention the red cross on a white ground, and in the case of other protected buildings a large rectangular panel divided diagonally into two pointed triangular portions, one black and the other white.

A belligerent who desires to secure by night the protection from the hospitals and other privileged buildings above mentioned must take the necessary measures to render the special signs referred to sufficiently visible.

ARTICLE 26

The following special rules are adopted for the purpose of enabling states to obtain more efficient protection for important historic monuments situated within their territory, provided that they are willing to refrain from the use of such monuments and a surrounding zone for military purposes, and to accept a special régime for their inspection.

(1) A state shall be entitled, if it sees fit, to establish a zone of protection round such monuments situated in its territory. Such zones shall in time of war enjoy immunity from bombardment.

(2) The monuments round which a zone is to be established shall be notified to other Powers in peace time through the diplomatic channel; the notification shall also indicate the limits of the zones. The notification may not be withdrawn in time of war.

(3) The zone of protection may include, in addition to the area actually occupied by the monument or group of monuments, and outer zone, not exceeding 500 metres in width, measured from the circumference of the said area.

(4) Marks clearly visible from aircraft either by day or by night will be employed for the purpose of ensuring the identification by belligerent airmen of the limits of the zones.

(5) The marks on the monuments themselves will be those defined in Article 25. The marks employed for indicating the surrounding zones will be fixed by each state adopting the provisions of this article, and will be notified to other Powers at the same time as monuments and zones are notified.

(6) Any abusive use of the marks indicating the zones referred to in paragraph 5 will be regarded as an act of perfidy.
(7) A state adopting the provisions of this article must abstain from using the monument and the surrounding zone for military purposes, or for the benefit in any way whatever of its military organization, or from committing within such monument or zone any act with a military purposes in view.

(8) An inspection committee consisting of three neutral representatives accredited to the state adopting the provisions of this article, or their delegates, shall be appointed for the purpose of ensuring that no violation is committed of the provisions of paragraph 7. One of the members of the committee of inspection shall be the representative (or his delegate) of the state to which has been entrusted the interests of the opposing belligerent.
APPENDIX C: THE RADAR STATIONS OF GREAT BRITAIN – SEPTEMBER

1940