

AIR WAR COLLEGE AIR UNIVERSITY

MILITARY STRATEGY IN THE BATTLE OF BRITAIN: A CROWLIAN ANALYSIS

by

John D. Lauher Lt Colonel, USAF

A RESEARCH REPORT SUBMITTED TO THE FACULTY

IN

FULFILLMENT OF THE RESEARCH

REQUIREMENT

Research Advisor: Lt Colonel Joseph E. Ryan

MAXWELL AIR FORCE BASE, ALABAMA

May 1986

DISCLAIMER-ABSTAINER

This research report represents the views of the author and does not necessarily reflect the official opinion of the Air War College or the Department of the Air Force.

This document is the property of the United States government and is not to be reproduced in whole or in part without permission of the commandant, Air War College, Maxwell Air Force Base, Alabama.

the second se	
Accession For	
NTIS GRA&I	
DTIC TAB	
Unannounced	
Justification	
By	
Distribution/	
Availability Codes	
Avail and/or	
Dist Special	
	\square
	DITIO
A-1	COPY
W	INSPECTED

ii

ひいしょう

AIR WAR COLLEGE RESEARCH REPORT ABSTRACT

TITLE: Military Strategy in the Battle of Britain: A Crowlian Analysis

AUTHOR: John D. Lauher, Lieutenant Colonel, USAF

and the second s

Printing Contract (Allowers Allower Printing)

The author uses an analysis technique proposed by Philip A. Crowl to analyze the military strategy of the Battle of Britain. Crowl's method involves evaluating a series of questions intended to be asked by strategists as they plan for future wars. After sketching the background of the battle, the author examines the objective of the campaign from both sides and evaluates whether the military strategies were tailored to meet the respective national political objectives. Next the limits of military power are detailed followed by an evaluation of the military alternatives. The analysis concludes with a detailed discussion of public support for the battle and an opinion on whether or not too many parallels were drawn with past successes, while military failures were overlooked in the planning process.

The author concludes that Germany lost the Battle of Britain primarily because she had no clearly defined objective, failed to recognize the limits of her military power, and lacked a carefully planned alternate course of action. The paper closes with a discussion of current US military strategy and compares our current philosophy with Crowl's questions. It appears that current US strategy has not overlooked the lessons learned from history's first significant air battle.

iii

BIOGRAPHICAL SKETCH

Lieutenant Colonel John D. Lauher (M.S., University of Arkansas, M.M.A.S., US Army Command and General Staff College) has been a student of the Battle of Britain since he was stationed in England in 1970. While there, he had the opportunity to travel extensively and discuss the battle with several pilot participants. In addition to his tour in the United Kingdom, Colonel Lauher has served overseas in Vietnam as well as the Federal Republic of Germany. Colonel Lauher is a career fighter pilot with more than 3,000 flying hours in the F-4 and F-15 who holds the Distinguished Flying Cross and Air Medal with 12 oak leaf clusters. He is a graduate of the US Army Command and General Staff College, as well as the Air War College, class of 1986.

TABLE OF CONTENTS

je.

CHAPTER		PAGE
	DISCLAIMER-ABSTAINER	ii
	ABSTRACT	iii
	BIOGRAPHICAL SKETCH	iv
I	INTRODUCTION	1
-	Background	1
II	ANALYSIS	4
	Is the National Military Strategy Tailored to Meet the National	4
	Political Objectives	7
	What Were the Limits of Military Power	11
	What Were the Alternatives	14
	How Strong Was the Home Front	17
	Does Today's Strategy Overlook Points of	
	Difference and Exaggerate Points of Likeness Between Past and Present	18
III	CONCLUSION: WHAT HAVE I OVERLOOKED	21
	What Does it Mean Today	22
	LIST OF REFERENCES	25

CHAPTER I

INTRODUCTION

As part of our Air War College studies we have looked at how military strategy is derived and how it relates to national strategy as a component part. This course of study has included exposure to various methods of analyzing military strategy, including one formulated by Philip A. Crowl which involves a series of questions intended to be asked by strategists planning *i*uture wars. According to Crowl, history suggests that there are at least six questions "that strategists must ask before they commence a war, or . . . undertake a wartime campaign." (10)

My objective in this paper is to apply Crowl's six questions along with a measure of hindsight and perform an analysis of military strategy in the Battle of Britain. Ferhaps by applying Crowl's work as we look at the past we can better understand why Germany was defeated in the campaign which many consider the turning point of World War II.

More importantly, by logically examining Germany's mistakes in planning her military strategy against Britain, we should be able to gain insight into how the strategy formulation process ought to work. Today's military strategists will profit from the lessons written in history s first significant air battle.

BACKGROUND

For two hectic months in 1940--from 8 August through 31 October--a fierce aerial battle raged over London and much of southeastern England. The British Air Ministry, reflecting on the superb accomplishments of the Royal Air Force (RAF), designated this the first great air battle in history. It is especially significant to airpower proponents in that, to date, it is the only military campaign fought exclusively in the air. With that in mind, let us examine the military situation that existed just prior to the Battle of Britain and that led to its outbreak.

ŝ

In early 1940, Germany found herself firmly ensconced in France. France's rapid fall put Germany in a strong position she had not anticipated gaining so quickly. Although she had not initially intended to directly attack England, the temptation presented after the evacuation at Dunkirk was too great. (19:69) Hitler now saw England as the military center of gravity in a Clausewitzian sense, claiming "England is the driving force against Germany. The aim will always be to force England to her knees." (15:139) Hitler hoped England would see the futility of her position and begin peace negotiations with Germany. After all, in addition to the massed ground forces poised across the channel, the Luftwaffe had the combined forces of three air fleets located at 79 different bases along the coasts of Belgium, Holland, Norway, France and Denmark. They totalled 3500 bombers, fighters and dive bombers capable of reaching

at least some portion of the English countryside. (2:51)

Winston Churchill, however, paid little attention to the negotiation demands. England would put up a struggle instead. This spirit was characteristic of much of the next several years' activities and certainly was the key to the battle which would consume those 84 days in 1940. When Hitler realized negotiations were not forthcoming, he issued the following directive:

Since England, in spite of her hopeless military situation, shows no signs of being ready to compromise, I have decided to prepare a landing operation against England and, if necessary, to carry it out. (12:28)

The operation, named Sea Lion, was to be an extremely optimistic all-out assault involving naval, air and land forces. Although the plan was never executed--forces proved insufficient and the English channel posed too difficult an obstacle--the Luftwaffe did develop a two part plan to support the operation. Simply put, it was envisioned that the Luftwaffe would destroy her counterpart, the RAF, and separate Britain from her supply routes. By smashing fighter defenses and attacking staging and home bases, the Luftwaffe would gain air superiority, allowing concentrated attacks on shipping and port facilities. (5:79) This operation, and the opposition posed by the RAF, became known as the Battle of Britain.

З.

CHAPTER II

ANALYSIS

CROWL'S FIRST QUESTION--WHAT IS IT ABOUT?

The real question is, of what interest, what objective, was a German air attack on England? As previously cited, Hitler felt England was the center of gravity. To defeat her would remove the force on his western flank, a force which might negate or challenge everything he had gained in his lightning push through Belgium and France. He could also gain greater security and freedom for naval fleet operations in the Atlantic and North Atlantic. In addition, he was looking to the East. If he could eliminate Britain as a threat, either through military victory or peace negotiations, he could then concentrate on Russia without having to maintain two major fronts. In order to accomplish this, Hitler's military strategy was quick victory over Unfortunately for Hitler, many German failures England. throughout the early years of World War II w re "due to the way that the country's leaders clung to the hope of the 'quick war'." (12:241)

On 30 June 1940, Major General Jodl, Hitler's closest military advisor, expressed the view that the final German victory over England was not far away. He had good reason to be confident. As a result of a series of victories unparalleled since the days of Napoleon, Germany was the

master of western Europe. The highly respected French Army had been destroyed in a campaign lasting barely six weeks. The British, who had sent a token force to France and Belgium, had been pushed off the continent by the advancing Germans. Although the greatest part of the British Expeditionary Force had managed to escape, it had been compelled to abandon almost all of its heavy equipment and, as a result, was temporarily incapable of offensive action. (21:3)

With the fall of France, Britain lost her only ally in Europe. Despite Churchill's defiant speeches, many, including Fresident Roosevelt and his advisors, doubted whether Britain would be able to resist the anticipated German onslaught.

Ironically, it was the magnitude of their victory over France which caused the German offensive to stall. No plans hid been made for a direct attack on England because the possibility that the Wehrmacht would inflict such a decisive defeat on the French Army so quickly had scarcely been contemplated. (21:6) The best Hitler had hoped for was to occupy bases in the low countries and northern France from which a naval blockade and air assault could be mounted against the British Isles. On 21 May 1940, after the German armor had reached the channel coast, Hitler briefly discussed the idea of invading England with the Commander of his Navy, Admiral Raeder; however, preoccupation with finishing the

Battle of France and then with armistice negotiations precluded their giving too much thought to the matter. (21:7)

In any case, Hitler was convinced that the British, for whom he had a grudging respect, would recognize the hopelessness of the situation and petition for peace. Hitler was anxious to bring the war to a speedy conclusion so that he could fulfill the mission which had always been his ultimate goal: the carving out of a great land empire in the east. (21:31)

Hitler understood that war is costly in terms of lives and money, but is not too high a price to pay if there is great value attached to the objectives to be gained. He undoubtedly saw this battle in that light. His strategy was therefore to attack England through concentrated attacks on the RAF and Fighter Command which he saw as Britain's military center of gravity.

Britain, on the other hand, saw her position primarily as a drivensive one, and this defense, militarily, fell primarily to the RAF. Her national objective at that point was basic survival and protection of the homeland. (22:141) She was willing to fight an attrition war if necessary to convince her enemies, in this case Germany, that long, painful war would not be worth undertaking. (22:176)

Air Chief Marshall Sir Hugh Dowding, Commander in Chief, Fighter Command, structured his concept of defense

around three primary objectives. These were to prevent destruction of his fighter forces, to inflict maximum destruction on enemy air forces, and to preserve enough of his fleet and strength during these actions to enable them to remain viable in any future, potential invasion of England. (23:14) Obviously, that constituted a very defensive strategy intended to support Britain's national interests. This leads directly to Crowl's second question.

IS THE NATIONAL MILITARY STRATEGY TAILORED TO MEET THE NATIONAL POLITICAL OBJECTIVES?

Crowl's second question concerns itself not with the decision to go to war, but with the proper methods of fighting the war once it starts. Let us now examine how well Germany and Britain tailored their respective military strategies in support of national political objectives.

Germany's national objectives were expanding. The spread of Nazism and the domination of Europe constituted her major objectives. To this end, she had already spread forces to the channel; a juncture at which Hitler was to experience his first disappointment of the war.

Hitler's hopes for a settlement with Britain were not fully dispelled until the third week of July when Churchill contemptuously rejected the German's ill-conceived peace offer. (21:23) In the meantime, Hitler and his advisors had begun to consider the possible courses of action should the British refuse to see reason. Britain, with her tactically advantageous location, powerful navy and rapidly expanding air force, would be an awkward opponent for the Wehrmacht, which had been designed for continental warfare. Germany's naval weakness and lack of long-range aircraft ruled out a strategy of blockade. Even if the forces had been available for such a plan, its execution would be far too time consuming for a man with as little patience as Hitler. An invasion seemed the quickest and surest method of conquering Britain; however, the Royal Navy's overwhelming superiority in surface ships complicated this plan. It was clear that troops could only be landed once air superiority had been achieved and even then there would be a great deal of risk.

Unlike some of his generals, Hitler did not regard the voyage across the channel as merely an extended river crossing. (13:143) As Admiral Raeder was quick to point out, the navy's huge losses during the Norwegian campaign would allow her to provide little or no protection for the invasion fleet. Hitler agreed that the invasion should be a last resort measure, to be exercised only when the British had been softened by air bombardment. If, as its Commander Herman Goering boasted, the Luftwaffe was capable of single-handedly defeating Britain, the British government might capitulate before the first German assault troops crossed the channel. (5:126)

On 16 July, Hitler announced in a directive that he had decided to prepare for, and if necessary carry out, an invasion of England. The operation was to be code named Sea

Lion and preparations were to be completed by the middle of August. A lack of inter-service cooperation doomed the project from the start, however. Goering could not be bothered by Sea Lion and did not attend a single planning session even though the other services were relying upon the Luftwaffe to establish the conditions for the landing. 0n 1 August 1940, disputes between the army and navy over a number of issues led to the postponement of Sea Lion until the middle of September. On the same day Hitler, who was becoming impatient with Goering's attitude, ordered the Luftwaffe to begin intensified warfare against England before 5 August. The Royal Air Force was to be neutralized as quickly as possible after which the attacks were to be directed against ports. Facilities on the south coast which might be needed for Sea Lion were, however, to be spared. (5:130)

Goering issued his tactical instructions for the air offensive, which he christened Eagle, on 2 August. The low esteem in which he held the Royal Air Force is demonstrated by the fact that he allowed only four days for its elimination south of a line from Gloucester to London and four weeks for its total annihilation. (5:132)

Was the German military strategy tailored to meet the national political objectives of this important campaign? While we have determined that the national interests that led to the Battle of Britain were suspect, I contend that the

military strategy that evolved to achieve those objectives was basically sound. Hitler and his generals correctly analyzed the geographical and military constraints associated with attacking England and developed a plan to overcome those obstacles. However, a general lack of support as well as equipment limitations would severely hamper the execution of this plan as we shall see.

10

Britain's problem was a much simpler one. Her national objective was survival. Consequently, British leaders had placed heavy reliance on defensive forces to protect homeland, industry and sea lanes. (22:141) As noted already, Sir Hugh Dowding's objectives for Fighter Command were designed with this closely in mind. As a result, the defensive strategy of the British military was tailored effectively. In fact, political, military and economic planners had all coordinated their efforts to developing this defensive strategy.

Early in the battle, the Luftwaffe targeted shipping in the channel in an attempt to draw Fighter Command away from their bases. The fact that the British fighters were not allowed to respond is an indication of Britain's commitment to close defense and Dowding's determination to make that concept work. (12:124) By not engaging German fighters far over the channel, the RAF succeeded in drawing the Luftwaffe closer and closer until it was in the RAF's best interest to attack, exploiting the tactical advantage they enjoyed in their own airspace.

There were heavy losses on both sides and much of southern England felt the sting of German bombs, but Britain's strategy proved effective. Her national objective was attained, and Germany was forced to expend her efforts and resources unsuccessfully, largely because they did not understand the issue addressed by Crowl's next question.

WHAT WERE THE LIMITS OF MILITARY POWER?

This next step in Crowl's evaluation process involves weighing one's own resources and comparing the result to the resources of your enemy and his allies. We have already seen that the German Navy was well aware of its inability to muster sufficient power to challenge the Royal Navy in the channel. Unfortunately for Germany, the Luftwaffe was not as honest in its self evaluation.

Goering's confidence in his air arm was not totally unfounded, however. Although the Luftwaffe had officially been in existence for little more than five years, it had already acquired a legendary reputation. It had played a spectacular and decisive role in the Polish, Norwegian, and French campaigns. The setback it had suffered at the hands of the RAF over Dunkirk in May 1940 was soon forgotten and its significance overlooked because of the morthumerous successes the Luftwaffe had enjoyed. Formidable though it was, the Luftwaffe was in many respects ill-equipped for the new task which it had been assigned and which its leaders so

readily accepted. The Luftwaffe had been designed not for independent strategic bombing but rather for tactical support of the army in the field; a role which it had performed with noted success. Its organization, the training of its crews and the weapons they were provided all reflected this tactical purpose. As a result, the Luftwaffe lacked the essential instrument for an effective air offensive, the long-range bomber. The medium and dive bombers which formed its striking force did not have the necessary range, armament or capacity for strategic operations and were vulnerable to the latest fighters. (11:125)

The Luftwaffe was also severely handicapped by the limited endurance--about eighty minutes--of its standard fighter, the Bf 109, which in all other respects was an outstanding aircraft. The flight across the channel and back took approximately one hour, leaving only twenty minutes for combat over England. The longer ranged Bf 110 proved inferior to the RAF's Hurricanes and Spitfires and therefore had to be protected by the faster and more nimble Bf 109. (11:127) Since the German bombers were too vulnerable to fly without escort in daylight, their operational zone was necessarily restricted to the Bf 109's radius of action. This was primarily London and the southeast corner of England, an area where the British defenses were concentrated. Further complicating the problem for the Germans was a lack of Bf 109s to provide adequate cover for

the bombers, each of which required an escort of at least two fighters. In effect, this reduced the total number of bombers that could be launched against the British at any one time to three or four hundred. (7:452)

Britain had more accurately calculated her own strength in terms of developing her defensive strategy. Little other evidence is needed than the fact that she staved off the attack and was eventually able to cross the channel--with allied support--and effect the defeat of Interestingly enough, during the period of Germany. Germany's most intense bombing of England, the RAF's strength actually increased. Because the fight was in the air, the key was numbers of aircraft. The British built airplanes at the expense of many other items in early 1940. The cabinet had approved the ultimate production of 3700 fighters, ordering the maximum possible production through March 1940, in anticipation of the attack. (22:173) As a result, even after her losses, the RAF was stronger at the conclusion of the Battle of Britain than she had been at the beginning. While in August they had 708 aircraft, after October their number had increased to 744. (27:463)

Conversely, the Germans did not have the right mix of forces to support their strategy, and they did not work with proper knowledge of their enemy in many cases. For one, their intelligence activities misled them. Their assessment of British inflexibility--that the fighters were too closely

tied to ground control and specific operating locations--led them to believe the RAF could not respond in large numbers on short notice. (12:157) Even the only factory producing Spitfires, one of the aircraft which so badly hurt the Luftwaffe, was discounted as a target because it was thought to be a bomber factory. (13:164) Furthermore, the Germans did not comprehend the effectiveness or usefulness of radar, especially the ground-based network the British used to mass their fighters at just the right time and place to repel German attacks. Adolf Galland, a leading German ace during the war, claimed ". . the British had an extraordinary advantage . . . radar and fighter control . . . guided all the way from take-off to his correct position for attack." (14:26)

It follows that an honest appraisal of German military capability, weighed against superior British aircraft and radar technology, should have led to altering or abandoning plans to invade England. Historical records do not indicate that such an appraisal was accomplished, however, and in any case it would probably have been ignored by Hitler even if it had been presented.

In summary, Germany did not assess its capabilities in light of the objective; Britain did. Costly mistakes were made. Simply put, the Germans had no real appreciation for the limits of their own military power, nor for the strengths of the British.

WHAT WERE THE ALTERNATIVES?

Crowl's fourth question deals with alternate campaign strategies, especially if the preferred strategy fails. This is an area in which the Germans were particularly ill-prepared as the Battle of Britain unfolded.

As previously discussed, German planning for this campaign was conducted hastily, based more upon opportunity than military necessity. The Germans stood in no clear and present danger of attack from Britain when they committed themselves to the invasion of England in the summer of 1940; German dominance of central Europe was unchallenged. So confident were they of victory over the British that the German staff had no contingency plan should the air offensive fail.

At this point it is worth noting that Hitler's plan to invade England was technically a contingency plan already. His real goal apparently was to sign a peace treaty with Britain which he would honor at least until Russia fell in the east, at the same time postponing America's entry into the war. It soon became obvious that Churchill was intent on whipping the British into a wartime frenzy and that a peaceful settlement between the Germans and British would not be possible. It was at this point that Hitler settled upon his invasion strategy as the next option.

In pursuing the air campaign against Britain, Germany changed strategies and targets at least four times during the

Battle of Britain. The Germans started by targeting channel shipping, then briefly changed to attacking the radar facilities which controlled Fighter Command. Soon after, they moved their attacks to the fighter bases and, just when this plan was beginning to hurt the British, they shifted their emphasis to the bombing of London. This uncertainty indicates they had little appreciation for an overall objective, at least at the level where the targeting decisions were made. Hitler himself ordered the bombing effort changed to London, so he, too, lacked a feel for the objective. (15:138-144)

Given the fact that war already existed on a major scale and the Luftwaffe force structure was unsuited to the task at hand, the German alternatives were limited. Germany seemed to understand that the RAF was the key target. Goering said, "As long as the enemy air force is not defeated, the prime requirement is to attack it . . . by day and by night, in the air and on the ground." (11:81) Yet, after 18 August, attacks against the radar sites which controlled those air forces were discontinued as poor investments of time and forces. (13:121) Had they pursued daily attacks against Fighter Command targets, the Germans might very well have crippled the RAF and British capability to maintain the defensive. "Goering should certainly have persevered against the airfields. By departing from the classic principles of war . . . he made a foolish mistake."

(9:154)

The British recognized the necessity of maintaining a close-in defense of the island. Although there were alternatives, such as negotiating or conducting an offensive campaign, they could see the success in their strategy and therefore knew there was no need pursuing a different course.

HOW STRONG WAS THE HOME FRONT?

His fifth question is an area Crowl claims is often overlooked by strategists; the concern with public opinion and support for both the war as well as the military strategy employed to fight it. Put simply the question becomes, "Is the war morally acceptable?"

Hitler and his generals were on firmer ground here than they were on several of the other issues we have already examined. Due to the nearly complete control he enjoyed over the German press, Hitler was able to favorably influence opinion at home, or at least keep it from coalescing against his efforts to the west. Another point in his favor was the relatively low number of combat casualties sustained in the fighting over the skies of Britain, one of the advantages of an air rather than land campaign.

What Germany judged poorly was the strength of the British home front. Churchill proved a master at stirring the public against the hated Nazi regime, an effort which was made easier once the Germans changed targeting schemes and abandoned military targets in favor of population centers.

The indiscriminate bombing of London and other English towns in the summer and early fall of 1940 served to forge the British resolve against Germany.

Churchill kept support at its zenith. He wore an RAF uniform as Minister of Defense, the first Prime Minister to wear a uniform while in office. (12:4) His speeches stirred support and understanding for the nation's defensive strategy. The longer the battle lasted, the more respect the RAF gained from the civilian population for their tenacity, and the more morale stiffened as the country weathered the enemy's blows together. Churchill's famous statement, "Never in the field of human conflict was so much owed by so many to so few" was a tribute to the success of the battle and signified the debt Britain owed her warriors.

The German home front, strong in its support of the overall military effort during these early days of the war, was physically sheltered from this specific battle by distance. As a result, I would characterize the "strength of the home front" as a neutral factor in Germany, while it was a strong negative factor (i.e., against the enemy) in Great Britain. Once again, Hitler and his staff were guilty of not properly analyzing one of the areas which Crowl contends has a primary bearing on strategic success.

DOES TODAY'S STRATEGY OVERLOOK POINTS OF DIFFERENCE AND EXAGGERATE POINTS OF LIKENESS BETWEEN PAST AND PRESENT?

In this, his final question, Crowl is concerned with whether past successes and failures might unduly influence

the strategist in planning for future campaigns. Did the ease with which the Wehrmacht rolled across western Europe lull Hitler into thinking that victory over the British would come as easily, or was the German problem even more basic? Was the concept of a continental army the reason Germany could not defeat the British? Surely this was the reason the Luftwaffe was structured to support ground operations with short range fighters and had no strategic bombing capability.

Because this was history's first great air battle, it is difficult to draw any meaningful experiences from the past to determine strategic differences or similarities. Looking back, we can identify failures, but the participants were each on the leading edge of air power tactics and strategy, especially during the Battle of Britain itself. It is interesting that the British Air Ministry, when trying to catagorize whether Luftwaffe bomber forces had been used in a strategic or a tactical role against Britain, concluded that "the Germans were not clear themselves." (19:79) It is obvious that the Germans did not concentrate their forces nor follow economy of effort principles. They damaged one target category and then switched to another without meeting their first objective fully. We now know that this was a costly mistake. In addition, the Germans may have failed to recognize the effects of rapidly changing aircraft technology. In the best Douhet tradition, they believed the bomber was essent ally invincible, and therefore failed to

place enough emphasis on fighter development and employment until it was too late. (11:32)

It would appear that even though he was a clever strategist, Hitler fell victim to his "successes of the past" as he contemplated how best to defeat the British on the other side of the English Channel.

CHAPTER III

CONCLUSION: "WHAT HAVE I OVERLOOKED?"

In this brief study of military strategy in the Battle of Britain, I have tried to show how a strategic analysis conducted before the campaign using Crowl's six questions might have led Hitler and his staff to pursue a different course of action.

The German objective was not clearly defined. The decision to take the war to Britain may, in fact, have been more opportunistic than formulated in response to serving German national interest; in the final analysis, the campaign was not worth the price.

Once the decision was made to attempt an invasion of England, however, the German analysis of military strategy required to succeed was basically correct. The staff properly identified the military obstacles to victory in England and formulated a plan that was sound, given the constraints involved. Unfortunately for them, it was their inability to recognize these same constraints and subsequently adapt their plan that led to the German defeat. The German planners did not recognize the limits of their military power (nor the strengths of the British), and did not have a contingency plan should Operation Sea Lion fail. Furthermore, the Germans badly underestimated the strength of British public opinion and did liture to account for it in

their selection of bombing targets. Too much of the campaign planning for the attack against England appears to have been based upon successes the Germans enjoyed as they conquered western Europe.

All of this might have been avoided had Hitler's staff been aware not only of Crowl's six questions, but his implied seventh as well: "What have I overlooked?" Once all the planning is done, once the contingencies have been thought out and every avenue explored, it is imperative that this last question be addressed. Only then is the strategic planning process complete.

WHAT DOES IT MEAN TODAY?

Military strategy today is designed to meet the challenges to US security interests. Such interrelated factors as US-Soviet relations, relative strengths of major nations, global military balance, arms control agreements, and current regional military situations must be considered in the formulatio: of strategy and the development of forces to support it ("What is it about?"). US military strategy and force levels must be adequate to confront a wide range of challenges, from low-intensity conflict to threats involving modern conventional and nuclear forces ("What are the limits of military power?").

These security requirements form the basis for US military strategy to support the more comprehensive national security objectives. The US military strategy is defensive

and seeks to deter war while maintaining a secure environment within which the United States, its allies, and friends can pursue legitimate interests. This strategy of deterrence is rooted in a national commitment to peace and freedom ("Is the national military strategy tailored to meet the national political objectives?").

The fundamental elements of US military strategy are nuclear deterrence supported by negotiated arms reductions and development of the Strategic Defense Initiative; strong alliances; forward-deployed forces; a strong central reserve; force mobility; freedom of the seas, air, and space; effective command and control; and good intelligence. (26:32-40)

US forces are not available to defend simultaneously against every threat with equal strength. Nonetheless, the United States must make it clear that its interests will be defended and obligations to allies met. US force employment planning considers the fundamental tasks that must be accomplished and the need to retain flexibility to meet other contingencies that threaten US security interests ("What are the alternatives?").

Should deterrence fail, US military forces will undertake missions to defeat aggression against the US, its allies and friends, and terminate the conflict on favorable terms. US forces would seek to limit the scope, duration, and intensity of any conflict in which they were involved.

 $2\overline{2}$

The US strategy is designed to capitalize on the enduring strengths of the United States--its political and social values, diversified economy, advanced technology, and the will and ingenuity of its people ("The strength of the home front"). To succeed, US strategy will continue to require the help of supportive allies and remain adaptable and responsive to a changing world.

The world as we know it today can be thankful that the German General Staff apparently overlooked these important considerations as they developed their military strategy for the Battle of Britain. We cannot afford to do the same. The lessons written in history's first significant air battle for today's military strategists are clear.

We shall not flag or fail. We shall go on to the end . . . We shall fight on the seas and oceans, we shall fight . . . in the air . . . we shall fight on the beaches, we shall fight on the landing grounds, we shall fight on the fields and in the streets, we shall fight in the hills; we shall never surrender.

WINSTON CHURCHILL (3:31)

LIST OF REFERENCES

1. Bader, Douglas. Fight for the Sky. Garden City, New York: Doubleday & Company, Inc., 1973.

2. Baker, Ralph. <u>The RAF at War</u>. Alexandria, Va: Time-Life Books, Publisher, 1981.

3. Baldwin, Hanson. <u>Battles Lost and Won--Great</u> <u>Campaigns of World War II</u>. New York: Harper and Row, Publishers, 1966.

4. British Air Ministry. <u>The Battle of Britain</u>. 1st American Edition, Garden City, New York, 1941.

5. British Air Ministry: Her Majesty's Stationery Office. The Rise and Fall of the German Air Force: 1933-45. New York: St. Martin's Press, 1983.

6. Collier, Basil. <u>The Battle of Britain</u>. New York: The Macmillan Co., 1962.

7. Collier, Basil. <u>The Defence of the United</u> <u>Kingdom</u>. London: Her Majesty's Stationery Office, 1957.

B. Collier, Richard. <u>Eagle Day</u>. New York: E.F. Dutton and Co., Inc., 1966.

9. Cooper, Matthew. <u>The German Air Force</u>. London: Jane's Publishers, 1981.

10. Crowl, Philip A. <u>The Strategist's Short</u> <u>Catechism: Six Questions Without Answers</u>. Harmon Memorial Lectures in Military History, Number 20, USAF Academy, Colorado, 1978.

11. Deighton, Len. Fighter: The True Story of the Battle of Britain. New York: Alfred A. Knopf, 1977.

12. Deighton, Len. <u>Battle of Britain</u>. London: George Rainbird, Ltd., 1980.

13. Dowling, Christopher, and Frankland, Noble, ed. Decisive Battles of the Twentieth Century. New York: David McKay Co., Inc., 1976.

14. Galland, Adolf. The First and the Last. New York: Henry Holt & Co., 1954; Bantam Books, 1978.

15. Gropman, Alan L. "The Battle of Britain and the Principles of War." <u>Aerospace Historian</u>, September 1971, pp. 138-144.

16. Haugland, Vern. <u>The Eagle Squadrons</u>. New York: Ziff-Davis Flying Books, 1979.

17. Johnson, J.E. <u>Wing Leader</u>. New York: Ballentine Books, 1957.

18. Jullian, Marcel. <u>The Battle of Britain</u>. New York: The Orion Press, 1967.

19. Macksey, Kenneth. <u>Kesselring: The Making of the</u> <u>Luftwaffe</u>. New York: David McKay Co., Inc., 1978.

20. Middleton, Drew. <u>The Sky Suspended</u>. New York: David McKay Co., Inc., 1960.

21. Parkinson, Roger. <u>Summer, 1940</u>. New York: David McKay Co., Inc., 1977.

22. Posen, Barry R. <u>The Sources of Military</u> <u>Doctrine</u>. New York: Cornell University Press, 1984.

23. Taylor, Telford. <u>The Breaking Wave</u>. New York: Simon and Schuster, 1967.

24. Ulanoff, Stanley M. <u>Fighter Filot</u>. Garden City, New York: Doubleday & Company, Inc., 1962.

25. Vader, John. <u>Spitfire</u>. New York: Ballentine Books, 1971.

26. Weinberger, Casper W. "US Goals, Objectives, and Strategy." <u>Annual Report to the Congress, Fiscal Year</u> 1987. Washington, D.C.: 1986.

27. Wood, Derek. <u>The Narrow Margin</u>. Westport, Connecticut: Greenwood Press, 1961.

28. Wright, Robert. The Man Who Won the Battle of Britain. New York: Charles Scribner's Sors, 1969.