#### AIR WAR COLLEGE

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# OVERALL GERMAN STRATEGY IN WORLD WAR TWO AND THE ALLIED AIR OFFENSIVE

by

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A Research Report Submitted to the Faculty

In Partial Fulfillment of the Curriculum Requirements

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Maxwell Air Force Base, Alabama April 1997

Report Documentation Page			
Report Date 01APR1997	Report Type N/A	Dates Covered (from to)	
Title and Subtitle Overall German Strategy in World War Two and the Allied Air Offensive		Contract Number	
		Grant Number	
		Program Element Number	
Author(s) Schottt, Joseph C.		Project Number	
		Task Number	
		Work Unit Number	
Performing Organization Name(s) and Address(es) Air War College Maxwell AFB, Al 36112		Performing Organization Report Number	
Sponsoring/Monitoring Agency Name(s) and Address(es)		Sponsor/Monitor's Acronym(s)	
		Sponsor/Monitor's Report Number(s)	
<b>Distribution/Availability</b> Approved for public releas			
Supplementary Notes			
Abstract			
Subject Terms			
Report Classification unclassified		Classification of this page unclassified	
Classification of Abstract unclassified		Limitation of Abstract UU	
Number of Pages 42		'	

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# **Contents**

	Page
DISCLAIMER	ii
PREFACE	iv
ABSTRACT	v
INTRODUCTION	1
THE GERMAN STRATEGY	2
A MODIFIED STRATEGY	6
THE ALLIED AIR OFFENSIVE	13
A DISASTER UNFORESEEN	19
RESULTS	26
CONCLUSIONS	33
BIBLIOGRAPHY	35

# Preface

I selected the topic of overall German Strategy in World War II and how it was impacted by the Allied Air Offensive for three reasons. First, I felt the relationship between the two has been under-explored. Second, World War II continues to be a rich storehouse of potential lessons on strategy, operational art and war-fighting. Third, and perhaps most important, I felt it valuable to explore the effects of an air offensive on a nation's war strategy to detect possible pitfalls the US should avoid.

#### Abstract

This paper examined overall German strategy in World War II in relation to the Allied Air Offensive. Research of primary and secondary sources indicated the initial overall German strategy was based on a one-front war with quick, intensive campaigns initiated by the Germans. Study of sources showed that based on the German experience on the Russian front the German strategy was modified in early 1942 to a one front, attrition strategy. However, German strategy was not modified in response to the initiation of the Allied air offensive. This Allied offensive grew to constitute a second front but German strategy was not adjusted quickly enough to counter-act this offensive. Consequently, research points out the failure of Germany to modify its strategy in light of the Allied air offensive was a major cause of the German defeat in World War II. Contemporary lessons include the possible value in modifying military strategy during a conflict if conditions change.

# Chapter 1

## Introduction

The purpose of this paper is to show that during World War II German leaders did not modify their strategy when the success of the Allied air offensive became manifest, and that their failure to change strategy was a major reason Germany was totally defeated.

First, this paper will describe the two main legs of the over-all German World War II strategy. The two main components were to fight on one front at a time and to fight quick, but intensive offensive campaigns. Then, the paper will demonstrate the German war strategy was consciously changed after it proved ineffective on the Russian front. Third, the paper will explain that the Allied air offensive became the Second Front against Germany long before the 1944 Allied invasion of France. At that point, the paper will show that German leader's failure to anticipate the impact of the Allied air offensive and failure to modify German strategy were major reasons why Germany was finally defeated.

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# Chapter 2

# The German Strategy

The overall German strategy in World War II sprang from their autocratic leader, Adolf Hitler, who made all major German decisions. Of course, Germany, led by Hitler, was the aggressor. Hitler took the initiative in the beginning of the war, and in the first years of World War II in Europe, he picked the time and the place of the attacks.

Hitler was careful to avoid conflicts on more than one front at a time as he wanted to reduce the amount of resistance his forces would face.<sup>2</sup> Before the war, in his book *Mein Kampf*, Hitler wrote that Germany should not make the mistake of "making an enemy of the whole world" but that Germany must "recognize the most dangerous enemy" and then "hit him hard with her full concentrated power..." Hitler told his generals several times that the main mistake Germany made in World War One was allowing "the development of a two-front war" and he promised them he would not make that mistake.<sup>4</sup> Hitler was careful to avoid a potential conflict on two fronts even before his invasion of Poland. For example, in the early 1930's Hitler calculated that Russia comprised a strong potential foe to Poland and therefore Poland would not attack Germany.<sup>5</sup> Nonetheless, in 1934, for added insurance, he negotiated a ten year peace treaty with Poland.<sup>6</sup> With little to fear from an attack from the east, the next year he turned his attention westward. He abrogated the military limitations on Germany and in 1936 he occupied the Rhineland. In

August, 1939, Germany and Russia signed a non-aggression pact which insulated Germany, to some extent, from the likelihood of an immediate attack from Russia. Concurrently with this, Hitler reinforced the Siegried line of fortifications along the western border of Germany.<sup>7</sup>

Germany had little reason to fear significant military action on its western borders as both France and Britain had clearly demonstrated in the 1930s they would avoid being labeled the aggressor. Militarily unprepared compared to Germany, there was little chance they would launch large scale assaults against the reinforced Siegfried line in 1939. Hitler also calculated that the Siegfried line, backed up by a total of 23 German divisions, would have resisted major assaults. Secure in the thought the only real actual opponent he would face was Poland, Hitler launched the invasion of Poland on 1 September 1939. Of course, this jolted France and Britain into reality and they declared war on Germany. After the defeat of Poland he boasted to his commanders "For the first time in 67 years it must be noted that we no longer have to conduct a war on two fronts... for the first time in history we have only to fight on one front." As World War Two continued, Hitler maintained the strategy of avoiding a two front war.

Hitler did not want to face the US and Britain in the west while he was attempting to conquer European Russia. Therefore, he had the objective of neutralizing Britain in the west by "stripping Britain of its European allies." At the least, Hitler felt if Britain lost its continental allies its ability to intervene significantly in continental matters would be greatly reduced. More important, Hitler hoped that the loss of allies would convince Britain to sign a peace settlement. Meanwhile, on the other side of the world, Germany encouraged Japanese hegemony in the Pacific. This was to minimize the United States'

ability to influence events in the Atlantic and in Europe by keeping the United States' attention riveted to the Pacific.<sup>15</sup> Hitler believed with Britain and the US unable to seriously threaten Germany that he could carry out what was probably his most desired goal; the defeat of Russia and the occupation of most, or all of European Russia.<sup>16</sup>

While fighting a one front war was a key facet of the German strategy, another segment of the strategy was to maintain the initiative by carrying out short, intense military campaigns. Hitler aimed for the defeat of Britain's European allies and Russia in quick, offensive warfare commonly referred to as a "blitzkrieg." Hitler felt that Germany would have a difficult time winning a long war against "a coalition of major powers." This was because of the larger population that foes could, over time, bring to bear against Germany <sup>19</sup> and that as time went on, neutral countries could go over to the enemy side. These neutrals could contribute resources and manpower to the enemy coalition. Therefore, Hitler did not want to risk a repeat of the World War I war of attrition. At the same time, to avoid a war of attrition he wanted to attack at the time and place of his choosing, with locally superior force so that victory was guaranteed. His forces would be limited in size, but efficient, flexible, fast, and led by very capable commanders.

The Germans wanted to shatter an enemy's cohesion, organization, and psychological strengths using strength against selected weakness, and using speed and surprise. The Germans did not want the war to transition to a war of attrition, where victory depended less on military competence but more on quantitative superiority.

Hitler felt confident his one front and blitzkrieg strategy would propel Germany to a major military and political power, Initially, he was correct: in the first phase of the war in Europe Hitler's strategy helped him dominate most of Western Europe. The Russian campaign lay ahead.

#### Notes

<sup>&</sup>lt;sup>1</sup> Milton Shulman, *Defeat in the West* (New York: E.P. Dutton & Co.,1948), 3.

<sup>&</sup>lt;sup>2</sup> Ibid., 35.

<sup>&</sup>lt;sup>3</sup> Thomas B. Buell et al., *The Second World War: Europe and the Mediterranean* (Wayne, N.J.: Avery Publishing Group,1964), 83.

<sup>&</sup>lt;sup>4</sup> Ibid.,69.

<sup>&</sup>lt;sup>5</sup> B.H. Liddell Hart, *Strategy* (London: Faber & Faber Ltd.,1954,1967), 213.

<sup>&</sup>lt;sup>6</sup> Ibid.

<sup>&</sup>lt;sup>7</sup> Hart, 214.

<sup>&</sup>lt;sup>8</sup> William H. McNeill, *The Pursuit of Power* (Chicago: University of Chicago Press,1982), 351.

<sup>&</sup>lt;sup>9</sup> Hart, 215.

<sup>&</sup>lt;sup>10</sup> Shulman, 35.

<sup>&</sup>lt;sup>11</sup> Klaus Reinhardt, *Moscow—The Turning Point* (Providence, R.I.: Berg Publishers Ltd., 1992), 427.

<sup>&</sup>lt;sup>12</sup> Edward M. Earle, ed., *Makers of Modern Strategy* (Princeton: Princeton University Press, 1971), 577.

<sup>&</sup>lt;sup>13</sup> Hart, 239.

<sup>&</sup>lt;sup>14</sup> Gerhard L. Weinberg, *Germany, Hitler, and World War II* (Cambridge: Cambridge University Press, 1995), 18.

<sup>&</sup>lt;sup>15</sup> Ibid., 18.

<sup>&</sup>lt;sup>16</sup> Earle, 579.

<sup>&</sup>lt;sup>17</sup> Buell, 15.

<sup>&</sup>lt;sup>18</sup> Buell, 14, 15.

<sup>&</sup>lt;sup>19</sup> Buell, 69.

<sup>&</sup>lt;sup>20</sup> Hart, 225.

# **Chapter 3**

# **A Modified Strategy**

As previously discussed, Hitler and the other German leaders had a two-fold overall strategy. First, Hitler planned to only deal with one front at a time. Second, Hitler planned to initiate the offensives. These offensives would be carried out on German terms: furiously and quickly. Hitler's invasion of Russia was consistent with this strategy. However, the Germans were not able to quickly defeat Russia and Hitler consciously changed their strategy in early 1942.

Previous to this, by the late fall of 1940, Hitler had stunned the world by his conquering of the Low Countries and France. On the other hand, Hitler had received a set-back when the Luftwaffe was defeated in the "Battle of Britain." Historians still debate whether Hitler would have initiated, or have been successful with Sealion—the planned invasion of Britain—even if he had attained air superiority over the invasion beachheads.<sup>1</sup> Nonetheless, Hitler decided not to launch the hastily planned invasion of Britain. Perhaps overshadowing all this, however, was the fact Britain had not responded positively to German peace feelers.<sup>2</sup> Still, Hitler had good reason to estimate Britain was incapable of a major land offensive in the west; most of her armies equipment had been abandoned or destroyed in the battle of France. In addition, the German intervention in North Africa, although designed to "bail out" Mussolini, would continue to put some

pressure on the British in Egypt.<sup>3</sup> Just as significant was the Japanese threat to Britain in the Pacific Theater which demanded British military attention to Australia, India and other British possessions.<sup>4</sup> While there would be German air and naval attacks in an attempt to starve Britain into submission, in Hitler's mind these would be peripheral actions.<sup>5</sup> All things considered, Hitler calculated it would be many years, if ever, before Britain could initiate a second front in the west.<sup>6</sup> After a quick campaign to defeat Russia, Germany would turn her attention to the west and finally knock Britain out of the war.<sup>7</sup> But that possibility lay ahead, by late 1940 Hitler was preparing to conquer European Russia.

The German invasion of Russia began in June, 1941. At first, the German strategy of a "blitzkreig" brought considerable success against the Russians. However, as events unfolded, it was shown that the Germans could be stopped. For several reasons, including German indecision, which caused the majority of German forces to be static for about a month in the summer, the German offensive faltered at the gates of Moscow in the fall.<sup>8</sup> Although there was furious fighting during December of 1941, the weather, Russian resistance, and other factors such as logistics made it impossible for the Germans to push into Moscow. At least for the present, the Germans had reached their culminating point.

In late 1941, many of Hitler's generals and ministers understood the opportunity to defeat Russia quickly was now gone and they advised Hitler to withdraw to defensive lines to the West.<sup>9</sup> Based on comments he made to subordinates and to the public, Hitler understood the initiative was shifting to the Russians.<sup>10</sup> The clear historical evidence is

the defeat at the gates of Moscow influenced Hitler to change the German strategy of a lightning war.

By January 1942, Hitler realized his strategy of a short war was unsound and he recast German strategy away from the blitzkrieg strategy to a strategy of attrition warfare. On 10 January 1942 he signed an order which directed the restructuring of the armaments industry for increased production and which directed that "all available raw materials" were to be channeled into weapons factories so that increased amounts of war material could be produced. These orders mark the end of the blitzkrieg strategy. In February, 1942, Hitler turned to other measures which pointed to the end of the blitzkrieg strategy—he mobilized the entire economy for war, increased the numbers of men drafted, ordered large increases in military production and directed that "peacetime planning and developments were to be suspended at once in all firms."

At least one source postulates that the increased Allied air raids were part of the reason Hitler moved to an attrition strategy. Others point out to the fact that Pearl Harbor had occurred by this time, and that Germany had declared war on the US. Harbor had occurred by this time, and that Germany had declared war on the US. Harbor had occurred by this time, and that Germany had declared war on the US and realized Germany would have to face American industrial might. Of course, this concept pre-supposes a logically thinking Hitler and a Hitler who would consider all factors. Facing the US industrial might may have encouraged Hitler to abandon the short war strategy. However, a very credible source states clearly that these interpretations are incorrect. Albert Speer was Hitler's technical advisor and personal architect until February, 1942, when he became Munitions and Armaments Minister. Speer, with first-hand knowledge, clearly states it was setbacks on the Russian front that influenced Hitler

to shift German strategy to a war of attrition.<sup>15</sup> Consistent with Speer's memories are the observations and records of other advisors of Hitler's who point out that Hitler consistently "thought little" of US industrial capabilities. Therefore, it must be concluded that the US war making potential had no influence on Hitler's shift from a blitzkrieg strategy to war of attrition strategy.<sup>16</sup> In fact, Hitler's order of 10 January 1942 specifically pointed out the armament and munitions needs on the Russian Front.<sup>17</sup> Further, since this order mandated that the German army's armament programs were to receive priority, it would seem that Allied air power was not one of Hitler's chief concern in early 1942.<sup>18</sup> On top of that, when both the armament industries and the German army needed additional manpower, Hitler directed more manpower be allocated to the army so the Russian front could be stabilized.<sup>19</sup> These actions certainly indicate the Russia front influenced him more than concern over US industrial capability or thoughts of an Allied air offensive.

Later in 1942, against the judgment and advice of many of his generals, Hitler launched the invasion of the Caucasus. It appears his goals were economic—to cut the Caucasus off from the rest of Russia would serve to deprive Stalin of oil and wheat and allow German exploitation of these same resources.<sup>20</sup> Of course, these resources would be important if one were planning a war of attrition. Clearly, by early 1942 Hitler had changed the original German WWII strategy of a quick war to strategy of a war of attrition.

By early 1942, Hitler evaluated the situation on the Eastern Front and correctly realized the quick war strategy had not brought victory over the Russians. German strategy then changed to a strategy of attrition. There were other strategic options

available but not selected, such as strategic withdrawal. The point, however, is that Hitler clearly changed the strategy when conditions changed. Conversely, Hitler did not modify the German Strategy of fighting on one front at a time when the Allied air offensive gained momentum.

On the surface, Hitler's declaration of war against the US appears to be a repudiation of his single front strategy. Some authorities point out that this is not necessarily the case. First, in December 1941, Hitler's planned submarine warfare against the US did not change Hitler's long-held plan to concentrate against Russia. He could not use his submarine forces to directly attack Russia. Since his submarine forces were available and already deployed to the Atlantic, and if in his mind he was going to have to fight the United States sooner or later, he might just as well attack while his submarine fleet was potent.<sup>21</sup> Further, if Hitler was concerned about the Allies supplying Russia, submarine warfare had the potential to seriously limit Allied logistic support to Russia. In addition, authors have pointed out that once Russia was defeated in a war of attrition, Hitler had plans to turn his attention to Britain and the US.<sup>22</sup> Second, as previously discussed, Hitler disregarded warnings of US industrial production. It is possible that Hitler felt Germany could defeat Russia and then Britain before the US could seriously threaten Germany. Additionally, some scholars think Hitler wanted to declare war on the US to encourage Japan.<sup>23</sup> (As it was, during 1941, Hitler had been encouraging Japan to attack Singapore and other British possessions.<sup>24</sup>) A German declaration of war would be consistent with that encouragement. Further, during 1940 and 1941, Hitler's advisors felt that the Japanese Navy was "the strongest and the best on the globe." Some current military historians suggest that evaluation was sound.<sup>26</sup> Therefore, it may have been reasonable for Hitler to calculate that a powerful Japanese assault in the Pacific would benefit Germany by tying down major portions of British and US forces.

Hitler may have even calculated that a German declaration of war against the US could help force Britain to negotiate for peace. Specifically, Hitler felt that India was the "heart" of the British empire. Some historians point out that Hitler felt that Britain might be compelled to come to the peace "table" if Japan seriously threatened India. <sup>27</sup> Therefore, a German declaration of War against the US might serve to drive Britain out of the War. With enough encouragement, Japan might even declare war on Russia and attack Siberia. Consequently, there is evidence that by early 1942 Hitler's strategy of a one front war at a time had not been changed. What had changed, however, was the air war.

#### **Notes**

<sup>1</sup> Thomas B. Buell et al., *The Second World War: Europe and the Mediterranean* (Wayne, N.J. : Avery Publishing Group,1964), 70.

<sup>&</sup>lt;sup>2</sup> Gerhard L. Weinberg, *World in the Balance* (Hanover, N.H.: University Press of New England, 1981), 18.

<sup>&</sup>lt;sup>3</sup> Ibid.

<sup>&</sup>lt;sup>4</sup> Ibid.

<sup>&</sup>lt;sup>5</sup> Ibid.

<sup>&</sup>lt;sup>6</sup> Ibid.,24.

<sup>&</sup>lt;sup>7</sup> Ibid.

<sup>&</sup>lt;sup>8</sup> R.H.S. Stolfi, *Hitler's Panzers East: World War II Reinterpreted* (Norman: University of Oklahoma Press, 1991), 140.

<sup>&</sup>lt;sup>9</sup> Alan F. Wilt, *War From the Top* (Blomington, I.L.: Indiana University Press, 1976), 32.

<sup>&</sup>lt;sup>10</sup> Klaus Reinhardt, *Moscow—The Turning Point* (Providence, R.I.: Berg Publishers Ltd.,1992), 375.

<sup>&</sup>lt;sup>11</sup> Ibid., 396.

<sup>&</sup>lt;sup>12</sup> Reinhardt, 395.

<sup>&</sup>lt;sup>13</sup> Archer Jones, *Elements of Military Strategy* (Westport, C.N.: Praeger, 1976), 112.

<sup>&</sup>lt;sup>14</sup> Williamson Murray, *Strategy for Defeat:The Luftwaffe 1933 –1945* (Maxwell Air Force Base, A.L.: Air University Press,1983), 88.

<sup>&</sup>lt;sup>15</sup> Albert Speer, *Inside the Third Reich* (New York: Macmillan, 1970), 239.

#### Notes

<sup>22</sup> Reinhard, 423.

<sup>24</sup> Ibid.

<sup>26</sup> Ibid.

<sup>&</sup>lt;sup>16</sup> Weinburg, 95.

<sup>&</sup>lt;sup>17</sup> Reinhardt, 382.

<sup>&</sup>lt;sup>18</sup> Ibid., 386.

<sup>&</sup>lt;sup>19</sup> Ibid., 382.

<sup>&</sup>lt;sup>20</sup> Ty Bomba, "The Fuhrer's Will: Hitler and the Stalingrad Pocket," *Strategy and Tactics* issue 124 (December 1988): 22.

<sup>&</sup>lt;sup>21</sup> Saul Friedlander, *Prelude to Downfall: Hitler and the U.S --1939-1941* (New York: Alfred A. Knopf, 1967), 196.

<sup>&</sup>lt;sup>23</sup> Thomas Fleming, "The Big Leak," *American Heritage*, December 1987, 65.

<sup>&</sup>lt;sup>25</sup> Gerhard L. Weinberg, *Germany, Hitler, and World War II* (Cambridge University Press, 1995), 201.

Andreas Hillgruber, "England's Place in Hitler's Plans for World Domination," *Journal of Contemporary History* 9, no.1 (January 1974): 20.

# Chapter 4

## The Allied Air Offensive

The Anglo-American coalition's plans for a strategic air offensive against Germany were long-standing. By the late 1930's both Britain and the US gave high priority for preparing for a strategic bombing offensive. There is clear documentation of very comprehensive plans for a British strategic air offensive as far back as 1937, when the "Western Air Plans" were published. The objectives of these British plans included key industrial targets such as the synthetic oil industry and plans for attacking the morale of the enemy population. Although not yet directly involved in the war, by 1940 the American Army Air Corps was preparing plans to launch air attacks on key German industrial targets in order to crush the ability of Germany to wage war. While both Britain and the US developed separately the goal of the destruction of the German industrial base, the specific plans to do this were formally merged at the secretly held ABC conference.

In 1940, in accordance with his belief in the importance of preparing for conflict while trying not to be involved directly in WWII, President Roosevelt approved the proposal for a secret conference. This conference convened British and US military planning staffs in Washington, D.C. to make proposals on combined US/British strategy

and plans. The conference was held from January to March 1941—many months before the Japanese attack on Pearl Harbor.<sup>3</sup>

The planning staffs produced a report, known as ABC-1, which had several key points. Among them was this provision: "There will be a sustained air offensive against both Germany and other regions under enemy control that contribute to German military power."

In May 1941, by direction of a joint-planning organization, the joint Army-Navy Board, the Conference's policies began to be assimilated into US war plans.<sup>5</sup> The overall strategy and objectives contained in the ABC-1 Report were formally endorsed by the President of the US on 9 July, 1941.<sup>6</sup>

The first actual "blows" of the Allied Air Campaign can be traced to May 1940, when Britain first bombed Germany. Since Britain could not bring significant ground forces directly against Germany, air power was one way to put sustained pressure on Germany. Early British bombings were limited in scope. Eventually, greater numbers and aircraft with larger bomb loads allowed the Royal Air Force (RAF) to steadily increase its bombing. Still, it was relatively minor offensive action.

The German invasion of Russia served to reinforce the importance of the Allied air campaign. After the invasion of Russia, Stalin put considerable pressure on Britain to open a "second front" against the Germans. Stalin hoped that an Allied offensive in the west would force the Germans to withdraw forces from the eastern front. By late 1941 Stalin was telling Churchill "...the military position of the Soviet Union, as well as Great Britain, would be significantly improved if the Allies opened fronts against Hitler in the West and North." Stalin's pressure on Britain to open a second front continued into

1942, and since by this time the US was directly involved in the war, pressure was also applied to the Americans. Not able to open a second ground front in Europe in 1942, and sensitive to the desires of their Russian ally, the US and Britain decided to accelerate their planned air offensive against Germany which had been laid out in the ABC documents.<sup>9</sup>

When the US entered the War directly, the amount of air power that could be unleashed against Germany grew. While the US steadily increased their bomber forces in Britain, the RAF also increased the number of its bombers. United States' bombers based in Britain carried out their first bombing runs in August of 1942.<sup>10</sup> Earlier, in May, British had launched one thousand plane raids against Germany.<sup>11</sup> Although Allied losses were heavy, the air offensive grew in intensity. By the Fall of 1943, US fighters were roaming "at will" over Northern Germany attacking German fighters and destroying many of them.<sup>12</sup> Of course, this reduced the numbers of German fighters attacking Allied bombers and reduced Allied bomber losses. On top of this, since the US attacked by day, and the British by night, German defenses were even more strained.

This Allied air offensive against Germany caused the Germans to dedicate large amounts of resources to defending against the offensive. Additionally, the Allied air offensive caused massive reductions in German war production.

Due to the pressures of the air offense, by the end of 1943 there were over 55,000 anti-aircraft guns deployed throughout Germany.<sup>13</sup> Over seventy-five percent of these guns were the dual purpose anti-air and anti-tank 88 millimeter gun which had proved very effective against Russian tanks.<sup>14</sup> The German minister of armaments production, Albert Speer, pointed out "the same guns could well have been employed in Russia against tanks..." By early 1944, over 800,000 Germans were dedicated to air defense in

the west and a million Germans were working to repair damage caused by the air offensive. <sup>16</sup> Thirty-three percent of the German optics industry was producing gunsights for anti-aircraft guns which caused shortages of optical gunsights for front-line ground troops. <sup>17</sup> Speer has pointed out that Germany could have formed and equipped 60 divisions with the men and resources committed to bomber defense, and that these forces could have changed the outcome either on the Russian front or in the West. <sup>18</sup> In an interview in 1976 Speer highlighted the great numbers of resources dedicated to combating the Allied air offensive. During the interview he stated "...without this great drain on our manpower, logistics, and weapons, we might well have knocked Russia out of the war before your invasion of France." <sup>19</sup> The amount of damage inflicted on German industry and transportation systems by the bomber offensive rose steadily in 1943 and 1944 even while the Germans were dedicating tremendous resources to stemming the Allied air offensive.

By the time Allied ground forces were poised to attack into Germany in early 1945, the Allied Air Campaign had severely damaged the German transportation system and key war industries. Specifically, tonnage capability of the German railroad system had been reduced by eighty-five per cent between September, 1944, and March, 1945.<sup>20</sup> Other important industrial products were also very heavily impacted. By the spring of 1945, production of nitrogen, a key component in the manufacture of explosives, was cut to just nine per cent of its spring, 1944 production.<sup>21</sup> This resulted in very limited German ammunition production just as the Allies were poised to invade the German homeland from both the east and west. To make matters worse for the Germans, their high octane airplane fuel production had virtually ended due to attacks on synthetic fuel

factories.<sup>22</sup> They could only launch occasional aircraft sorties, and they had almost no fuel to train new pilots. On the ground, most of their tanks and trucks were inoperable due to lack of fuel. Overall fuel production in early 1945 was only twelve per cent of the February, 1944 production.<sup>23</sup> Without a doubt, the Allied air power strategy was a success.

The United States Strategic Bombing Surveys conducted by the US military after World War II stated "Allied Air Power was decisive in the war in western Europe." Clearly, the Allied air offensive was a second front—a front Hitler did not anticipate.

#### **Notes**

<sup>&</sup>lt;sup>1</sup> Noble Frankland, *Bomber Offensive* (New York: Ballantine Books, 1970), 18.

<sup>&</sup>lt;sup>2</sup> R.J. Overy, *The Air War 1939-1945* (Chelsa, M.I.: Scarborough House, 1991), 18.

<sup>&</sup>lt;sup>3</sup> Col Ed Crowder, "Pointblank," Airpower Journal, Spring, 1992, 57.

<sup>&</sup>lt;sup>4</sup> Ibid.

<sup>&</sup>lt;sup>5</sup> Captain Tracy B. Kittredge, "A Military Danger: The Revelation of Secret Strategic Plans," *Naval Institute Proceedings* 81, no.7 (July,1955): 732.

<sup>&</sup>lt;sup>6</sup> Ibid., 733.

<sup>&</sup>lt;sup>7</sup> Overy, 37.

<sup>&</sup>lt;sup>8</sup> Fisher, *The Road to Yalta* (New York: William Morrow & Co.,1974), 4.

<sup>&</sup>lt;sup>9</sup> Geoffrey Perret, Winged Victory (New York: Random House, 1993), 243.

<sup>&</sup>lt;sup>10</sup> Franklin, 51.

<sup>&</sup>lt;sup>11</sup> Franklin, 49.

<sup>&</sup>lt;sup>12</sup> Overy, 101.

<sup>&</sup>lt;sup>13</sup> Overy, 106.

<sup>&</sup>lt;sup>14</sup> Ibid.

<sup>&</sup>lt;sup>15</sup> Speer, 381.

<sup>&</sup>lt;sup>16</sup> Lt Col Mark A.Gunzinger,"Airpower as a Second Front," *Airpower Journal*, Fall, 1995, 65.

<sup>&</sup>lt;sup>17</sup> Speer, 382.

<sup>&</sup>lt;sup>18</sup> Lt General Ira C. Eaker and Arthur G. Metcalf, "Conversations With Albert Speer," *Air Force Magazine*, April 1977, 54.

<sup>&</sup>lt;sup>19</sup> Ibid.

 $<sup>^{20}</sup>$  Russell F. Weigley, *The American Way of War* (New York: Macmillan Publishing Co.,1973), 357.

<sup>&</sup>lt;sup>21</sup> Ibid.

<sup>&</sup>lt;sup>22</sup> Martin Kitchen, *Nazi Germany at War* (London: Longman Publishing, 1995), 304.

<sup>&</sup>lt;sup>23</sup> Ibid.

# Notes

<sup>&</sup>lt;sup>24</sup> The United States Strategic Bombing Survey—Summary Report—European War (Maxwell Air Force Base, A.L.: Air University Press 1987), 37.

# **Chapter 5**

# A Disaster Unforeseen

By mid 1942, soon after Hitler had modified his strategy to a war of attrition, the potential effects of the Allied air offensive should have been clear. Not only had the RAF slowly increased the level of bombing over occupied Europe and Germany, but the Allied strategy for a massive air offensive and the projected production figures of US aircraft were openly written about by correspondents.

During 1941 the increased intensity of Allied air attacks was significant. For example, by November 1941, the RAF had an average of over 500 bombers and crews available each night to attack various targets.<sup>1</sup> Most targets were area attacks on cities while some attempts were made for precision bombing attacks on plants that processed oil, and rubber and on electrical power plants.<sup>2</sup> In March, 1942, the RAF concentrated most of its long range bombers for a strike on a German city. In what should have been a "wake up" call to the Germans, Lubeck was bombed by almost 250 RAF bombers. Almost half of the central part of the city, over 200 acres, was destroyed.<sup>3</sup> Soon after that, in May, 1942, the RAF bombed Cologne with over 1,000 bombers. At the time it was the largest air attack in history,<sup>4</sup> and the fact that over 1,000 bombers were employed was well publicized.<sup>5</sup> Still, after the Cologne attack, the German leadership did not reevaluate overall strategy. Rather than a strategic reappraisal, Hitler ordered retaliatory

bombing raids against British cities, and condemned the Luftwaffe for failing to shoot down all the Allied bombers.<sup>6</sup>

During 1942, the RAF not only increased the number of bomber aircraft available for missions but phased out slower, less capable models in favor of more capable aircraft. Additionally, the US Army Air Force (AAF) build-up began in Britain in 1942. By late 1942, the US AAF could only launch a maximum of a little more than 100 bombers a day against targets in occupied Europe. Nonetheless, almost all the bombers used by the US were large, four-engine bombers and its bomber capabilities in Britain were steadily rising. Therefore, it should have been clear to Hitler and his advisors that the US AAF would soon be a major force that would have to be reckoned with.

The ever-increasing Allied attacks on Germany and on German occupied countries were direct evidence of the potential of an air offensive. To limit the effectiveness of these attacks, additional German anti-aircraft guns and fighters were employed in the West. If nothing else, the increasing amount of Luftwaffe fighter aircraft dedicated to defense of the Reich should have helped German leaders conclude a second front was developing in the West. There were only 116 Luftwaffe fighters dedicated to night air defense in the West in September, 1940. By September of the next year, the number was 250, and by September, 1942, it was 345. Moreover, the quality of the resources deployed to the West for air defense was much better than resources deployed elsewhere. Significantly, the best German fighter pilots were assigned to the Western air defense squadrons. Moreover, when additional aircraft were sent to the Western air defense units they were always new variants of existing fighter designs while older, less capable fighter models went to the Russian front or to the Mediterranean theater. The ever

greater amounts of Allied resources dedicated to the air offensive and the more, and better, German defensive resources were clear evidence of the potential for an air offensive against Germany. But there was another key indicator which was a clear warning of the possibilities of the US producing massive amounts of war material, particularly aircraft.

Based on the observations of the German Embassy staff, the German Ambassador to the US sent several warnings to Berlin during 1940 elaborating on US plans for a massive air force. The tone of the warnings was described by Murray, currently one of the foremost authorities on the Luftwaffe: "While America's material defense was still woefully lacking in nearly every respect, production would represent a serious threat by 1941 and increasingly each year thereafter." While the warnings from the German Embassy should have been clear indicators, one of the clearest signs was an extensive "leak" in American newspapers explaining US war plans, including detailed information on the planned US strategic bombing campaign.

A top-secret document, eventually labeled the Victory Program Document, which detailed the entire US strategic plan for fighting Germany, had been developed in 1941. A major part of US strategy was an air offensive, so the document detailed the plan for bombing Germany, including a detailed listing of overall objectives, targets, and aircraft production requirements. The strategic plan also called for large-scale combined air, sea, and land British/US offensives against Germany starting in 1943. This document was leaked to newspapers who supported isolationist policies. The newspapers completely exposed the Victory Program in early December, 1941, presumably to paint FDR as planning war. The entire transcript of the stories about the Victory Plan was cabled

from the German Embassy to Berlin. These cables, understandably, triggered a series of German studies. Hitler's staff concluded it would be possible for the US to produce the war material for the planned "Victory" Program within the time-frame the plan outlined. During the time frame of 5 to 14 December Hitler was briefed on the Victory Program, his staff's studies about the Program, and their recommendation that a major German strategy revision was required in order to defeat the objectives of the Allies. Even with all the information available concerning the on-going and planned air offensive Hitler did not revise German strategy. Hitler stuck to the war strategy predicated on fighting on one front at a time.

On the other hand, as already discussed, Hitler did make significant changes in strategy if he felt they were warranted. Due to changing conditions on the Russian front, Hitler modified the blitzkrieg strategy and made a transition to a strategy based on attrition. However, Hitler did not modify his one-front strategy. He did not adjust the strategy, even though there were many indications of an impending Allied second front in the West in the form of the air offensive.

Scholars advance several reasons why Hitler and the other German leaders did not revise the German strategy in the face of the Allied second front. These reasons include an underestimation of allied capabilities, with assumptions that the future would be like the past. Throughout the war, Hitler underestimated Allied, in particular US, capabilities. For example, he apparently disregarded staff studies indicating the Allies might very well be able to produce the war material required in the Allied victory plans. Documents also clearly show that his staff's conclusion that Britain and the US could very well begin major offensives against Germany in 1943 was briefed to Hitler in December, 1941.

However, according to Goering, the head of the German Air Force, Hitler substantially underestimated the abilities of the US to produce large quantities of war material.<sup>18</sup> In conjunction with this tendency to misjudge Allied industrial capabilities, Hitler also dismissed probable enemy courses of action.

The objectives and plans of the Victory Program called for a concentration of US forces with the British for combined offensives in Africa and Europe. As previously discussed, these provisions of the Victory Program had also been briefed to Hitler in December 1941. At that time, it may have been reasonable for Hitler to calculate that his forces could still conquer European Russia in 1942 and then shift to combat Britain and the US in the West and in the Mediterranean. But the evidence is that Hitler did not carefully consider the potential courses of action that would eventually be open to the Allies—it appears that Hitler did not carefully and logically consider the possibility of major Allied offenses in the West in 1943. In other words, Hitler gave no thought to the possibility of major British and US offenses in the West in 1943 because he calculated there would be no Allied offensive at that time. After the Victory Documents were leaked to the US media, Hitler did not accept his staff's recommendations for a revised strategy because he simply believed Japanese military action would "tie down" the US until some years after 1943.<sup>19</sup> After the War, Goering testified that Hitler used his intuition to reach the conclusion that "the major brunt of US forces would be to bear on the Far East and would not constitute a danger for Germany."<sup>20</sup> Without a doubt, Hitler greatly underestimated US industrial capabilities and "assumed away" probable Allied courses of action.<sup>21</sup> In addition to minimizing future enemy capabilities and intentions, Hitler believed the future would be like the past. That is, since strategic bombing had been ineffective in the past, Hitler believed it would also be in the future.

There were many reasons that Hitler did not appreciate the potential for strategic bombing. One reason was Hitler misapplied the example of the Luftwaffe's inability to cripple Britain via bombing in 1940 and 1941.<sup>22</sup> Hitler felt the Allied Air forces would have the same general experience in strategic bombing that the Luftwaffe had experienced. Of course, the Luftwaffe, in numbers and capabilities of aircraft, and in doctrine, were not prepared for a strategic bombing offensive.<sup>23</sup> The early portion of the Allied air offensive reinforced the concept that effects of aerial bombing would be limited by air defenses. While Allied air raids increased in size and number in 1941 and 1942, relatively speaking, the numbers and volume of attacks were not high. The limited sizes of the raids, the unsophisticated tactics of the Allied air crews and the German air defenses generally kept damage from the raids manageable. As long as bomb damage was not "excessive," and so long as enemy sorties were not above 100 per day, Hitler viewed his air defense as adequate.<sup>24</sup> Over all, Hitler judged the early attacks of the Allied air offensive to be more of a nuisance than anything else.<sup>25</sup>

However, by late 1942, there was considerable evidence that the Allied air offensive was building toward a second front and that, consequently, the German strategy of a one front war was losing validity. Even Hitler, focused heavily on events in Russia, considered briefly the possibility of a second front in the air. After the RAF's 1,000 plane raid on Cologne in May, 1942, Hitler pointed out to his staff that these attacks were designed to "establish an aerial second front" However, as previously shown, Hitler's under-appreciation of Allied potential along with his regard for German air defenses led

him to believe the second front in the air would not materialize. All in all, Hitler did not feel a second military front via air operations was a serious threat. Consequently, it is logical to assume he felt no need to reconsider German strategy.

#### **Notes**

- <sup>1</sup> Nobel Franklin, *Bomber Offensive* (New York: Ballantine Books Inc.1970), p41.
- <sup>2</sup> Ibid.
- <sup>3</sup> Franklin, 43.
- <sup>4</sup> Franklin, 49
- <sup>5</sup> Alan F. Wilt, *War From the Top* (Bloomington, I.N.: Indiana University Press, 1976), 90.
- <sup>6</sup> Alfred Price, *Luftwaffe ;Birth, Life and Death of an Air Force* (New York: Random House,1969), 94.
  - <sup>7</sup> Franklin, 54.
  - <sup>8</sup> R.J. Overy, *The Air War 1939-1945* (Chelsea, M.I.: Scarborough House, 1980), 18.
- <sup>9</sup> Williamson Murray, *Strategy For Defeat:The Luftwaffe 1939-1945* (Maxwell Air Force Base, A.L.: Air University Press, 1983), 134.
  - <sup>10</sup> Ibid.
  - <sup>11</sup> Murray,103.
- <sup>12</sup> Captain Tracy B. Kittredge, "A Military Danger: The Revelation of Secret Strategic Plans," *Naval Institute Proceedings* 81,no. 629 (July 1955): 731.
  - <sup>13</sup> Ibid.
  - <sup>14</sup> Ibid., 734, 742.
  - <sup>15</sup> Kittredge, 743.
  - <sup>16</sup> Kittredge, 742.
  - <sup>17</sup> Thomas Fleming, "The Big Leak," *American Heritage*, December 1987, 65.
  - <sup>18</sup> Kittredge, 738.
  - <sup>19</sup> Ibid.
  - <sup>20</sup> Ibid.
- <sup>21</sup> Hans-Adolf Jacobsen, "The Second World War as a Problem in Historical Research," *World Politics* 16, no.4, (July 1964): 632.
- <sup>22</sup> R.J. Overy, "Hitler and Air Strategy," *Journal of Contemporary History* 15, no, 3 (July 1980): 410.
  - <sup>23</sup> Murray, 20.
- <sup>24</sup> Alan F. Wilt, *War From the Top* (Bloomington, I.N.: Indiana University Press, 1976), 230.
  - <sup>25</sup> Ibid.
  - <sup>26</sup> Murray, 134.

# Chapter 6

## **Results**

As previously discussed, the Allied air offensive did become the second front. This second front, combined with Hitler not modifying German strategy, had several operational and strategic impacts on the Germans. Operationally, the Germans did not have adequate numbers and types of fighter aircraft and the trained crews to operate them —soon the Luftwaffe defenses were swamped.<sup>1</sup> Also, at the operational level, by 1943, the Allied air offensive "pulled" large numbers of German aircraft and crews from the Russian front.<sup>2</sup> The Allied bomber offensive was putting so much pressure on German defenses and causing so much damage to German industry that aircraft had to be moved from the Russian front to aid in defense of Germany. This re-deployment of aircraft had a major negative impact on ground operations on the Russian front. As the war went on, the Russian army gained qualitative and quantitative parity with, or superiority over the German army. The Germans were using the effective ground attack and anti-tank capabilities of Luftwaffe fighter aircraft to stem Russian advances until the army could close the gaps.<sup>3</sup> By summer of 1943, due to a shortage of aircraft, the Germans could not develop air superiority over even localized areas on the Russian front.<sup>4</sup> Needless to say, this loss of air superiority had major negative impacts on the combat effectiveness of the German Army. Back in the German homeland, industries lost potential production because they had to adjust to the bombings. They did this by replacing destroyed facilities, using alternative methods of transportation, dispersing production lines, and by moving production facilities into caves or other hardened facilities. Even considering the effects of the bombings, Speer's reforms brought increased efficiency and greatly increased armament production. Still, he has emphasized in his writings and in interviews that, considering all categories of arms, Allied bombings cut potential armament production by 28% in the critical period of late 1943. Even more important, military aircraft production was cut 30%, and tank production was cut 36% during this period.<sup>5</sup> This was a critical time for Germany because she was desperately fighting to maintain control over her airspace<sup>6</sup> and was attempting to stabilize the eastern front after the disastrous German defeat at Kursk.<sup>7</sup> As is well known, conditions only got much worse for the German war effort. By early 1945, due to Allied air power, German industry was experiencing shortages of raw material. At the same time, destruction of the German railroads and canals meant that only a small amount of the completed armaments could be moved to the front. Still, even with all the effects of the bombing, fuel turned out to be the Achilles tendon of the Germans. Eventually, the bombing of the synthetic fuel plants—essentially petroleum refinery facilities which could not be feasibly moved underground—essentially ended German fuel production.<sup>8</sup> This halted the mechanized German war machines and was a major factor in the final defeat of Germany.

Clearly, there were many direct and indirect effects of the Allied bombing campaign—a campaign that was actually the second front. These effects include the transfer of key units from the Russian front, the virtual end of German fuel production, and the massive division of manpower from offensive combat to air defense duties.

While these impacts were significant, there was a more important and more basic result of Hitler not properly evaluating the potential of an aerial second front and modifying German strategy. In the overall strategic sense, the Allied air offensive meant that Germany was faced with a two front war. Unfortunately for Germany, her military plans and doctrine were designed around a one front war. Additionally, her resources were not capable of sustaining a long war on two fronts.9 Without a modification of German strategy, Hitler was left with the strategy of attempting to wear down the Allies and hoping the US/British/Russian alliance would disintegrate. 10 It goes without saying that it was Nazi Germany that got worn down and overrun. Clearly, Hitler's failure to modify German strategy was a major cause of the German defeat in WW II. Obviously, there are also other major factors why Germany lost the war. Some of these factors include the Allied industrial superiority, 11 the Allied breaking of the German codes, Hitler's failure to synchronize German and Japanese strategies and plans, and the German error of not exploiting Ukrainian nationalism.<sup>12</sup> Nonetheless, Hitler's failure to modify the German strategy of a one front war must be added to this list. Since the German strategy was a one front strategy, Hitler's overall plans and the resources to carry those plans out were based on fighting on one front at a time. Hitler's staff had warned him about the potential of an enemy air offensive, but Hitler had failed to take action. Had Hitler changed his strategy, the length, and perhaps even the final outcome of WW II in Europe might have been different. However, Hitler disregarded clear indicators of the coming Allied air offensive—indicators that existed early enough for Germany to make major shifts in its selection of strategy, options, objectives, and major weapons produced.

Undoubtedly, even if Hitler had foreseen the Allied air offensive, it would have been very difficult for Hitler to have deflected the Allies away from their air campaign plans. The Allies, using sound military thought, were attempting to fight on their terms. But there were other strategic options Hitler could have pursued in reaction to the Allied air offensive—options that could have shifted the character of the war so that it was being fought more on Hitler's terms.

A proper reassessment of all factors could have resulted in the adoption of one or more other German strategies. One potential course of action could have been a move to strategic defense. Operationally, this could have included foregoing large scale offenses in Russia in 1942 and a strategic withdrawal to defensive lines on natural and man-made barriers, <sup>13</sup> perhaps even a withdrawal to the pre-WWII boundaries. <sup>14</sup>

After WW II, some of the German generals argued that after Germany failed to defeat Russia in 1941, the Germans should have withdrawal to natural features conducive to the defense (such as large rivers). The Germans could have augmented the natural barriers by constructing fortifications and man-made barriers. Therefore, the Germans could have had the advantages of shorter supply lines and fighting behind strong barriers. Had this happened, the Russians could have been "bled white" leading to a military stalemate rather than a victory for the Russians. Moreover, a strategic withdrawal from the Russian Front could have allowed other opportunities, such as major initiatives in the Mediterranean or the freeing up of many divisions for duty in France to prepare for the D-Day invasion.

Another potential strategy was to attempt sincere negotiations with Stalin.<sup>17</sup> These negotiations could have been separate from, or in addition to, a strategic withdrawal from

Russia. Separate from the options concerning the Eastern front was the possibility of withdrawal from the area east of the Baltic, Scandinavia, North Africa, Italy and perhaps even France.<sup>18</sup> Another strategy could have been a massive focus on air defense and industrial preparation for bombing. In reality, while upgrades to existing types of German fighters occurred throughout the war, no completely new types of German fighter reached service in significant numbers during the war. Nonetheless, even with the Germans employing the types of fighters they started the war with, it was difficult for the Allies to gain air superiority over occupied Europe. The potential impact of hundreds of German jet fighters with trained crews early in the war has been widely recognized.<sup>19</sup> Not so recognized, however, is what would have been the vast increase in German combat effectiveness if the resources dedicated to V-2 surface to surface missiles had been used on surface to air anti-aircraft missiles. 20 Qualitatively better German fighters, coupled with well-thought out and organized dispersal and hardening of industries early in the war could have blunted the air offensive. A strategic withdrawal from Russia and a major reorientation of focus against the Allies in the Mediterranean could have stymied the Allies. If done before the Allied invasion of North Africa, the Mediterranean and Suez Canal could have been effectively closed to the Allies with major implications.<sup>21</sup>

Of course, Hitler attempted some of these strategies. But he attempted them too late to have any meaningful possibility of success. For example, instead of negotiating with Stalin in 1942, he waited until September of 1943 to sincerely attempt talks.<sup>22</sup> By this time Stalin's forces were so superior to Hitler's there was no incentive for Stalin to reach a negotiated settlement.<sup>23</sup> Along the same lines, fairly late in the War, Hitler tried to

emphasize air defense but time and resources ran out before new weapons could regain air superiority.

The above discussion of strategies is not designed to be an in-depth description of all the strategies available to Hitler and their potential advantages and disadvantages. There is little doubt the reader can outline other potential German strategies. The point of the above examples is to show there were strategic options available to Hitler—options other than carrying out a flawed one-front strategy. Needless to say, the key was for Hitler to re-assess German strategy early enough so that he was able to implement other options. Of course, Hitler did not do this.

#### **Notes**

- <sup>1</sup> Williamson Murray, *Strategy For Defeat: The Luftwaffe 1933-1945* (Maxwell Air Force Base, A.L,: Air University Press, 1983), 209.
- <sup>2</sup> Alfred Price, *Luftwaffe: Birth, Life and Death of an Air Force* (New York: Random House, Inc., 1969), 113.
  - <sup>3</sup> Ibid.
  - <sup>4</sup> Price, 113, 115.
- <sup>5</sup> Lt. General Ira Eaker and Arthur Metcalf, "Conversations With Speer," *Air Force Magazine*, April 1977, 54.
- <sup>6</sup> Adolf Galland, *The First and the Last: The Rise and Fall of the German Fighter Forces* (New York: Ballantine Books, 1954), 155.
- <sup>7</sup> Ty Bomba, "Death and Destruction: 1942-1944 on the Russian Front," *Command* issue 34 (Spring 1995): 30.
- <sup>8</sup> W. Victor Madej,ed, *German War Economy: The Motorization Myth* (Allentown: P.A.: Game Publishing Co., 1984), 43.
- <sup>9</sup> William H. McNeill, *The Pursuit of Power* (University of Chicago Press, 1982), 353.
- $^{10}$  Alan F. Wilt, War From the Top ( Bloomington, I.N.: Indiana University Press, 1976), 96.
- <sup>11</sup> Hans-Adolf Jacobsen, "The Second World War as a Problem in Historical Research," *World Politics* 16, no.4 (July 1964): 639.
- <sup>12</sup> Kenneth Macksey, *Military Errors of World War Two* (London: Arms and Armor,1987), 127, 70, 63.
  - <sup>13</sup> Albert Speer, *Infiltration* (New York: Macmillan Publishing Co.,1981), 143.
- <sup>14</sup> Walter Goerlitz, *History of the German General Staff* (Westport, C.N.: Greenwood Press Publishers, 1975), 405.

#### **Notes**

<sup>19</sup> Macksey, 175.

<sup>22</sup> Calvocoressi and Wint, 402.

<sup>&</sup>lt;sup>15</sup> Ibid.

<sup>&</sup>lt;sup>16</sup> "Zitadelle: The Battle of Kursk," *Command* 21 (March\April 1993):32.

<sup>&</sup>lt;sup>17</sup> Peter Calvocoressi and Guy Wint, *Total War: The Story of World War II* (New York: Pantheon Books, 1972), 402.

<sup>&</sup>lt;sup>18</sup> Albert Seaton, *The Fall of Fortress Europe: 1943-1945* (New York: Holmes & Meirer Publishers, 1981), 89.

<sup>&</sup>lt;sup>20</sup> "Smithereens: The End of World War II in Europe," *Command* issue 16 (September/October 1990),46.

<sup>&</sup>lt;sup>21</sup> "Operation Felix: The Assault That Never Was on the Rock of Gibraltar," *Strategy and Tactics*, no.153 (August 1992):19.

<sup>&</sup>lt;sup>23</sup> "German- Soviet Peace Talks, 1941-44," Command 22, (May/June 1993): 10.

# Chapter 7

## **Conclusions**

At the beginning of WWII the German strategy was a one-front, blitzkrieg strategy. Hitler had considerable success concentrating on one front and carrying out intensive offensives in order to shatter enemy defenses. The Russians, unexpectedly for Hitler, survived the Nazi invasion which was launched in June, 1941. At this point, Hitler was not a slave to the strategy; he modified the blitzkrieg strategy in early 1942 to one of attrition warfare.

Concurrently, the Allies adopted an air offensive against Nazi Germany as a major part of US/British strategy. This offensive grew slowly, but in May 1942, the RAF was launching attacks by over 1,000 bombers at a time. US assistance to the Allied air campaign was very limited in the year after Pearl Harbor, but there were strong indications that a substantial Allied air offensive was going to be unleashed against Germany. Hitler did not properly assess the information available to him and determined the Allied air offensive would not be a serious threat. Hitler, rather than being prudent and over-estimating enemy capabilities, underestimated them. Without a realistic appraisal of the situation he had no basis to modify the one front strategy. However, as we have seen, the air offensive relatively quickly became the second front. The Allied air offensive played a major role in defeating Hitler. Similarly, Hitler's failure to respond to

changing conditions was another major factor in Germany's defeat. Hitler did not adjust his strategy but maintained the adjusted strategy of attrition warfare on one front. As the Allied air offensive grew, the Allies exploited German weaknesses. Hitler's one front strategy meant Germany was not able to adequately combat the second front—the Allied air offensive while fighting the Russians on the East.

The lessons for us today are clear. If involved in a conflict, do not underestimate the enemy and constantly reassess the enemy's potential strategy and capability. Try to maintain the initiative. Carefully craft a strategy and options for courses of action if conditions change. Above all, stick to strategy if it is in our own best interests, but also be prepared to change the strategy if a modification is in our best interests. For example, if conditions change, our strategies may also have to change. As President Franklin D. Roosevelt said: "Hitler built a fortress around Europe, but he forgot to put a roof on it." We must insure that US strategy has sides, a floor, and a roof—no matter how significantly the environment changes.

#### **Notes**

<sup>&</sup>lt;sup>1</sup> Wilbur H. Morrison, *Fortress Without a Roof,* St. Martin's Press: New York, 1982 preface.

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