



# **No Sense in Dwelling on the Past?**

**The Fate of the US Air Force's German  
Air Force Monograph Project, 1952-69**

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Air University Press  
Maxwell Air Force Base, Alabama

April 2011

**Muir S. Fairchild Research Information Center Cataloging Data**

Shaughnessy, Ryan

No sense in dwelling on the past? : the fate of the US Air Force's German air force monograph project, 1952-69 / Ryan Shaughnessy.

p. ; cm.

Includes bibliographical references.

ISBN 978-1-58566-206-7

1. Germany. Luftwaffe—History.
  2. Military history.
  3. United States. Air Force—History.
  4. United States—Military relations—Germany.
  5. Germany—Military relations—United States.
- I. Title.

940.5482/43 - dc22

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Air University Press  
Air Force Research Institute  
155 North Twining Street  
Maxwell AFB, AL 36112-6026  
<http://aupress.au.af.mil>

*Dedicated to Mr. Harry Fletcher, whose  
candor and generosity made this project possible*



# Contents

<i>Chapter</i>		<i>Page</i>
	DISCLAIMER . . . . .	ii
	DEDICATION . . . . .	iii
	FOREWORD . . . . .	ix
	ABOUT THE AUTHOR . . . . .	xv
	ABSTRACT . . . . .	xvii
	ACKNOWLEDGMENTS . . . . .	xix
	INTRODUCTION . . . . .	xxi
1	AN OVERVIEW OF AMERICAN WORLD WAR II OFFICIAL MILITARY HISTORY PROJECTS . . .	1
	The von Rohden Project (1945–47) . . . . .	4
	The Naval Historical Team, Bremerhaven (1949–52) . . . . .	6
	The US Army’s German Military History Program (1945–61) . . . . .	8
2	CHRONOLOGY OF THE KARLSRUHE PROJECT (1952–69) . . . . .	17
	Stepchild of the Army’s History Program . . .	18
	Topic Selection and the Prioritization of Soviet Studies . . . . .	21
	Assignment of Key Personnel and Early Research Obstacles . . . . .	23
	Documentary Sources Become Available, 1954 . . . . .	28
	Personnel Issues Arising from the Late Start of the Karlsruhe Project . . . .	30
	A Second Full-Time USAF Employee Comes Aboard, 1955 . . . . .	34
	The Final Phase: 10 Years, One Editor, and 40 Drafts . . . . .	35

CONTENTS

<i>Chapter</i>		<i>Page</i>
3	THE “UNFORESEEN BY-PRODUCT”: TOWARDS A NEW WEST GERMAN–AMERICAN AIR FORCE RELATIONSHIP . . . . .	43
	Demilitarization, the “Economic Miracle,” and Historical Programs . . . . .	44
	West German Rearmament . . . . .	48
	Effects on the NATO Alliance . . . . .	52
	A Historical Program Director as Air Attaché . . . . .	53
	The West German Officer Education System Takes Shape . . . . .	56
	The USAF Extends the Project at the Request of the Bundesluftwaffe, 1957 . . . . .	58
	Relational Rearmament . . . . .	61
4	INSULATED BUT IGNORED: THE MUTED AIR FORCE RESPONSE TO THE KARLSRUHE PROJECT . . . . .	67
	The Influence of Rapid Technological Change . . . . .	68
	The Era of Air Force Dominance and Doctrinal Stagnation . . . . .	72
	Delays Contribute to Loss of Air Force Interest . . . . .	75
	The Karlsruhe Project’s View of Its Own Role . . . . .	79
	Avoiding the Pitfalls of Army History . . . . .	82
	Vietnam Parallels: “Lessons” Lost?. . . . .	86
	Jumping to the Wrong Conclusion. . . . .	90
5	CONCLUSION . . . . .	95

<i>Appendix</i>	<i>Page</i>	
A	COMPARISON OF AMERICAN AND GERMAN GENERAL OFFICER RANKS . . . . .	101
B	PUBLISHED KARLSRUHE MONOGRAPHS . . . . .	103
C	UNPUBLISHED KARLSRUHE MONOGRAPHS . . . . .	105
D	ILLUSTRATIONS . . . . .	107
E	SELECTED MONOGRAPHS . . . . .	111
	LIST OF ABBREVIATIONS AND TERMS . . . .	119
	DRAMATIS PERSONAE . . . . .	121
	BIBLIOGRAPHY . . . . .	123



## **Foreword**

The final stages of World War II witnessed a remarkable upsurge of support for documenting the history of the conflict among America's war leaders, one without parallel. The enduring fascination with the history of the 1861–65 Civil War provided a precedent, but that conflict produced no long-term institutional support for the production of official military history. One common thread connecting the outpouring of Civil War history with the emergent interest in the history of World War II was the unequivocality of outcome—outcomes that placed the historical records of the vanquished at the disposal of historians. By contrast, the equivocal conclusion of World War I, ended by armistice rather than surrender, may help to explain why the armed services sponsored no comprehensive official histories of that conflict. Another common thread connecting the American historiography of the Civil War with that of World War II lies in the willingness of vanquished commanders to tell their side of the story. That parallel should not be pressed too far, however, for that willingness was not clear until after the cessation of hostilities.

Whatever its origins, interest in documenting the US engagement in World War II was widespread and shared by senior civilian leadership as well as that of the Navy, Army, and Army Air Forces (AAF). The detailed reasons for this upsurge of interest in official history were many and varied from institution to institution. Of relevance to the study that follows, the deployment of new and controversial technologies of war and a lack of consensus concerning their effectiveness were motivating factors, particularly with regard to air operations. Among the major official historical efforts, the United States Strategic Bombing Survey (USSBS), with separate divisions charged with evaluating the effectiveness of strategic bombing in Europe and the use of the atomic bomb against Japan, was established by Secretary of War Henry Stimson in 1944. Indeed, the USSBS's European division published an interim report on the impact of strategic bombing in Europe before the end of hostilities in the Pacific.

The armed services were not far behind, having made significant efforts to preserve historical records while hostilities were

ongoing. Even if restricted to the official histories, the results were impressive: Rear Adm Samuel Eliot Morison's 15-volume *History of U.S. Naval Operations in World War II*; the seven-volume *Army Air Forces in World War II*, edited by Professors Wesley Frank Craven and James Lea Cate; and the monumental 80-volume *U.S. Army in World War II* series (this book's author, Lt Ryan Shaugnessy, refers to it as the largest collaborative historical undertaking ever) effectively exploited the primary source material generated during the war and wrote the first draft of the conflict's history from the American perspective.

But there was another side to the history of World War II, one that went beyond American sources and archives, and that was the enemy's perspective. For the historian and the military planner, that perspective is important, for war is an interactive process. The editors and authors of the official histories understood that process and did what they could to incorporate the enemy point of view using captured enemy documents. But such materials were in short supply when the early volumes of the official histories were written.

Another source of information on the enemy's perspective was born of the fact that a considerable number of the senior German and Japanese leaders who survived the war were in American custody. Former enemy combatants in Soviet hands were beyond the reach of the historical efforts of the Western Allies—an early manifestation of the Cold War. But those in American, British, and, presumably, French hands were available. They were also, as it turned out, generally willing to collaborate with their Western captors, a concrete consequence of the unequivocal nature of Allied victory. The fact that these leaders were dependent on their captors for food and shelter, things in short supply in Occupied Japan and Germany, was a powerful incentive as well.

Again, the USSBS took the lead, conducting scores of interviews with senior Axis civilian and military officials in American custody before the survey was completed in 1946. These interviews, though initially tending toward the cursory, broadened out with time and, reflecting the interviewers' historical interests and in some cases training, touched on many topics that went well beyond the effects of strategic bombing narrowly defined. Translated into English and published in bound volumes

distributed to official archives and libraries, they remain an invaluable historical resource to this day.

Whether the historical branches of the armed services took their cue from the USSBS, acted on their own initiative, or were motivated by some combination thereof is unclear, but within weeks of Victory in Europe (VE) Day, both the Army and AAF had programs in place to plumb the history of the war from the German perspective. The Navy was slower off the mark, not putting in place a program to interview and exploit the knowledge of senior *Kriegsmarine* (war navy) officers in US custody until 1949. As laid out in the pages that follow, the initial AAF effort was comparatively modest and centered on an effort headed by *Generalmajor* Hans Detlef Herhudt von Rohden, former head of Abteilung 8—the Luftwaffe’s historical section. Established in May 1945 and dubbed project “R,” it foundered on von Rohden’s untimely death and the dearth of primary documents available to his team. Project R was disestablished in 1947. The effort, however, managed to obtain a significant amount of primary source documents that were invaluable.

Meanwhile the Army set up an ambitious program to exploit the knowledge of senior German captives—the US Army German Military Historical Program (1945–61). That program’s mission was to produce over 2,000 studies, of which hundreds were translated into English and published by the Department of the Army, principally in the 20-series pamphlets. These studies were written and researched by former general officers of the *Heer* (German army), the ground component of the Wehrmacht (German defense force), largely on the basis of personal experience, then translated and edited by Military Historical Program personnel.

With the collapse of their initial effort, the Historical Division of the newly formed Air Force tried again, accepting a generous offer from the Army’s program based in Karlsruhe, West Germany, to share facilities, translators, and administrative support for a comparatively modest charge. That laid the foundations for what would become the German air force (GAF) monograph project.

Changing its direction, the Air Force historians, Col Wendell A. Hammer, the project officer, GAF monograph project (1953–57), and the project’s editor, Edwin P. Kennedy (1955–61),

followed the Army's lead, focusing on the cooperation and reminiscences of former Luftwaffe (German air force) general officers, supported by the documentary resources assembled by project R and whatever additional material could be found.

The Navy, Army, and Air Force programs diverged in their approaches and objectives, reflecting the institutional cultures of their parent services and those of their German sources in fascinating and revealing ways. By 1947–48 the Cold War was on, with the threat of becoming hot on short notice, and the Navy effort increasingly focused on attempts to milk former flag-rank *Kriegsmarine* officers of knowledge of the operational and tactical methods of the Soviet navy, particularly in the Baltic. Having presumably exhausted its sources' database, the US Navy project was closed down in 1952 but not before having provided its flag-rank subjects survival, sustenance, and—most important over the long haul—contacts within the senior ranks of the US Navy that would facilitate the formation of West Germany's navy, the *Bundesmarine*, in which many of those subjects would occupy senior posts.

Reflecting the realities of the Cold War and the Army's increasingly subordinate position in the United States' strategic calculus, the Army's German Military Historical Program shifted its focus preemptively to the east, extracting from its ex-*Heer* contributors detailed operational and tactical studies of how the Wehrmacht dealt with the Red Army. These studies also reflected the political realities of the Cold War. If the Soviets were to be deterred on the ground, then West Germany would have to be rearmed, with obvious military implications. Giving their Army handlers what they wanted, the German contributors produced narrow "lessons learned" monographs, explaining how the authors dealt with the Soviet colossus, successfully attacking and then defending against odds of three, four, five, and even seven to one. They also went to pains to promulgate the myth of the apolitical German army, fighting the good fight against the Soviets while the *Schutzstaffel* (SS) went about its work of atrocity and genocide. Much as Confederate generals preserved the ethos of the lost cause in the historiography of the American Civil War, the German generals preserved the myth of the apolitical Wehrmacht.

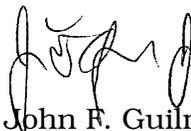
That is not to say that the German Military Historical Program monographs have no value. Read critically, many make significant contributions to our understanding of operations on the eastern front in extremes of terrain, climate, ideology, and logistical deprivation. Significantly, the vast majority of them deal with the Wehrmacht's halcyon days of 1941–42. Equally significantly, few of them have anything to say about the Red Air Force, no doubt because the vast majority of flag-rank German army officers who witnessed the full fury of the Red Air Force ended the war dead or in Soviet captivity.

The GAF monograph program was more modest, operating on a shoestring and ultimately producing only 12 of 40 planned monographs. It is a fascinating story of institutional starvation and selective resource allocation that Shaughnessy tells well, populated by strong personalities and competing agendas. Perhaps the most interesting part of the story is the manner in which political and strategic imperatives impinged on the historical project, for the period of the GAF monograph's peak of activity coincided with the period of intense debate and political maneuvering over the creation of the nascent *Bundeswehr* (German federal defense force) and *Bundesluftwaffe* (German federal air force). An important product of this scholarly and military-political maneuvering was to place the GAF monograph project officer, Colonel Hammer, as the ideal liaison between the ex-Luftwaffe officers who would become the leaders of the Bundesluftwaffe, the West German government, and the US Air Force command structure. Here the difference between the experience of German army officers and Luftwaffe officers is stark. While the Army contributors to the German Military Historical Program could claim to have fought the Western Allies to a near standstill in the West and to have been overwhelmed by sheer numbers in the East—a half-truth at best and a fabrication at worst—their Luftwaffe colleagues were in no doubt as to who won and why. They had been utterly defeated in the daylight skies over the Reich by the USAAF with a significant assist at night from Royal Air Force Bomber Command. They understood defeat and how it had come to them, and, as Shaughnessy and several of his sources perceptively note, there is more to be learned in defeat than from victory.

## FOREWORD

The US Air Force of the 1950s and 1960s was not attuned to the lessons that it might have gleaned from the accounts of its former German adversaries, lessons that say important things about, among other things, the limitations of airpower in a counterinsurgent role. It, therefore, placed a low priority on the GAF monograph project and let its directors, editors, and authors go their own way . . . writing good history. The Air Force monographs have retained their historical value to a much greater extent than their Army counterparts. Moreover, monographs that were not translated remain available in the archives awaiting the historian's visit. The irony is rich.

Finally, by placing ex-Luftwaffe senior officers in personal contact with their victorious former adversaries, the GAF monograph project fostered surprisingly cordial and professionally stimulating contacts, serving as midwife in the birth of the Bundesluftwaffe, created in the American mold. If not exactly a Germanic recreation of the US Air Force, the Bundesluftwaffe was something very much like it in equipment, training, professional attitudes, and institutional culture.



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## ***About the Author***

First Lieutenant Ryan Shaughnessy is an Air Force intelligence officer assigned to Langley Air Force Base, Virginia. He was born and raised in Louisville, Kentucky, and received both a bachelor of science degree in history and commission from the US Air Force Academy in 2008. He received a master of arts degree in history from Ohio State University in 2009.



## **Abstract**

This book examines the German air force (GAF) monograph project, also known as the Karlsruhe project, through which the US Air Force employed former Luftwaffe generals to record the history of World War II from the German perspective. Historians have explored parallel programs in the US Army and Navy, but the Karlsruhe project has received little attention. However, the Air Force monographs have proven useful to historians because of their high quality.

This book attributes the Karlsruhe monographs' strength as works of history primarily to the Air Force's limited interest in them, which insulated the writers from outside pressure to produce studies of immediate utility to the military. Whereas policy needs drove the Army and Navy programs and often caused them to search for convenient tactical "lessons" in German history, the GAF monograph project was effectively autonomous. This was a mixed blessing. Chronically undermanned and inadequately funded, the project ended with most studies still unfinished. The Air Force ignored the monographs and failed to benefit from the experience of the Luftwaffe.

This book illustrates the inherent tensions in writing official military history and utilizes the Karlsruhe project as a lens to examine problems plaguing the Air Force during the early Cold War. Still, cooperative historical work proved to be an inexpensive and unexpected way of cementing the critical West German-American military alliance, and both air forces came to value this aspect of the project more than the historical studies it produced.



## **Acknowledgments**

I will be forever indebted to those who set me up for success in this project. Prof. John Guilmartin afforded me the freedom to pursue my interests and provided invaluable advice and feedback along the way. Profs. Richard Muller and Alan Beyerchen directed me towards a topic that was ideally suited to my somewhat compressed program of study. Harry Fletcher's testimony made a satisfactory exploration of the Karlsruhe project possible, and his humor and hospitality made my research a true pleasure. In the archives at the Air Force Historical Research Agency, Sylvester Jackson was a tremendous help.

Prof. Carole Fink and all the members of her Winter-Spring 2009 European Diplomatic History seminar shaped my project through what became a hugely productive and demanding educational experience. Special thanks must go to Stephen Shapiro and Anne Sealey—many of the best ideas presented are theirs. My editors—Robyn Rodriguez, Chris Elias, and Lt Col Sean Judge—thankfully, did not allow our friendship to get in the way of good, hard criticism, and their company over the past year helped make it the best of my life. Any remaining errors or omissions are mine alone.

Finally, I must thank my parents for their constant support and the faculty of the Air Force Academy's History Department, especially Profs. Jeanne Heidler and Charles Steele, Col John Abbatiello, and CDR Stuart Farnham, US Navy, retired. Their mentorship and encouragement made my time there enjoyable and my graduate study possible.



## **Introduction**

At noon on 6 March 1944, the German air force launched its most concentrated attack on American bombers in World War II. Attacking the four-engine bombers head-on as they plodded towards Berlin, the first wave of 107 single-seat German fighters ripped through the American defensive boxes. Ten bombers, each with 10 crew members aboard, fell from the sky within seconds. Navigational errors had placed that American unit, the 13th Combat Wing, in an exposed position with little fighter escort—it would lose 25 B-17s by day's end.<sup>1</sup> Skillful ground coordination enabled the Luftwaffe to achieve this especially high concentration of interceptors and thereby inflict heavy casualties.

At *I. Jagdkorps* (fighter corps) headquarters in occupied Holland, *Generalmajor* Josef “Beppo” Schmid had quickly recognized that the Americans' target was Berlin and successfully directed fighters from neighboring commands to meet the Americans. Unlike most senior Luftwaffe officers, Schmid never became a pilot, but he proved to be a capable commander as he orchestrated the air defense of Germany in the pivotal period between September 1943 and December 1944.<sup>2</sup>

Despite Fortress Europe's integrated network of radar stations, communication nodes, and command centers, the Allied air forces won the war of attrition during 1944. On 6 March the Americans sustained their highest numerical loss of the war with 69 bombers destroyed, a 10.2 percent loss rate. They still bludgeoned their way to the German capital and put nearly 1,400 aircraft aloft, including bombers and escorts. The Luftwaffe, on the other hand, could scarcely afford its loss of 64 aircraft. In the face of such long odds, some airmen resorted to acts of sheer desperation. One German pilot that day, his ammunition exhausted, used his plane's wing to sheer off a piece of an American bomber's tail. He survived, but only two American gunners escaped their spinning aircraft.<sup>3</sup>

The bloody events of 6 March 1944—perhaps Schmid's finest moment as a commander—provided an ironic backdrop to the ceremony surrounding his interment some 12 years later. *Generalfeldmarschall* Albert Kesselring delivered a heartfelt

eulogy, mentioning the handful of old comrades present. One notably absent officer was Josef Kammerhuber, the architect of Germany's nighttime air defenses that had ravaged Royal Air Force Bomber Command through 1944. Kammerhuber was in England at the time of Schmid's funeral in 1956, negotiating with Germany's new ally as the chief of the reborn West German air force. In his place, he sent an honor guard of six officers as representatives of the West German armed forces, a military that was still highly controversial both at home and abroad.<sup>4</sup>

Kesselring—a convicted war criminal who had been released ostensibly on grounds of poor health—went on to state the “respect and affection” held for the deceased by his final employer: the US Air Force. Since 1953 Schmid had been a participant in the GAF monograph project, an effort to record the history of the air war from the German perspective for the benefit of the American military. The writers and editors of the Karlsruhe project (named after the West German city housing the main office) were almost all German, supervised by a handful of members of the USAF Historical Division. Kesselring was one of the few surviving senior Luftwaffe officers who did not write for the project but convinced other veterans to work for the Americans.

Schmid, by comparison, had been the primary author of two drafted studies of the Luftwaffe's air war against the Western Allies, neither of which were completed after his death. Still, out of good nature and in recognition of the importance of building strong bonds with America's new North Atlantic Treaty Organization (NATO) ally, the project officer, Lt Col Wendell Hammer, USAF, placed two small wreaths on Schmid's casket. Hammer also provided Schmid's widow with funds to defray the cost of the funeral. She accepted the money only as payment for her husband's efforts and partial compensation for his diaries, which the general had donated to the massive document collection assembled for the project.<sup>5</sup> American members of the Karlsruhe project would continue to visit her long after her husband's death.<sup>6</sup>

How did this show of respect, characterized by the assistant chief of the Historical Division as an “extraordinary occasion,” occur so soon after one of the most destructive campaigns in the history of warfare?<sup>7</sup> This study tells the story of the GAF monograph project for the first time, revealing the crucial part

it played in the transformation of the West German–American military relationship from one of victor and vanquished into one of partnership in the defense of Western Europe. Further, it explores why the US Air Force came to value the Karlsruhe project more for the diplomatic opportunities it presented than for the historical studies it produced.

World War II was a seminal event in the history of the United States and its Air Force in particular, which became an independent service two years after the war ended. It produced the largest documentary trail of any conflict to date, which was not wholly beneficial to surviving military thinkers attempting to cope in the postwar defense environment. The abundance of material meant that, as historian Frank Futrell put it, “few persons—military or civilian—would have the time or the incentive to master it.”<sup>8</sup> According to Bernard Brodie, this information overload contributed to “the divorcement of doctrine from any military experience other than that which has been intensely personal with the proponents.”<sup>9</sup>

In an Air War College lecture in September 1951, Maj Gen Orvil Anderson, USAF, put the predicament more bluntly: “If you will only let experience be your teacher, you can have any damn lesson you want. Progress in the development of military science and strategy is vitally dependent upon the soundness of the evaluations of past battle experience and upon the boldness, inspiration and depth of the projected thinking which creates the solution for the future.”<sup>10</sup>

Total Allied victory provided the American military with an unprecedented chance to appraise the war from the perspective of its former enemy owing to the incarceration of thousands of German general officers. This made a whole corps of what one historian has accurately called “captive historians” available to the American military.<sup>11</sup> Beginning within months of the German surrender, the American government employed former high-ranking German officers to write studies of a historical nature, usually with the Germans working on topics where they at least had some firsthand knowledge. Postwar foreign historical projects were a unique chance to learn what had happened on the “other side of the hill” and to make the vast body of knowledge of the German military available to the American military. The American Army, Navy, and Air Force

sponsored their own projects focused on aspects of the war of interest to them, and work on the German studies continued in one form or another for nearly 25 years.

The US Army's German Military Historical Program (1945–61) was by far the most prolific of the postwar projects, producing approximately 2,000 studies, of which hundreds were translated into English. Recent scholarship has revealed the powerful influence that the German report series had on both postwar historiography and the US Army. James Wood has revealed how these studies have thoroughly permeated Western histories of the war. Motivated by staunch anticommunism and “a desire to overcome the tarnished reputation of the Wehrmacht,” the German authors produced a large body of influential and often self-serving accounts that, like many Wehrmacht memoirs, sought to separate the army from the Nazi state and Hitler's failed strategy.<sup>12</sup>

Kevin Soutor, searching for the origins of the Army's more aggressive mobile defense doctrine that emerged in late 1949, has identified the German reports as the central factor. The Army even asked its German generals to critique existing American doctrine. Although the Army program began as a more conventional historical effort, it gradually shifted focus to the Soviet-German War, providing sought-after information on America's presumed adversary. The Historical Division disseminated these highly focused studies across the Army, and officers frequently discussed them in professional journals.<sup>13</sup>

The US Navy, working with the British Royal Navy, attempted to utilize German veterans and archival material to reconstruct wartime events immediately after the German surrender. While the impact of these studies is less pronounced, it is clear the Americans soon realized the potential value of their “historians” as the Cold War escalated. In Bremerhaven, the Navy established the Naval Historical Team (1949–52) within the Office of the Director of Naval Intelligence. After quickly completing historical studies of interest to the Navy, the team evolved into a secret intelligence organization that provided German impressions of Soviet activities and capabilities. Douglas Peifer and David Snyder have emphasized the role the team played in West German naval rearmament, a facet of the program that was likely more important than any study it produced. In the imme-

diate postwar period, military activities in Germany were met with unease if not outright prohibition. The Naval Historical Team therefore provided a crucial back channel for German veterans, naval rearmament planners, and American officials.<sup>14</sup>

Chapter 1 of this work details these older programs as well as the Air Force's short-lived von Rohden project, which foundered in 1947 due to the lack of Luftwaffe documentary records and the poor health of its namesake and leader. Beginning in 1952, the Karlsruhe project combined various elements of its predecessors. Paid for by the Air Force but inspired by and virtually conducted by the Army for its first two years, the Karlsruhe project managed to follow a distinct path beginning with the Air Force's selection of a drastically reduced number of monographs.

Chapter 2 examines in detail the course of the Karlsruhe project, which encountered similar obstacles to the von Rohden project. Because the Air Force never provided adequate resources or personnel, significant delays occurred, and in the end, the Air Force published only 12 of 40 planned studies.

The Air Force began to value the project for reasons other than historical work, mirroring the evolution of the Naval Historical Team. Chapter 3 explores how the Air Force project officer in Karlsruhe essentially became a military attaché during West German rearmament, much to the surprise of his superiors at the Historical Division. The project became a conduit for officer education textbooks and USAF doctrine, and the cooperative enterprise heavily influenced several authors who left early to become the senior leaders of the new West German air force, or Bundesluftwaffe. Nearly every former Luftwaffe general still living in the West participated in some capacity, and German veterans began speaking at USAF staff schools as part of this exchange. This was especially significant because, as James Corum has shown, the Bundesluftwaffe explicitly modeled itself after the US Air Force and relied totally on the latter's technical expertise, aircraft, and training establishment for at least a decade.<sup>15</sup>

After five and a half years, the US Air Force closed its office in Karlsruhe after completing all drafts in the summer of 1958. Translation and editing of the monographs continued in the United States for another 11 years, but interest waned partly

because it was no longer a cooperative effort with a vital NATO ally. Chapter 4 places the Karlsruhe project in the context of the wider Air Force during the early Cold War to explain why it was so starkly different from its contemporary projects in terms of its scale, its impact within the military, and the character of the studies it produced. Briefly, the 1950s was a period of dramatic change in the technology of air warfare, Air Force dominance of the defense budget, and doctrinal complacency and stagnation within the service.<sup>16</sup> This did not incentivize studying the past for the Air Force as it did for the Army. Yet the Air Force was not totally disinterested in history. Although monographs on the Soviet Union made up only one-sixth of the monographs requested, they comprised half of those the Air Force completed.

Paradoxically, the Air Force's limited interest both strangled and freed the Karlsruhe project. On one hand, given the challenges that had doomed the early von Rohden project, the Air Force should have provided the resources to better meet the inevitable obstacles. Instead, the service initiated a second historical project with the expectation that it could quickly and cheaply produce high-quality studies; perennial delays and eventually cancellation resulted. On the other hand, the Air Force's neglect insulated the project from the constant pressure to produce expedient works, which had driven the older historical programs towards a narrower "lessons learned" approach. The Karlsruhe project created many sound histories, although many others are mere technical reports. Those that reached publication were arguably the best possible accounts given the limitations of the source material and the writers.

Interest in the monographs did not suddenly materialize when they reached publication some two decades after the end of World War II. The Air Force never made official use of its German studies and instead published them publicly. Students of history both inside and outside the military have used the monographs, which are excellent references to the massive Luftwaffe document collection assembled between 1952 and 1958.

It may have appeared at the time that technological advances had altered the character of air warfare, but this was not the case. In his memoir, the senior German staffer *General der Flieger* Paul Deichmann recalls asking Hammer early on "why

a great airpower, which in the end decisively defeated Germany, is particularly interested in our air force.” Hammer replied that “one must know how the German air force, with its ‘handful of weapons and aircraft,’ was able to resist the world’s airpowers for years.”<sup>17</sup> Others frequently expressed their belief that more could be learned from the defeat of an air force than from its victory. Outside the project offices, however, there was less enthusiasm. The Karlsruhe monographs may have contributed to historians’ understanding of the Luftwaffe, but, as Frank Futrell might have predicted, from the standpoint of the US Air Force, they generally faded into the background noise of the mass of World War II historiography.

### Notes

(All notes appear in shortened form. For full details, see the appropriate entry in the bibliography.)

1. Muller and Caldwell, *Luftwaffe over Germany*, 169–70.
2. Ibid., 168, 296. Most famous as the inept chief of Luftwaffe intelligence during the Battle of Britain, Schmid later commanded the *Hermann Göring* Luftwaffe armored division in North Africa. He ended the war at the rank of *Generalleutnant* in command of all air units supporting the German army in the West.
3. Ibid., 171.
4. Col Wendell A. Hammer to Joseph W. Angell, Jr., letter, 12 September 1956, Karlsruhe Collection, Air Force Historical Research Agency (AFHRA), Maxwell AFB, AL.
5. Ibid.
6. Edwin P. Kennedy, Jr., to Joseph W. Angell, Jr., letter, 2 May 1958, Karlsruhe Collection, AFHRA.
7. Joseph W. Angell, Jr., to Col Wendell A. Hammer, letter, 27 September 1956, Karlsruhe Collection, AFHRA.
8. Futrell, *Ideas, Concepts, Doctrine*, vol. 1, 146–47.
9. Brodie, “Douhet in Perspective.”
10. Futrell, *Ideas, Concepts, Doctrine*, vol. 1, 146–47.
11. Wood, “Captive Historians, Captivated Audience,” 123–47.
12. Ibid., 125.
13. Soutor, “To Stem the Red Tide.”
14. Peifer, *Three German Navies*; Snyder, “Arming the ‘Bundesmarine’”; and Greiner, “Operational History (German).” Because the Naval Historical Team is depicted in less detail than the German Military History Program and is often addressed only tangentially, the author of the present work has chosen to compare the Air Force monograph project primarily to the Army project.
15. Corum, “Building a New Luftwaffe.”

## INTRODUCTION

16. Several scholars have explored USAF doctrinal stagnation during the Cold War. Worden, *Rise of the Fighter Generals*; and Ziemke, "In the Shadow of the Giant."

17. Deichmann, *Der Chef im Hintergrund*, 10. "My answer, that it was, first and foremost, the courage of the German soldier that made this possible, found the full agreement of the American" (*ibid.*).

## Chapter 1

# **An Overview of American World War II Official Military History Projects**

World War II prompted the dramatic expansion of official history programs in the American military, as evidenced by the mammoth series that each branch of the American armed forces produced after the war. Military history has played a role in American officer education, particularly at the Army's Infantry and Cavalry School and the Naval War College, but as Allan Millett observed, it was not until the progressive period when officers realized that "historical analysis could pay political dividends."<sup>1</sup>

While none of the services produced comprehensive accounts of the Great War, by 1920 the Army, Navy, and Marine Corps each had its own historical offices in Washington, DC, to support its service.<sup>2</sup> During the 1930s, the services attempted to explore, through case studies and historically informed analyses, the essence of airpower, seapower, amphibious warfare, and the "principles of war."<sup>3</sup>

In March 1942, Pres. Franklin Roosevelt, an avid student of naval history, ordered all government agencies to prepare an "accurate and objective account" of their activities in World War II. The services dispatched teams of civilians and military members around the world to collect documents and write histories. The resulting official histories were massive and are generally well regarded: Rear Adm Samuel Eliot Morison's 15-volume *History of U.S. Naval Operations in World War II*; the seven-volume *Army Air Forces in World War II*, edited by Wesley Frank Craven and James Lea Cate; and the 80-volume *U.S. Army in World War II* series, better known as the "Green Books." This last project remains the largest collaborative historical undertaking in American history.<sup>4</sup>

In "An Improbable Success Story," former Director of Naval History Ronald H. Spector explains the acceptance of these works by both academia and the military, concluding that the official military historians of the mid twentieth century are the "product of a fortunate series of accidents: the fact of total vic-

tory in World War II, the desire of high level readers to inform the public about the services' 'achievements,' and the needs and demands of the services themselves, all coinciding with the maturing of academic history and the willingness of academic historians to lend their expertise to the project."<sup>5</sup> Lt Gen Henry H. "Hap" Arnold's directive to his historians embarking on the Craven and Cate project underscores Spector's conclusion: "We want the public now and after the war to understand what air-power really is; we want credit to go where credit is due."<sup>6</sup>

More than any other postwar program, the US Strategic Bombing Survey (USSBS) is connected with the US Air Force (USAF) and its ancestor service and, therefore, cannot escape brief mention. The US government's official review of a bombing campaign that still cultivates controversy, the USSBS, not surprisingly, has faced criticism on the grounds of supposed bias, inaccuracy, and the immorality and ineffectiveness of the techniques investigated. It is beyond the scope and focus of the present study to evaluate these claims, but a few points are worth highlighting.

The survey, established in late 1944 by Secretary of War Henry Stimson, was a massive effort and, at its peak, employed 300 civilians and 850 military personnel. Headed by prominent businessmen and economists with high-ranking military officers from the various services in advisory roles, it produced over 300 supporting reports and three major summaries, one each for the defeat of Germany, the defeat of Japan, and the atomic attacks. The survey published its first summary conclusions on the European theater before the Japanese surrender in the hope that its findings might prove useful. Many of the researchers followed closely behind the advancing Allied armies, scrambling to collect documents and interview prominent persons who could attest to the effects of strategic bombing on the German war effort. The war in the Pacific ended within weeks of the publication of the German report, and the survey completed the rest of its work in 1946.<sup>7</sup>

Just as total Allied victory allowed USSBS investigators to scour enemy territory in 1945, it also allowed the United States to launch unprecedented foreign military history projects. The incarceration of so many high-ranking enemy combatants and the capture of hundreds of enemy records gave the American

military a corps of potential historians and the documentary records to support them.

The ultimate outcome of the American historical programs differed, but they followed similar courses in their early stages. Brief interrogations of prisoners gave way to more extended interviews. Later, the Americans encouraged certain key former officers to write historical studies, with the captors assigning topics and providing documentary sources. At the same time, the Americans grouped selected prisoners into writing teams.

The German historical projects were not unique. In October 1945 the headquarters of the American Far East Command ordered the production of operational monographs by former officers of the Imperial Japanese army and navy. The resulting program continued until 1960 under the supervision of the US Army's military history section and produced over 200 monographs of varying quality.<sup>8</sup>

The focus of this section will be on those German projects begun in the 1940s by the US Army, Navy, and Army Air Forces (AAF). The courses and receptions of the three projects on a small scale reflect the larger challenges facing the services and illustrate different views of the utility of history for dealing with the future. Overshadowed by the USSBS, the atomic bomb, and rapidly changing technology, the Army Air Corps's von Rohden project failed primarily because of practical considerations—the lack of documentary material and the death of its namesake and leader. It ended the same month the Air Force achieved independence.

At first, the US Navy commissioned brief historical studies but began directing the German admirals to write historically informed analyses when relations with the Soviet Union deteriorated. This quasi-intelligence and planning outfit also proved crucial as a back channel between the Navy and its unofficial German counterpart during the sensitive period of German rearmament. Finally, the Army's project shifted focus several times over its 16 years; it concluded by producing specific "how to" manuals for Army officers hungry for any information on the Soviet Union. Of the postwar projects, the Army's was by far the largest and had the greatest influence on its sponsor service. Several of the German contributors assisted in revising Army doctrine during the early 1950s.

## **The von Rohden Project (1945–47)—A First Draft of Luftwaffe History**

The von Rohden project, also known as project “R,” lasted from May 1945 until September 1947 and attempted to capitalize on the wartime work of the Luftwaffe High Command’s historical section, Abteilung 8. American forces captured that organization’s chief, *Generalmajor* Hans Detlef Herhudt von Rohden, and members of his team in early May 1945. Interrogators first tried to gain insights through extensive debriefings. At von Rohden’s urging, the US Strategic Air Forces in Europe historian allowed the former von Rohden team to work together to compose a summary history of the Luftwaffe. The manuscript’s working title, “European Contributions to the History of World War II: The German Air War, 1939/45,” suggests the German writers viewed the project as one contribution to the international history of the war.<sup>9</sup>

Unfortunately, scarcity of sources hampered progress from the start. Von Rohden’s team spent years assembling documents, but 250,000 files, some dating back as far as 1870, had been burned in May 1945 at Vorderriss, Bavaria. The assistant director of those archives committed suicide, but the director saved several important cases. Those documents that survived the final months of the war were spread across Europe in various archives, warehouses, and aircraft hangars and were usually unsorted and often classified by the Allies.<sup>10</sup>

For von Rohden project participants, which included such famous Luftwaffe figures as *General der Jagdflieger* Adolf Galland and *Generalmajor* Hubertus Hitschhold, their own recollections were initially their main sources of information. Together with von Rohden, the permanent team was comprised of Col Werner Baumbach, von Rohden’s former assistant Col Otto Kriesche, and Lt Col Friedrich Greffrath, the director of Luftwaffe archives. Hopes remained high for the von Rohden project in spite of difficulties in obtaining source material, with one American Air Corps major remarking that the project “may furnish future historians with valuable help not only in assessing the effectiveness of the German air effort, but will also be a guide for future theorists of air-warfare.”<sup>11</sup>

Documents requested from England began to trickle into von Rohden's prisoner-of-war camp in Germany in early 1946. Though the German writers completed two studies on Luftwaffe operations in Russia and the Mediterranean that May, they also complained that frequent relocation to different camps, inadequate office supplies, and lack of access to captured Luftwaffe documents were slowing their progress. A summer 1947 progress report, possibly written by von Rohden himself, expressed frustration: "It would be a further relief for us if we had the opportunity to go walking *alone* for an hour or two, announcing our departure and return, and *promising again* to make no attempt to escape" (emphasis added).<sup>12</sup>

These and other obstacles notwithstanding, the team produced 10 more studies during the first half of 1947, for a total of more than 1,500 pages of German text. The von Rohden reports are now grouped in 15 notebooks and include brief treatments of operations in every theater. However, there was no translator assigned to the project at the time, and two-thirds of the manuscripts produced remain in German form only. This translation problem, a result of lack of time and personnel in the responsible intelligence section of the US Strategic Air Forces in Europe, also contributed to a lack of editing and oversight. The German participants appreciated that the victors were allowing them to contribute to the history of the Luftwaffe so soon after their defeat, but they desired more detailed direction and greater intellectual interchange between themselves and representatives of the US military and historical community.

Owing to these difficulties and the illness of von Rohden himself, the project ended abruptly in 1947. The summary of the studies upon their presentation to the Library of Congress in 1949 concludes that "with its undercurrent of tragedy, relieved by rumblings of bombast and half-humorous flashes of hindsight, the manuscript, should it ever be published, seems calculated to appeal to the general reader in style and mood and, with its careful documentation and wealth of operational detail, to command the interest of the serious-minded scholar and professional soldier."<sup>13</sup>

However, the final von Rohden studies were so broad and cursory that their greatest value is as a window into the thinking of the writers. Far more important than the studies them-

selves is the document collection assembled for the von Rohden project, which includes wartime studies written by Abteilung 8, war journals, Luftwaffe directives spanning all levels of command, and much more. The total collection includes 212 cubic feet of largely unsorted German records, copies of which were preserved at the National Archives when the original collection returned to Germany in 1967.<sup>14</sup> Five years after the von Rohden project ended, the United States again employed Colonel Grefrath on the German air force (GAF) monograph project to exploit the von Rohden document collection.

### **The Naval Historical Team, Bremerhaven (1949–52)**

Of the three historical programs, the Naval Historical Team (NHT) became the most heavily involved in contemporary operational planning and the production of intelligence reports for its American sponsors. The NHT's early activities reflected its name, but it soon evolved into a naval intelligence outfit in the years before West Germany formed the *Bundesmarine* (German federal navy). It also provided opportunities for former *Kriegsmarine* (war navy) officers to associate at a time when veterans groups were outlawed.

As was the case with the Army's history program, the US Navy began commissioning studies from its prisoners of war (POW) soon after the war ended. In *The Three German Navies*, Douglas Peifer's study of the transition from the *Kriegsmarine* into the East and West German navies, he describes the close association between the British and American naval history writing programs. Having captured the entire German naval archives in April 1945, the two allies agreed to share the documents and use them for the purposes of intelligence gathering, historical writing, and evidence discovery for war crimes trials.<sup>15</sup>

Karl Dönitz "set the example" for other *Kriegsmarine* officers, dictating a study of the naval war while imprisoned.<sup>16</sup> Several other officers followed suit but without the benefit of any documentary record. The Allies soon began allowing a handful of German officers to travel to England to exploit the seized *Kriegsmarine* materials. The American Army and Navy funded addi-

tional studies in 1947 and 1948 on subjects pertinent to both services, such as the investigations of various amphibious operations. Vice Adm Friedrich Ruge, who would go on to become the *Bundesmarine's* first chief of naval operations, was one of the key contributors and was happy to work for the Americans in exchange for extra food.

According to Peifer, the formation of the NHT in 1948 marked a departure from earlier programs. The tension of the Berlin blockade was the impetus for its establishment by American naval intelligence. In the summer of 1948, the chief of German naval intelligence convinced Ruge and Konrad Patzig, the former head of the *Kriegsmarine* personnel division, to recruit former colleagues for the NHT. Although most were loath to cooperate with their former enemy because either they or their former commanders would soon be subject to war crimes prosecution, many eventually came around, thanks to the personal appeals of their comrades and the looming Soviet threat. The initial round of studies produced after the NHT's first official meeting at a Bremerhaven villa in April 1949 remained primarily historical in nature, but soon the American intelligence officers began feeding the Germans topics such as "How Best to Deny Soviet Submarine Access to the North Sea," which were clearly geared towards present issues facing the US Navy.<sup>17</sup>

The team was comprised of eight Germans, including former admirals, a *Luftwaffe* liaison, and a naval engineer, but they also forwarded requests to subject matter experts outside the group. One of the first tasks assigned to the NHT by the US Navy was identifying potential amphibious landing sites on the Baltic and North Seas, as the United States placed such operations prominently in early war plans.<sup>18</sup> In 1953 the group collaborated with members of the Central Intelligence Agency-backed Gehlen Organization in a war game.<sup>19</sup> That same year the chief of an important East German naval construction project deserted to the West and presented detailed plans to the NHT. The NHT also functioned as a go-between for the US Navy and the German maritime labor forces that the Americans contracted to clean up harbors and disarm mines.<sup>20</sup>

The NHT was one of the most influential groups in the formation of the *Bundesmarine*. Peifer argues that the NHT, various minesweeping forces, and other intelligence organizations never

amounted to the shadow navy that the People's Sea Police did in East Germany, but these groups saw the first postwar associations of *Kriegsmarine* veterans, a key first step. The NHT, because of the ties it fostered within that community, became powerful in the rearmament debates, providing advice and support to the naval officials of the West German government. Finally, in the preparations for the establishment of the *Bundesmarine*, the West German government sought the counsel of the NHT regarding personnel and equipment policy, and the US Navy received timely inside information on developments. Its first chief knew West German chancellor Konrad Adenauer personally, and the team members became crucial behind-the-scenes "operators" in the German defense establishment, in essence picking the members of and setting the agenda for the naval branch of the *Amt Blank*, the precursor to Bonn's Ministry of Defense.<sup>21</sup> NHT members even drafted the proposals for German naval contributions to the European Defense Community, proposals that the original force structure of the *Bundesmarine* mirrored closely.

### **The US Army's German Military History Program (1945–61)**

The US Army's German Military History Program, which began in 1945, produced the greatest volume of documents and had the most significant historiographical and military impact of the American foreign historical projects. The Army's Historical Division had no plans to employ former German officers in May 1945, but early interrogations revealed the potential value of the German prisoners. Of his first interview with *General der Artillerie* Walter Warlimont, the former deputy chief of operations at the Wehrmacht High Command, American major Kenneth Hechler wrote, "My eyes widened as I saw for the first time what had taken place 'on the other side of the hill.' Each response opened up a new vista . . . Hitler alone felt we would land in Normandy . . . Rommel was not on hand on [D-Day] because it was his wife's birthday." Hechler was "overjoyed" with the results, with the proceedings becoming "a real conversation rather than an interrogation."<sup>22</sup> More valuable interviews

followed, but Helmut Heitman, a South African who was later chief of the Foreign Military Studies Branch and a translator for the GAF monograph project, characterized the system as “haphazard” and “unsatisfactory.” In 1946 the effort received its own branch, and writers focused on whichever battle or campaign Army historians in the United States were researching for the Army’s official history.<sup>23</sup>

Historian James Wood called the resulting effort “absolutely unparalleled in the annals of military history.”<sup>24</sup> By the time the project ended in 1961, the German authors, many of whom began researching and writing while still POWs but later became civilian employees, produced about 200,000 pages of manuscript histories for the US Army, much of which was never translated into English. In its first few years, the program complemented the Army’s official history of its own operations, *The U.S. Army in World War II* series, providing narrative accounts of the war against the Western Allies from the German perspective. Initially American officers conducted open-ended interviews with high-ranking POWs without the aid of good maps or other supporting materials, limiting the value of the early interrogations. Months later, the interviewers came ready with batteries of specific issues to address and questionnaires; the improved results helped garner support for an expanded project.

Both official and independent historians have made extensive use of these histories and interviews, coloring the Western historiography of World War II. That said, Wood cautions against blind acceptance of these accounts: “One often gets the impression from these manuscripts that high-ranking German prisoners of war were taking advantage of an opportunity, offered to them by their captors, to let off steam after a crushing defeat and commit their many frustrations to paper.”<sup>25</sup> With war crimes trials as a backdrop, many accounts, not surprisingly, foisted nearly all the blame for defeat and atrocities on Hitler.

In the winter of 1947 at prisoner camps in Garmisch and Neustadt, the focus of the program shifted towards assembling “lessons learned” accounts of combat against the Red Army as the US Army’s Historical Division began to coordinate its activities with War Department intelligence needs. With East-West tensions increasing, former German officers had an impressive and unique body of knowledge from years of experience on the

Soviet front. The monographs on particular operations or tactics were sometimes rife with Nazi racial ideology, but they, nevertheless, provided a model, indeed the only model, of an army facing a seemingly unstoppable Soviet opponent in Europe—a proposition with which the United States was faced in 1947.<sup>26</sup>

A dispute in August 1947 over the Army's continued support of the program highlights the newfound utility of the German writers. Gen Dwight Eisenhower, then Army chief of staff, ordered the project to be continued but with the focus shifted from historical work to the study of topics of interest to various Army staffs and schools. In July 1948 the Army gave the program new life, creating a German control group under *Generaloberst* Franz Halder that would translate American requests for information and select the most suitable writers to address them. Halder and most of the men working with him were happy to assist the United States in what he termed "its historic mission of combating bolshevism."<sup>27</sup>

During the following decade, the control group continued to produce accounts of the eastern front, with the Berlin blockade prompting a deluge of Army requests for documents that would be useful in preparing the Americans for war against the Soviet Union. *Principles and Experiences of Position Warfare and Retrograde Movements* and *Planned Attack against Fortified Defense Positions North of Kursk by the 6th Infantry Division, July 5–8, 1943*, are representative of the later studies in their specificity and clear utility for American Army officers.<sup>28</sup> More important for the purpose of comparison with the Karlsruhe project, the German Military History Program heavily influenced US Army doctrinal development.

The earliest American war plans foresaw that, in the event of a Soviet invasion of Western Europe, American numerical inferiority would make the defense of Germany impossible. American forces would have to withdraw to Great Britain and possibly the Iberian, Italian, and Jutland peninsulas. Following a strategic nuclear air campaign against the Soviet Union, Allied forces would have to impose peace on their own terms. In 1948 the United States revised these plans as a result of the revival of Western European economies and the ratification of the Brussels Treaty. Abandoning Western Europe at the first rattle of the Soviet saber was no longer politically acceptable; instead,

American forces would defend the Rhine River line and attempt to slow the Soviet advance.<sup>29</sup>

For US Army leaders seeking a historical example to serve as a basis for training, education, and doctrine, the German historical studies were a perfect fit. As late as 1949, Army defensive doctrine was changed little from that of World War II and emphasized positional defense based on static infantry divisions and heavy artillery support; however, the new doctrine for armored forces that appeared in December 1949 stressed aggressive, mobile defense. Kevin Soutor shows that there was nothing in the American Army's recent history that presaged this shift and argues that it resulted primarily from the German studies produced under the leadership of Halder.

Before the report series was formally published, the Army's Historical Division distributed 56 studies between 1947 and 1949 within the service and included them on officer reading lists. According to Soutor, the reports served as both the partial intellectual genesis for the revised armored doctrine and a demonstration of its effectiveness because the techniques that Field Manual (FM) 17-100, *The Armored Division*, proposed closely mirrored German methods on the eastern front. A light defending force on the border would allow the enemy to achieve a breakthrough, and the friendly armored force, held in reserve, would counterattack against the enemy thrust when it stopped to regroup. Still, in 1949 the mobile defense concept far outpaced the Army's capacity to mount such a defense—at the time it had only one armored division and little mechanized transport for its infantry.<sup>30</sup>

The German writers provided other lessons for the interested Americans. Soviet attacks rarely succumbed to a single defensive method, so a mix of offensive and defensive measures was ideal. The armored force was strongest if held back from the front because mobility was one of its key advantages. Last-ditch holdouts, exemplified by Hitler's "stand fast" orders, that aimed to tie down enemy forces were counterproductive in situations of vast numerical inferiority. Finally, Soutor writes that the studies, although often tinged with racist opinions of the Russian soldier, also conveyed a grudging respect for Soviet generalship because the Red Army had indeed achieved what it outlined in its doctrine.

Frequent mentions of the German reports in contemporary US Army journals reveal the eagerness with which American officers accepted these lessons. As new studies emerged, Army officers often reviewed them and compared German and American methods. The studies seemed highly applicable to the contemporary American predicament: the Army would be vastly outnumbered against a Red Army whose technology, methods, and leaders were mostly unchanged since 1945. Moreover, the Germans had delayed the Red Army's entry into German territory for years, a welcome and needed example for an American Army in search of inspiration. Soutor points out that American officers overlooked the fact that the German army had many more divisions deployed to hold off the Soviets than the Western Allies ever had during the Cold War. In sum, he characterizes the American use of the German studies as an exercise in "selective thinking."<sup>31</sup>

The impact of the program was demonstrated when the Army contracted Halder and six other former German general staff officers to critically analyze its current operational doctrine, FM 100-5, *Operations*. According to Soutor, the Germans' harsh critique of the US Army's doctrine in 1953 led to its wholesale revision the following year, when the Army formally embraced both the mobile defense concept and armor as the dominant force on the battlefield.

The ideas put forth by the German officers also had notable psychological and bureaucratic components. The German mode of mobile defensive warfare, although ultimately unsuccessful, was not entirely passive in nature and depended on the counterattack, which appealed to the offensive spirit of any good military officer. Finally, the historical program demonstrated that the Army could do more than merely retreat under the Air Force's nuclear umbrella, a key contribution in an age when the nuclear-armed Air Force garnered the vast majority of funding.<sup>32</sup>

Soutor concludes that "mobile defense, inspired by German ideas, prevailed in military literature but lost in the field."<sup>33</sup> Funding and allocation within the Army and in the Department of Defense (DOD) changed little as a result of the German studies. The Army did not acquire more tanks to support its new doctrine; instead, in 1954, the same year that its revised doc-

trine appeared, it fielded its first nuclear units. The historical program may have demonstrated that a well-trained and well-equipped army could hold off the massive Red Army on the potential battlefields of central Europe, but in the nuclear age, the US Army's possession of its own atomic arsenal was the surest path to survival within the Pentagon. After these events and its brief courtship with the mobile defense concept, the Army moved towards a defense anchored on the use of tactical nuclear weapons, and the German Military History Program wound down, finally concluding in 1961.

Although those intimately involved with the German Military History Program and the revision of Army doctrine may have been dismayed by the failure to shift towards mobile defense, Soutor suggests that the Army's conservatism may have been fortunate. He makes clear that "adopting lessons from the series was an exercise in selective thinking" aimed at showing that a defense against the Red Army could hold; therefore, its supposed lessons for the US Army in the 1950s were often unrealistic.<sup>34</sup> All along, the US Army glossed over the fact that its forces in Europe and those slated for deployment there were tiny compared to the Wehrmacht of 1941 and 1942, which were, not incidentally, the years of heaviest focus by the program. There was far less coverage of the later years of the war, when a mobile defense had proven either impossible to mount or inadequate to stop the Red Army.<sup>35</sup>

Whatever the drawbacks of or falsehoods propagated by the German Military History Program, the resulting mountain of reports powerfully demonstrates that the Army believed it could benefit from investigating the history of World War II from the enemy's perspective. Through the NHT, former German admirals also authored studies with the goal of informing policy; simultaneously, these veterans took some of the first crucial steps towards West German naval rearmament. The scope of and support for both programs expanded over time as their focus shifted decidedly towards the Soviet Union.

In contrast, the AAF allowed the von Rohden project to collapse under the weight of logistical and practical obstacles after it produced only a few studies. September 1947 not only witnessed the end of the von Rohden project but also saw the Air Force become independent, prompting a restructuring of the

service's history program. Within five years, the new Air Force Historical Division recognized the value of the Army's German Military History Program and attempted to benefit from its experience and infrastructure. As before, the Air Force's thriftiness and more limited conception of the value of history eventually constrained the scope and impact of its studies. The GAF monograph project, in contrast with its sister service's programs, suffered chronically from shrinking resources and diminishing interest in the historical works it produced.

### Notes

1. Millett, "American Military History," 7.
2. Ibid.
3. One excellent essay on this phenomenon within the US Marine Corps is Corbett, "Marine Corps Amphibious Doctrine."
4. Spector, "Improbable Success Story," 26.
5. Ibid., 30-31.
6. Edwin P. Kennedy, Jr., to Joseph W. Angell, Jr., letter, 2 May 1958, Karlsruhe Collection, AFHRA.
7. MacIsaac, *Strategic Bombing in World War II*. The book, the first scholarly treatment of the survey, focuses less on strategic bombing and more on the organizational history and the evolving mission of the survey, to include its justification of an independent Air Force. Numerous shorter pieces have followed, many of which emphasize the survey's inaccuracies or its illumination of and effects on interservice disputes both during and after the war. Although the survey helped the Air Force gain independence, McMullen, "The USSBS and Air Force Doctrine," demonstrates that the new Air Force paid little heed to the survey's "lessons" when conducting war planning in the late 1940s and writing its doctrine in the 1950s.
8. Headquarters, Army Forces Far East, "Introduction to the Japanese Monographs."
9. "Von Rohden Collection," 45-49.
10. Fletcher, "Use of Captured German and Related Records," 83-86.
11. Stackpole, "History of the German Air Force," in AFHRA, *List of Films*.
12. "Development of Project R," in AFHRA, *General Survey of Karlsruhe Project*.
13. "Von Rohden Collection."
14. Fletcher, "Use of Captured German and Related Records," 85-86.
15. Peifer, *Three German Navies*, 107-8.
16. Ibid., 107.
17. Ibid., 112.
18. Snyder, "Arming the 'Bundesmarine,'" 481.
19. Peifer, *Three German Navies*, 107-13.
20. Ibid., 150-53.

21. Ibid., 162, 172–73, 176.
22. Hechler, “Enemy Side of the Hill,” 32.
23. Heitman, “German Generals Helped,” 5.
24. Wood, “Captive Historians, Captivated Audience,” 124.
25. Ibid., 136.
26. Ibid., 136–38.
27. Ibid., 143.
28. Hechler, “Enemy Side of the Hill,” 32.
29. Soutor, “To Stem the Red Tide,” 660–62.
30. Ibid., 669–73.
31. Ibid., 679–80.
32. Ibid.
33. Ibid., 682.
34. Ibid., 679.
35. Ibid., 679–81. Soutor enumerates several other key shortcomings of US Army doctrine based on the German model.



## Chapter 2

### **Chronology of the Karlsruhe Project (1952–69)**

When the Air Force approved the Karlsruhe project in late 1952, the service's Historical Division and its parent command, Air University (AU), had unrealistic expectations concerning nearly every aspect of the enterprise. Ignoring the failure of the von Rohden project, they believed that it was possible to quickly and cheaply produce studies of interest to the Air Force by outsourcing research, composition, and editing to the Army. To be fair, the US Army Europe (USAREUR) Historical Division offered, but the late start of the program immediately presented several obstacles that dramatically slowed research and writing. Whereas the older historical projects began when it was possible to simply provide captured German officers extra rations in exchange for writing, by 1952 most former Luftwaffe generals were free men who had found employment in the private sector. An alternative was to pay contributors to write in their spare time, but this, coupled with the poor health of many veterans, slowed composition.

With the war growing more distant, the memories of participants faded, and, to their credit, the project staff maintained reasonably high standards of scholarship by insisting that the generals document their sources. Unfortunately, locating reliable source material on the Luftwaffe again proved a formidable hurdle, especially since the British Air Ministry (AM), which held many surviving records and was writing its own history of the Luftwaffe, was often reluctant to cooperate.

On the other hand, the Karlsruhe project would have accomplished nothing if it were not for the goodwill and expertise of the USAREUR Historical Division. But even though it relied entirely on the Army's well-established historical program for translation and editorial services for its first two years, the Karlsruhe project developed along very different lines. Eschewing the Army's sponsorship of thousands of studies on a multitude of German units and topics, the Air Force Historical Division polled different offices at AU and requested just 40

monographs. Only six were directly related to the Soviet Union, but these immediately received priority and made up half of the monographs eventually published.

The Air Force's reluctance to allot additional resources to the Karlsruhe project caused its scope and goals to contract as multiple challenges arose. This forced the prioritization of topics as work fell behind schedule. The project had completed no studies by the time the last Air Force historian left Karlsruhe in 1958. From then until 1969, the project had only one employee—a single editor working on 40 book-length rough drafts. Not surprisingly, the editor completed only 12 monographs, and the Historical Division decided to leave the remaining drafts as reference works to the massive Karlsruhe document collection, the assembly of which was one of the few unqualified successes of the project.

### **Stepchild of the Army's History Program**

*The general plan for the [German Air Force Monograph] project is satisfactory and feasible. However, in view of the almost total lack of prior work in the particular field of studies to be undertaken, the fact that the basic documents required for research are in the hands of the English, the constantly improving economic situation in Germany, and the many unpredictable effects which the ratification of the pending contract between the United States and Germany may have upon our German studies program . . . we cannot give any ironclad guarantees.*

—Acting Chief,  
USAREUR Historical Division,  
18 November 1952  
Message to the Chief of  
US Army Military History

The US Army's German Military History Program was both the inspiration for and a vital supporter of its sister service's second attempt at a history of the Luftwaffe in World War II. The obstacles foreseen by the Army turned out to be quite ac-

curate, which should come as no surprise given that the Army had more than five years of experience in such work when the GAF monograph project began.

In the fall of 1952, Joseph Angell, assistant to the chief of the Air Force Historical Division, visited USAREUR headquarters in Karlsruhe, West Germany, and saw firsthand the Army's historical operation at its peak.<sup>1</sup> Col W. S. Nye, chief of the USAREUR Historical Division, touted the accomplishments of his team and the value of the studies produced thus far. Returning to Maxwell AFB, Alabama (home of the Air Force Historical Division, AU, and the service's staff schools), Angell relayed Nye's exciting message to his superiors—not only had the German studies been very useful to the Army, but if the Air Force were to start its own project the USAREUR Historical Division informally promised to do most of the legwork for the Air Force at minimal cost.

By 1952 the Army's mature and well-supported German program had already completed over 1,000 manuscripts. Years of refinements and steady Army support led to the formation of a large and experienced staff of writers, translators, and editors at USAREUR's Foreign Military Studies Branch. In recognition of this "unique organization for the preparation of historical studies and projects of the German war effort," Maj Gen Orlando Ward, the Army's chief of military history, encouraged the USAREUR Historical Division to put its resources at the disposal of agencies outside the Army when requested and outlined the general principles governing the FMSB's cooperation with outside agencies. The requesting agency reimbursed the Army for author and consultant fees and other costs related to the project. It also provided the Army with a project officer and outlines of the desired studies.<sup>2</sup> In preparatory discussions, the Air Force agreed to all of these stipulations.

Within weeks of Angell's initial visit to Karlsruhe, the Air Force's Historical Division and AU formally sought permission to accept the Army's generous offer. In support of the project, the commander of AU stressed the value of the Army's experience, "administrative organization, facilities, and access to former German key military personnel" and emphasized the necessity of not duplicating effort by creating a parallel Air Force organization.<sup>3</sup>

On 26 November 1952, the Office of the Air Force Chief of Staff approved the GAF monograph project and earmarked \$50,000 in unexpended deutschmarks, the amount and form the Army requested in exchange for producing 40 operational studies and monographs.<sup>4</sup> The quick approval resulted partly from the belief that the project represented a fleeting opportunity given the changing nature of the West German military and political landscape, which soon might make German personnel and documents unavailable.<sup>5</sup>

The tentative deal worked out between the Army and Air Force Historical Divisions was an ad hoc arrangement from the beginning, with both sides clearly aware that the projected cost of the Air Force project depended on multiple variables. No one would have been surprised had the project gone slightly over budget or fallen somewhat behind schedule, but as it happened none of Colonel Nye's key assumptions from October 1952 were borne out.

In its first three years, the project's cost more than tripled, even though not a single finished study for the Air Force was produced. Nye made his initial offer in good faith, but the Air Force did not understand the factors underlying the Army's calculations, in particular the expectation that wages in Germany would remain relatively stable. The costs of American historical projects operating in Germany soon rose precipitously thanks to West Germany's "economic miracle" (the rebirth of German industry and finance following World War II). Additionally, the Army's program determined its ideal German contributors over the course of several years and acquired the necessary documentary sources to complete studies focused on ground combat. Everyone involved overestimated the transferability of both writers and useful documents from the Army to the Air Force's project. Finally, Nye almost certainly based his estimate on the manpower and time needed to complete Army studies, which were generally shorter than those the Air Force requested. In summary, Colonel Nye's offers, whether he realized it or not, were overly generous, and the Air Force's expectations were far too high. The Air Force project needed all the help it could get in its early years.

## **Topic Selection and the Prioritization of Soviet Studies**

Even as the Air Force Historical Division's leadership hoped to utilize the Army's infrastructure in Karlsruhe to minimize costs and duplication of effort, it charted its own course by selecting a drastically lower number of research topics of generally broader scope.<sup>6</sup> Before seeking approval for the Karlsruhe project, the Historical Division polled other organizations at AU to determine possible research topics and gauge interest in the program. Three offices associated with the Air War College (AWC) and the Research Studies Institute (RSI)—of which the Historical Division was a part—responded enthusiastically with detailed lists. Together these lists correspond closely with the final list of monographs shown in appendices A and B, meaning that the project added or dropped almost no topics over its 17 years.<sup>7</sup> The opposite was the case with the Army and Navy projects, which shifted focus and added studies repeatedly. However, the Karlsruhe project mirrored its predecessors with its emphasis on Soviet topics, which became apparent even before it received formal approval.

On 3 October 1952, Col William Momyer of the air evaluation staff set the tone when he suggested that if obstacles arose to jeopardize the project completion, that “the entire effort be devoted to recording [the Luftwaffe generals'] experiences on the Eastern Front.” He believed that these studies provided “a prime source of information about the [German] scheme of employment against the Russians and . . . as a by-product the Russian scheme of employment.” Momyer felt that “these two areas constitute a serious vacuum of knowledge at the present time” and went on to present questions that he wanted the Germans to answer. He was keenly interested in how the Germans conceived air superiority when planning Operation Barbarossa, wondering if they counted on a stunning blow to cripple the Russian air force or if they considered the “necessity” of destroying Russia's aircraft factories, training establishment, and fuel supplies “as a means of guaranteeing control of the air.”

He also asked how the Germans organized their air units on the Soviet front to provide support for the ground forces. Did

they have a unified air commander, or were air assets tied to individual army units? Was the Luftwaffe able to concentrate units to provide close air support in the “decisive segment of the 1,000 miles front?” Did a senior officer command all military forces in the theater? Finally, he requested a monograph that dealt specifically with the German commanders’ opinions of the Russian air force, including its perceived “stronger features, with particular emphasis on what they considered to be malemployment.”<sup>8</sup>

Having recently completed a tour as an AWC student, Momyer was its deputy commandant for evaluation in October 1952. In this capacity, he supervised the writing of Air Force doctrine. Thanks to his position, Momyer’s recommendations, more than anyone else’s, shaped the Karlsruhe project proposal sent to the Office of the Air Force Chief of Staff later that month.

AU commander Lt Gen Idwal Edwards sold the project in terms of its utility against the Soviet Union when he promised to give “considerable emphasis to German combat experience with and intelligence on the Russian air force.” While the proposal included the full list of 40 topics (effectively the summation of all suggestions), the only sample outline included in the approval package highlighted interesting themes that eventually would be spread throughout all six Soviet studies.<sup>9</sup> The emphasis on Soviet studies in the project proposal was not merely intended to increase the chances of approval by the Air Force. In the Historical Division’s early communications with the Army, the Air Force reiterated that all interested AU agencies agreed that priority should go to these studies, half of which were to be narrative operational histories with the remainder devoted to specific topics of interest (studies 153–55 and 175–77).<sup>10</sup>

While there was agreement on priority, there were six times as many monographs on non-Soviet topics. In fact, Momyer spent most of his letter to the Historical Division discussing other areas of interest, as did two other AU officials who offered suggestions.<sup>11</sup> They hoped to gain greater understanding of the Luftwaffe’s decision making during the Battle of Britain and its prewar and wartime conception of strategic and tactical airpower.

Another prevailing theme concerned the effects of Allied air-power on German air force (and to a lesser extent German army) operations. While General Edwards called the winnowing of potential research topics “rigidly selective,” almost every suggestion received by the Historical Division either became a monograph or was incorporated into other studies.<sup>12</sup>

A comparison of the questions on Soviet versus all other topics posed by AU officials reveals both ignorance of and interest in the Soviet-German war. Questions about the eastern front were typically more general, indicating the Americans’ dramatically lower level of existing knowledge. On the other hand, questions on the western front were typically pointed and insightful. For example, one American officer repeatedly singled out particular enemy tactical formations and battles from the air war over Western Europe and the Mediterranean for investigation, while the only eastern front operation mentioned specifically was the Stalingrad airlift. Of course, this disparity resulted primarily from the personal experiences of these Americans and the relative accessibility of literature on the subjects in the West. Still, it more than validates Momyer’s statement that a serious vacuum of knowledge on eastern front air operations existed in the US Air Force when the Karlsruhe project began.

### **Assignment of Key Personnel and Early Research Obstacles**

By all accounts, the Karlsruhe project was extremely fortunate in the selection of both its German and American leadership. Thanks to delays in the Air Force personnel system, several months passed before the American project officer arrived in Karlsruhe. In the meantime, Colonel Nye wasted no time and asked *Generaloberst* Halder, the head of the Army project’s control group, to recommend his ideal Air Force counterpart. Halder chose retired *General der Flieger* Paul Deichmann, who had already written several studies for the Army. According to multiple sources, Deichmann was the best possible choice.<sup>13</sup> His American counterpart later described him as a “dynamo” who worked 12 hours a day, seven days a week.<sup>14</sup> Another re-

marked admiringly, “I think it is safe to say that without him there simply wouldn’t be a program. He has a great deal of enthusiasm and energy and is able to communicate a sense of purpose to his contributors.”<sup>15</sup>

Born on 27 August 1898 in Fulda, Germany, Deichmann was commissioned in the Imperial Army in 1916 and began flying as an observer the following year. After the Great War, he served in several different infantry units, left the military briefly, and eventually transferred to the new Luftwaffe in 1934. Promoted to the rank of major while serving on the Luftwaffe general staff the next year, he went on to hold a variety of staff and command positions during World War II.<sup>16</sup>

Deichmann held his first conference with an Army staffer on the same day the Air Force approved the project. Having obviously put considerable thought into a potential Air Force project, the German general provided four single-spaced pages detailing necessary items, including one dozen reference books, pertinent magazines, and six 110-volt lightbulbs “(three for reserve).” More importantly, Deichmann pointed out that although some documents were already in American hands, the British AM possessed much critical source material.<sup>17</sup>

According to the original Army–Air Force agreement, the Air Force had to supply its own project officer who would, among other duties, serve as a liaison to the British. Unfortunately, he did not arrive for six months, hampering Anglo-American cooperation. Even though the Air Force Historical Division did not receive its first choice, Lt Col Wendell Hammer proved a perfect fit for the project. Hammer’s German skills were mediocre at first, but his passion for the project and deft touch when dealing with often temperamental former German generals, obstructionist British archivists, and many others more than made up for any shortcomings.

Hammer had a PhD in social science from the University of Southern California and had most recently monitored all research projects at AU, an assignment that left him better prepared for the obstacles he soon faced.<sup>18</sup> Arriving in Karlsruhe in July 1953, the project officer was part historian, part low-level diplomat, and part manager. Hammer later wrote, “The fact that the project is USAF approved, AU monitored, US Army housed, USAFE [United States Air Forces in Europe] supported,

and German Air Force staffed permits the Project Officer few days without perplexities or surprises.”<sup>19</sup> Hammer proved adept at promoting the project to each of these organizations. Hammer’s arrival in Karlsruhe in July 1953 facilitated the exploitation of British archives in England, but results were painfully slow in coming.<sup>20</sup>

In the meantime, Deichmann scrounged for any source material he could find, with mixed results. Before joining the Karlsruhe project, Deichmann had seen “project von Rohden” mentioned in a journal and requested the studies and document collection as one of his first acts as control officer. The von Rohden papers resided at the AU Library at Maxwell AFB, also home of the Historical Division. Unfortunately, the AWC had already reserved them, so the team assembling in Karlsruhe had to wait until August 1953 to gain access.<sup>21</sup>

Even though the studies themselves may have been of questionable value, the von Rohden document collection was indispensable. Forced to turn elsewhere for source material, Deichmann collected the memoirs of Winston Churchill and several German and Allied commanders. Hammer eventually obtained copies of the summary reports of the USSBS and distributed several dozen volumes of *The Army Air Forces in World War II* by Craven and Cate.<sup>22</sup>

Both Deichmann and Hammer realized that obtaining Luftwaffe records was crucial because they would be necessary to produce the scholarly, well-documented monographs the Air Force expected. The Air Force had requested 40 focused studies that together would provide comprehensive coverage of the Luftwaffe in all theaters and address dozens of major themes. Perhaps more than any other participant, Deichmann appreciated the challenges in writing the air war history the Americans sought.

In a second formal request for the von Rohden papers written in June 1953, Deichmann contrasted the difficulties associated with reconstructing the details of ground and air warfare. Air combat, he said, usually took place hundreds of miles away from the base of operations and lasted only a few hours or minutes. Squadrons often joined different wings for a single operation, and commands were renamed frequently. In summation, he wrote that “contrary to the commitment of Army

units, there was therefore a continuous change of units and in time and space” in the air war. He stated that the lack of records forced him to recruit additional contributors to corroborate the recollections of his team members, which he estimated would increase the cost of the writing phase by 30 or 40 percent. It is possible that Deichmann exaggerated these difficulties to excuse the expanding cost of the project, but it was unsatisfactory to rely on memory alone 10 years after the events being studied.<sup>23</sup>

The Air Force Historical Division’s own directives reinforced Deichmann’s point, with Hammer’s “suggestions for authors” being the prime example. Disseminated to all participants in April 1954, the memorandum made clear the importance of properly documenting sources. Hammer discussed elements of style and organization in quite basic terms, suggesting to authors that they question whether their work “follows a logical sequence throughout.”<sup>24</sup> That the writers needed such guidance shows the difficulties the Air Force faced in demanding sound historical monographs from men who were not trained historians. Nevertheless, the staff endeavored to maintain high standards and, on several occasions, forced authors to totally rewrite their studies.<sup>25</sup>

One member of Deichmann’s team did not need to be lectured on basic writing skills and historical work, but Prof. Richard Suchenwirth brought his own baggage. Described in the foreword to his monographs as “a well-known and somewhat controversial German and Austrian historian, author, teacher, and lecturer,” Suchenwirth was born in Vienna in 1896 and moved to Germany in the mid-1930s. He had served as director of the Teachers’ College at Munich–Passing until 1944, when he became a professor of history at the University of Munich.<sup>26</sup>

Suchenwirth was integral to the success of the project. In early 1953, he began working with Deichmann as the unofficial German editor, putting his skills to good use by proofreading and scrutinizing other contributors’ work. He also personally authored three monographs—*The Development of the GAF*, *Command and Leadership in the GAF*, and *Historical Turning Points in the GAF*—that are arguably the most scholarly and objective studies produced by the project.

Ironically, Suchenwirth was also the only team member who aroused the suspicions of the Americans. The Americans knew that some of their German employees may have had associations with the Nazi Party, but it, nevertheless, came as a surprise when an American editor overheard a conversation between Professor Suchenwirth and another author, *General-leutnant* Hermann Plocher. The professor complained about being unable to sleep in Stuttgart because of commotion on the streets. The police “were beating up some poor devils by the railroad tracks. It must be characteristically Swabian, this tendency towards excesses.”<sup>27</sup> Plocher retorted, “Now really, Professor, beatings and such things should never have disturbed an old party man like you: you had enough time in the SA [*Sturmabteilung*] to accustom yourself to such noises.”<sup>28</sup> Suchenwirth later explained to the American that he had only been given an honorary SA rank for a particular history he had written. The editor wrote to his supervisor, “All this means, I suppose, is that I watch Suchenwirth more closely than I otherwise would. He is neither black nor white, however, and it is always very difficult to make a distinction between a National Socialist opinion, a German opinion and a just plain individual opinion. . . . In all fairness too, we have to admit that he is making a valuable contribution to the project.”<sup>29</sup>

Suchenwirth was, however, the exception to the rule. In general the Americans had little cause to question the pasts of the German writers, but they remarked on and dealt with the personal shortcomings of the generals-turned-historians. Hammer concluded that untrained writers were the “most difficult problem confronting us in our attempt to get scholarly, interestingly written studies.” After working on the project for eight months in Karlsruhe, he judged that the participants were “each intensely determined to tell the true and full story in the best way possible,” but they “were no more researchers and writers than our own generals and admirals, sans ghost-writers.”

He lamented that the inability of many to read recently published works in English, when coupled with the continuing dearth of primary documents, would make it harder for the authors to free their studies of bias, misconceptions, and rationalizations. Hammer recognized that dispassionate historical writing was a tall order for men who had “undergone the ultimate in personal

and professional frustration and humiliation,” but he felt that the job of future historians of the air war would be an impossible task if the German side of the story were not told.<sup>30</sup>

### **Documentary Sources Become Available, 1954**

Whatever their shortcomings, the German contributors were enthusiastic in their cooperation with the Americans, which directly impacted the project's course by aiding the search for documents. In contrast to the war they were studying, the Germans were the greatest researchers and document finders for the Americans, while the British were usually the biggest obstacles.

Because of the Germans' eagerness to tell their side of the story and the Americans frequently assuring them that copies of the completed studies would go to the future West German military, the Germans began coming forward with their own source material. Officers and family members had literally buried many documents in 1945 and brought them to Deichmann in 1953 and 1954. Some donated documents, but most requested a nominal fee.<sup>31</sup>

Much useful material was already in American possession. On a trip to the archives in Alexandria, Virginia, Deichmann pointed out a document that the Americans did not know they had. Hidden in a section that the original German owners had innocuously labeled “propaganda,” Deichmann “discovered” the daily situation reports of the Luftwaffe High Command. The general's feigned surprise fooled no one.<sup>32</sup>

One would-be document donor was Col Werner Panitzki, the future head of the West German air force, who steadfastly asserted that he personally helped fill three trunks with microfilm of important Luftwaffe documents at the close of the war, which he then buried near his home. He was absolutely sure that the British discovered and removed them, but the British always maintained that they knew of no such source.<sup>33</sup> Unfortunately for the project, Hammer was never able to track down Panitzki's mysterious microfilm rolls, if they existed in the first place. But taken as a whole, the German efforts at recovering documents were one of the greatest contributions of the Karlsruhe project.

Werner Panitzki was far from the only project member frustrated by the British, but Hammer finally began to make progress on the British front in 1954. At the outset of the Karlsruhe project, an Army officer correctly reasoned that “the project will stand or fall on obtaining access to German Air Force documents now held by the British government.”<sup>34</sup> The British were hesitant to aid the Americans for more than a year. The turning point came in October 1954 when Hammer delivered several sources to Louis Jackets at the Air Ministry’s Air Historical Branch which showed, in Hammer’s words, “that our dealings need not be a one way matter—that we are in a position to help him considerably.”<sup>35</sup>

Earlier in the year, he and Deichmann visited the archives at AU and Washington, DC, and acquired “horse-trading resources” from the German collections there.<sup>36</sup> With a two-way relationship between the British and Americans established, Jackets paid a visit to Karlsruhe in December 1954 to survey the American operation. Genuinely impressed, Jackets offered Hammer the services of the Air Historical Branch to help review the drafts, an offer that Deichmann and Hammer seemed eager to accept. Hammer was now on “the closest terms with Jackets,” writing that their time spent together “uncovered a very human being under his English (forgive me) Jacket.”<sup>37</sup>

The chief and assistant chief of the Historical Division, Dr. Albert Simpson and Angell, saw things differently. While pleased with Hammer’s progress with Jackets, they were uncomfortable giving the British access to their studies at such an early stage. They preferred instead to allow the British to view the studies at some later date. “Our experience in the post-war period has been that we have consistently played openly with Nerney and his shop and that their play has been very nearly the opposite.”<sup>38</sup> The Americans thought they would see more of the same in the coming years.<sup>39</sup>

This may have been a self-fulfilling prophecy because Hammer continued to have occasional difficulties with Jackets. In March 1956 Jackets refused to allow Deichmann to enter the archives even though he had done so in the past. The Americans believed this decision was related to the forthcoming return of the Air Ministry’s German records collection to the new West German military. Obligated to send back all the original

documents, Jackets did not want Deichmann to catalogue the collection for fear the German government would come looking for particular documents if the British attempted to hoard them, or so the Americans thought.<sup>40</sup>

In spite of British obstructionism, the document collection effort was one of the greatest successes of the project, both in terms of what it provided the writers and what it preserved for historians. By December 1956 Hammer was confident the project had most of the documents it needed to produce satisfactory studies.<sup>41</sup> With access to sources finally assured, the project had its first chance to begin producing studies at its intended rate.

### **Personnel Issues Arising from the Late Start of the Karlsruhe Project**

Unfortunately, it was more difficult to find and keep contributors owing to the late start of the Karlsruhe project compared to the other historical projects. Many found jobs in the private sector as the West German economy recovered. To make matters worse for the project, the aging contributors who joined worked slower and were increasingly susceptible to illness. As of April 1954, the average age of the 20 topic leaders was 58 years, and by spring 1956 five of those leaders had been incapacitated for at least several months each.<sup>42</sup> Two topic leaders died before the writing phase ended, as did a handful of lower-ranking contributors.

Within months of the end of the German phase, the topic leader of the incomplete Battle of Britain study withdrew (after two years of assurances to the contrary) to the obvious frustration of the project staff.<sup>43</sup> In contrast, Wilhelm Speidel labored on even when illness caused his writing to become undisciplined and increasingly difficult to translate, complicating the staff's task.<sup>44</sup> Replacing dead, ailing, or unskilled writers was no simple matter because outsiders had to be taught the techniques of historical writing and needed to become familiar with the literature and available documents before they were useful. All the while, project leaders continued paying those writers whom they dismissed, increasing production costs and delaying the completion of studies.<sup>45</sup> Another form of attrition took

hold in 1956 that will be discussed later: the exodus of writers joining the new West German air force, the *Bundesluftwaffe*.

The organizational scheme of the project made it especially vulnerable to the loss of certain personnel, and despite the relatively large number of available writers, a delay on one study usually hampered progress on others. The chief cause of these delays was Deichmann's selection of topic leaders. One month before the Air Force finally approved the project, AU decided to commission 40 studies, and by late 1952 Deichmann gained access to the list of topics the Air Force wanted covered. Over the course of 1953, he carefully selected topic leaders. Almost all were retired one- to three-star generals, who were presumably close acquaintances of Deichmann and familiar with the subject matter.

For example, Josef Kamhuber, who led the German night fighter force and organized the construction of Germany's air defenses during the war, was the topic leader and primary author of *Problems in the Conduct of a Day and Night Defensive Air War*. With Deichmann's assistance, topic leaders chose key contributors, men who preferably had firsthand experience with the topic in question. These contributors included other generals, many field grade officers, and a handful of captains. The number of contributors writing for each study varied widely but typically ranged from three to a dozen retired officers, most of whom lived away from Karlsruhe and worked at home.

Having dispersed contributors was unavoidable because most Germans had jobs elsewhere, but this added to delays on the project. Dispersion made topic leaders more important figures because they were responsible for collecting the work of contributors and integrating that work into a German draft. Since writers were working with inadequate sources during their spare time, it is not surprising that it took topic leaders longer than expected to get German drafts to Deichmann, Suchenwirth, Hammer, and the other permanent party at Karlsruhe.

It appears the topic leaders were in fact the sole authors of many studies, with the so-called key contributors serving primarily as interviewees, references, and fact checkers. Although it is difficult to determine the exact number of former Luftwaffe officers who contributed indirectly to the project, the assistant chief of the Air Force Historical Division reasoned that nearly

all of the surviving Luftwaffe general officers in West Germany participated in the writing of the monographs to some degree. In addition, several hundred lower-ranking officers, civilians, and technicians also aided the project in various capacities.<sup>46</sup>

The 20 topic leaders did not bear the burden of composition evenly. In fact, a core of only eight “authors” completed half of the 42 drafts submitted to the Air Force. Moreover, members of that core were responsible for 10 of the 12 studies the Air Force actually completed and published. Deichmann surely picked his topic leaders with the best intentions, but assigning generals multiple studies usually meant they had to finish one before beginning the next.

For example, Plocher was responsible for the three-part *German Air Force versus Russia* series that eventually totaled 2,018 pages in draft form. Deichmann initially tasked Plocher with an additional study on the Spanish Civil War, on which he was a noted expert. Not surprisingly, this was too much for him to handle before he returned to active duty in 1957, and Deichmann took considerable time finding a replacement for the Spanish Civil War study.

Deichmann’s assigning himself the topic leader position on four monographs could not have made things any easier. It is hard to say whether the multitasking of topic leaders resulted from overeagerness on the part of the core writers, a shortage of suitable candidates, or a conscious decision to give multiple studies to the best and most knowledgeable writers. This arrangement, when combined with illness and the initial shortage of sources, slowed composition considerably.

In any event, if Deichmann and Hammer received all 40 drafts at once, they would have been unable to translate them all. The Army, in effect, withdrew its support by assigning only one full-time translator to the Air Force project and later scaled back even further. The multiple obstacles caused an increase in the number of German personnel on the payroll. The improving German economy meant that the Americans had to offer higher wages to remain competitive, and costs ballooned in 1953 and 1954.

The original interservice agreement stipulated that the Air Force would pay the Army \$50,000 in exchange for translation, clerical, and partial editorial services. Colonel Nye calculated

that amount on the basis of 40 shorter studies of the type the Army was making at the time, but the Air Force wanted monographs that were each several times longer.

After Hammer arrived in Karlsruhe in July 1953, with the project little more than six months old, the Army informed him that the \$50,000 were nearly gone. Realizing that setting up a duplicate organization would be even more expensive, the Air Force continued paying the Army. Neither side seemed willing to end the relationship, so the two renewed their agreement on 10 August 1955 with nearly the same terms.<sup>47</sup> USAREUR, with its infrastructure already in place, received considerable compensation for minimum additional effort, while the Air Force benefitted from the Army's organization and only had to provide one Air Force officer and funding.

By November 1955 the Air Force had paid \$180,000, but only seven draft studies were complete, and none had been fully translated. Lt Col Edward Barta, Colonel Nye's executive officer, recommended the Army formally withdraw its support, citing budgetary and personnel concerns. Hammer fired back within days, arguing that the Army was failing to provide all the services laid out in the original agreement. He also said that the Air Force Historical Division did not care about these shortcomings and was more focused on ensuring the success of its project.

Hammer successfully argued that maintaining the otherwise exceptionally cooperative relationship between the Army and Air Force Historical Divisions was paramount. Even though the editorial and translation services the Army provided eventually diminished to nothing, there was never a formal split. In fact, having the Army operation nearby continued to benefit the Air Force because Hammer found experienced Army civilian translators that he paid to do Air Force work in their free time.

Direct Army support for the Karlsruhe project was invaluable while it lasted. As the document collection grew, the German authors were able to slowly produce acceptable drafts. In February 1954, the USAREUR Historical Division loaned one of its best officers, Capt Earle Stewart, as an editor.<sup>48</sup> The project also employed a handful of German historians, a few other Army officers, and a PhD candidate for short periods. Even

though they performed excellently, it became clear that a permanent editor would be best.

Stewart's hospitalization in December 1954 made the need all the more pressing.<sup>49</sup> Colonel Nye pointed out the limitations of Army editors working on the Air Force project, and their lack of expertise in air operations presented challenges.<sup>50</sup> Stewart, an otherwise outstanding editor who eventually received a commendation from the Air Force, "did some rather free editing" of Plocher's three-part *German Air Force versus Russia* series, so much so that it "didn't reflect an Air Force point of view."<sup>51</sup> If the Air Force Historical Division wanted its monographs completed, it needed to take ownership of the project and hire a second full-time Air Force employee.

### **A Second Full-Time USAF Employee Comes Aboard, 1955**

The Air Force Historical Division solicited applications for a dedicated American project editor in November 1954, hoping to have that person in Karlsruhe by early winter. They selected Edwin Kennedy Jr., who served in military intelligence in Europe during World War II. After the war, he held several odd jobs, including a research assistant to the Mexico City bureau chief of Time-Life and assistant chief of the Research and Writing Branch of the USAFE Historical Division.<sup>52</sup>

Possessing the best German language skills of any American his German interviewer had ever met, Kennedy proved to be a perfect fit with his "combination of firmness and diplomatic tact."<sup>53</sup> But Kennedy had to get to Karlsruhe first. One bureaucratic mix-up followed another for six months. The Air Force Historical Division and the Air Force personnel system had no protocols or precedents for assigning him to such a unique position as bilingual historical editor, and while there was a sense of urgency in Karlsruhe, nothing moved quickly. Kennedy finally received his orders in July 1955 and immediately contributed heavily to the project. Like Hammer and Deichmann, he was indispensable and helped compensate for the personnel shortages.<sup>54</sup>

None of the obstacles the Karlsruhe project faced were insurmountable, but they introduced cumulative delays that led to the publication of only about one-quarter of the drafted studies. During the Karlsruhe phase, the Air Force revised its estimated project completion date repeatedly. The Army originally guessed that it might take only three years to generate the studies, but Deichmann immediately revised this when he recognized the lack of records.<sup>55</sup> In early 1955 Deichmann and Hammer forecasted that all German manuscripts would be completed by 30 June 1956.<sup>56</sup> As late as December 1956, they aimed for completion in just six months.<sup>57</sup>

The Air Force Karlsruhe historical office finally closed on 30 June 1958. Drafts of 42 studies had been completed, the extra being expanded chapters of other monographs (see appendices A and B). No studies had yet been published, and translation and editing were behind schedule because of delays in composition and the limited number of personnel.

Army translators and Air Force staffers translated roughly 7,000 pages by spring 1958, but 14,000 pages remained. The head of the Air Force's Research Studies Institute (RSI) deemed 5,300 of the remaining untranslated pages "of immediate and primary interest to the USAF." Because it was more expensive to translate the remaining studies in the United States, the RSI contracted two translators to handle the work in Germany. The Historical Division hoped that two other translators who worked at Maxwell would be available to speed the work, but personnel cuts at RSI made this impossible. Therefore, the Air Force Historical Division had only two translators, Helmut Heitman and Patricia Klammerth, working on the manuscripts, both of whom were still employees of the Army Historical Division in Europe. Working on a part-time basis, they completed 40 of 42 translation drafts by November 1962.<sup>58</sup>

### **The Final Phase: 10 Years, One Editor, and 40 Drafts**

It would not have mattered if the Karlsruhe project translated the German drafts more quickly because there was only one dedicated editor at Maxwell. With the completion of the

Karlsruhe phase, Hammer left the project, and only Kennedy remained to edit the studies and prepare them for publication. In fact, from 1959 until the project's end in 1969, the project editor effectively worked alone. Jane Hanlin, the administrative assistant to the chief of the Historical Division, occasionally proofread final drafts for typographical errors, but she was the only other person who ever worked on the project. After publishing two studies in 1959, the project published at the average rate of one study per year through 1969.<sup>59</sup> Kennedy stayed on until 1961, and Dr. John L. B. Atkinson and Gerard E. Haselwander followed with one-year stints as editor.<sup>60</sup>

In October 1963, Harry R. Fletcher joined the Air Force Historical Division and remained the project editor until its end in 1969. He served as an enlisted member of the Army Air Corps in a variety of stateside assignments during World War II and received a direct commission into the Army engineers after the war. Called to active duty in 1949, he supervised several units during his two and a half years in the occupation of Germany, notably Frankfurt's I. G. Farben Chemical Corporation Casino, then the largest officers' club in the world and collocated with the Supreme Allied High Command. He was pursuing a doctorate in history at the University of Wisconsin–Madison in 1963 when Col Eldon Downs of the Air Force Historical Division spotted him. The focus of Fletcher's master's thesis (the Condor Legion, the Luftwaffe force dispatched to aid Francisco Franco during the Spanish Civil War) and his fluency in German made him well suited for the position.

"There was no fixed schedule," Fletcher recalls of his time with the project, "except for the understanding that I would proceed with my work as fast as possible, while maintaining some level of professionalism." It was his responsibility to "sharply edit" the studies, correct translation errors, and compose organizational charts and other essential elements that were lacking in the rough drafts. He also attempted to keep in touch with the German authors whenever possible, largely to understand their intentions and background.<sup>61</sup>

A few remained interested in the project during the 1960s, including Halder, Deichmann, Plocher, and Gen Johannes Steinhoff, the chief of staff of the West German air force and later chairman of the North Atlantic Treaty Organization (NATO)

Military Committee.<sup>62</sup> Steinhoff initially believed that the monographs were meant for dissemination as USAF studies at American military staff schools. He “was astonished to find that ARNO Press, NYC [New York City], was publishing all the studies for the general public,” which began in 1968.<sup>63</sup>

Since the inception of the GAF monograph project, Dr. Albert F. Simpson was its champion within the Air Force historical community and AU. Simpson served as a historical officer in the AAF during World War II and rose to the rank of colonel in the Air Force Reserve after the war. He became the Air Force historian in 1946 and was chief of the Air Force Historical Division from 1951 to 1969. In these capacities, he was involved in nearly every historical project in the Air Force for 25 years, including Craven and Cate’s noted official history, *The Army Air Forces in World War II*. Fletcher writes that Simpson was not surprisingly “very much committed to developing” an Air Force history program.<sup>64</sup>

Simpson and his longtime deputy, Joe Angell, started the project in 1952 and were instrumental in its successes and survival. Significant challenges confronted the project from the outset, but Simpson and Angell were able to repeatedly convince AU to provide more funds. The chief and deputy kept close track of progress, helped generate the original monograph outlines, critiqued drafts, occasionally visited Karlsruhe, and prioritized certain studies. During the Karlsruhe phase, they conferred with Hammer, Deichmann, or both on at least a monthly basis. With the drafts completed in 1958, Simpson was the only source of oversight for the project editor.

Simpson remained a friend of the project, but a significant, and realistic, downgrading of expectations was seen in October 1965. Simpson, Fletcher, and Dr. Maurer Maurer, Simpson’s new deputy, held a conference where they decided to edit only six more studies. At the time, eight studies were complete, and a ninth was nearly finished. This decision capped the project at 15 published monographs out of approximately 40. The unfinished studies, which were English-language rough drafts, were to be made available to researchers. At the conference, they settled on three criteria to determine which studies should be edited: level of interest to the USAF, the quality of the manu-

script and subject matter, and historical significance for reference purposes.

Unfortunately, Simpson's health began to fail. At least twice during the late 1950s he underwent surgery, keeping him out of the office for weeks.<sup>65</sup> Beginning in 1967, his health deteriorated further as he battled lung cancer. Simpson died on 21 April 1971, and the Air Force Historical Research Agency at Maxwell AFB was subsequently named in his honor.<sup>66</sup>

Maurer assumed many of Simpson's duties during the latter's slow decline, which led directly to the project's termination after publishing 12, not 15, studies. According to Fletcher, Maurer "was fascinated with the organizational lineage and honors accrued by USAF units," but he "disliked the GAF project intensely."<sup>67</sup> Fletcher says that Maurer believed the Air Force "didn't have anything to learn [from the Germans]. After all, if we had anything to learn, we wouldn't have won the war."<sup>68</sup>

Fletcher preferred to maintain contact with the German authors to aid in his editing of their work, but Maurer discouraged this. Maurer "had a bad thing about the Germans," said Fletcher, which he could never quite understand because, as he puts it, "Maurer certainly isn't an Irish name."<sup>69</sup> Potentially, Maurer felt the project editor's job was taking away one of the Historical Division's salaried positions from work he considered more valuable.

No one officially cancelled the GAF monograph project, and no record exists of its end. Fletcher felt that lineage and honors work was essential and that such records must be "meticulously maintained," but he was not very enthusiastic about performing such work himself. With Maurer waiting in the wings, he writes that "it was evident to me that with the demise of Dr. Simpson or his becoming fully indigent, the entire project would be ended."<sup>70</sup> After Fletcher finished editing the 12th monograph, Suchenwirth's *Command and Leadership in the German Air Force*, in July 1969, he took a teaching and chair position at nearby Troy State University. With the project editor's position vacant and Simpson almost totally absent, editing of the studies finally ended after nearly 17 years of continuous operation.

In its eagerness to accept the Army's offer of support in fall 1952, the Air Force Historical Division overlooked the fact that

it took the Army seven years and a much higher level of investment to accumulate sufficient source material and accustom former generals to the minimum standards of historical writing. A microcosm of the Karlsruhe project was the experience of Kennedy, the superb project editor who sat idle in Alabama for six crucial months in 1955. Delays of this sort were common and their effects cumulative. Staff members recognized that the project was behind schedule from the start, but the additional funds it received merely allowed it to survive for another fiscal year.

In spite of this, the Karlsruhe project did bear fruit. The 300,000-page document collection brought to the United States has proven useful to military and civilian researchers, as have the unpublished studies, even if most remain in raw form. The six Soviet monographs provided some of the first glimpses into the air war on that front, and several other published studies are of high quality. Finally, the project indirectly involved nearly every surviving Luftwaffe general officer outside the Eastern Bloc and served as the site of cooperative work between erstwhile enemies during the pivotal years of West German rearmament.

### Notes

1. Deichmann, *German Air Force Operations*, vii–viii.
2. Office of the Chief of Military History to US Army European Command (USAREUR) Historical Division (HD), draft memo. A copy of this internal Army document was most likely given to Joe Angell on his 1952 visit to the USAREUR HD. It was dated received by USAF HD on 13 October 1952.
3. Air University (AU) to chief of staff of the Air Force (CSAF), memorandum, subject: request for approval, Karlsruhe Collection, AFHRA, Maxwell AFB, AL.
4. \$50,000 is roughly equivalent to \$407,000 in 2009.
5. CSAF to AU, memorandum, subject: approval of project, Karlsruhe Collection, AFHRA.
6. That is not to say that the Karlsruhe monographs are all general histories of the Luftwaffe. In fact, many are best characterized as technical reports. Having said that, the Air Force did not sponsor hundreds of German unit histories or highly specific battle studies as did the Army.
7. Edwin P. Kennedy, Jr., to Joseph W. Angell, Jr., letter, 2 May 1958, Karlsruhe Collection, AFHRA.
8. William W. Momyer to Angell, letter, Karlsruhe Collection, AFHRA.
9. Lt Gen Idwal Edwards to CSAF, memorandum, subject: proposal, Karlsruhe Collection, AFHRA.

CHRONOLOGY OF THE KARLSRUHE PROJECT (1952–69)

10. Joseph W. Angell, Jr., to Wilbur S. Nye, letter, Karlsruhe Collection, AFHRA.
11. The USAF Historical Division (HD) Joseph W. Angell, Jr., received suggestions from Col L. M. Guyer (Air War College [AWC] deputy commandant for academic instruction) and Martin Goldman (Research Studies Institute [RSI] historian). See also feedback on preliminary outlines: Col Grover Brown (AWC deputy academic director) to Angell and Dr. Eugene Emme (director of RSI's Graduate Study Group) to Brown, letters, Karlsruhe Collection, AFHRA.
12. Edwards to CSAF, letter, Karlsruhe Collection, AFHRA.
13. USAREUR HD to USAF HD, letter, Karlsruhe Collection, AFHRA.
14. Wendell A. Hammer to Albert F. Simpson, letter, Karlsruhe Collection, AFHRA.
15. Kennedy to Angell, letter, Karlsruhe Collection, AFHRA.
16. Deichmann, *German Air Force Operations*, xii.
17. Deichmann conference, supporting documents.
18. Angell to Lt Col Sprague, letter, Karlsruhe Collection, AFHRA.
19. Hammer to commandant, letter, Karlsruhe Collection, AFHRA.
20. Hammer to Simpson, letter, Karlsruhe Collection, AFHRA.
21. Director of AU Library to Angell, letter, Karlsruhe Collection, AFHRA; Paul Deichmann to AU director of administration, letter, Karlsruhe Collection, AFHRA.
22. Hammer to Simpson, letters, Karlsruhe Collection, AFHRA.
23. Deichmann to Helm, letter, Karlsruhe Collection, AFHRA.
24. Hammer, "Suggestions for Authors," Karlsruhe Collection, AFHRA.
25. Karlsruhe project "Statement of Progress," Karlsruhe Collection, AFHRA.
26. Suchenwirth, *Development of the German Air Force*, xv.
27. Swabia is a historic region of southern Germany that includes portions of the current states of Bavaria and Baden-Württemberg.
28. The *Sturmabteilung*, also known as the Brownshirts, was a paramilitary organization of the Nazi Party in the 1920s and 1930s.
29. Kennedy to Angell, letter, Karlsruhe Collection, AFHRA.
30. Hammer to Simpson, letter, Karlsruhe Collection, AFHRA.
31. Ibid.
32. Hammer to Angell, letter, Karlsruhe Collection, AFHRA.
33. Ibid.
34. Summary of Informal [US Army-US Air Force] Agreement, Karlsruhe Collection, AFHRA.
35. Hammer to Angell, letter, Karlsruhe Collection, AFHRA.
36. Hammer to Simpson, letter, Karlsruhe Collection, AFHRA.
37. Hammer to Angell, letter, Karlsruhe Collection, AFHRA.
38. Refers to the captured German records section of the Royal Air Force, which Hammer would later refer to as the "Court of St. Nerney." See also Hammer to Emme, letter, Karlsruhe Collection, AFHRA.
39. Angell to Hammer, letter, Karlsruhe Collection, AFHRA.
40. Hammer to Simpson, letter, Karlsruhe Collection, AFHRA.
41. Ibid.

CHRONOLOGY OF THE KARLSRUHE PROJECT (1952–69)

42. Angell to Perkins, letter, Karlsruhe Collection, AFHRA.
43. Logbook of project, Karlsruhe Collection, AFHRA.
44. Kennedy to Angell, letter, Karlsruhe Collection, AFHRA. According to Kennedy, Deichmann suggested that *General der Flieger* (retired) Speidel was “a sick man and is no longer able to think clearly” and considered reassigning his work to other contributors.
45. Hammer to Simpson, letter, Karlsruhe Collection, AFHRA.
46. Angell to Perkins, letter, Karlsruhe Collection, AFHRA.
47. USA Adjutant General to CINCUSAREUR, letter, Karlsruhe Collection, AFHRA.
48. Hammer to Simpson, letter, Karlsruhe Collection, AFHRA.
49. Hammer to Angell, letter, Karlsruhe Collection, AFHRA.
50. Nye to Simpson, letter, Karlsruhe Collection, AFHRA.
51. Logbook of project, Karlsruhe Collection, AFHRA.
52. Kennedy, Application Form for Federal Employment, Karlsruhe Collection, AFHRA.
53. Angell to Hammer, letter, Karlsruhe Collection, AFHRA.
54. Ibid.
55. Nye to Simpson, letter, Karlsruhe Collection, AFHRA.
56. Hammer to Angell, letter, Karlsruhe Collection, AFHRA.
57. Simpson to Hammer, letter, Karlsruhe Collection, AFHRA.
58. Simpson to Klammerth, letter, Karlsruhe Collection, AFHRA.
59. Very little documentation survives from the second stage of the project. The earlier Karlsruhe phase was quite the opposite because the project had three subunits (German, US Air Force, and US Army) working in Europe who corresponded frequently with the USAF HD in Alabama, the Army’s USAREUR HD, and US Air Forces Europe. Unfortunately, after 1958 the project had only one full-time employee who worked on the same base as almost his entire chain of command, so almost nothing remains.
60. Suchenwirth, *Command and Leadership*, vii.
61. Fletcher, questionnaire, Karlsruhe Collection, AFHRA.
62. Reference correspondence between USAF HD staffers and these individuals, e.g. between Plocher and Simpson through 1969, Karlsruhe Collection, AFHRA.
63. Fletcher, questionnaire, Karlsruhe Collection, AFHRA.
64. Fletcher, interview, Karlsruhe Collection, AFHRA.
65. Angell to Hammer, letter; and Simpson to Deichmann, letter, Karlsruhe Collection, AFHRA.
66. “Former Air Force Historian Dies,” *Aerospace Historian*, 114.
67. Fletcher, questionnaire, Karlsruhe Collection, AFHRA.
68. Fletcher, interview, Karlsruhe Collection, AFHRA.
69. Ibid. Fletcher implies that Maurer may be of German ancestry.
70. Fletcher, questionnaire, Karlsruhe Collection, AFHRA.



## Chapter 3

### **The “Unforeseen By-Product”**

#### **Towards a New West German–American Air Force Relationship**

*There is possibly a much more important facet to the project. It is affording the Air Force its only means of keeping constantly in touch with men who either directly or indirectly will set and steer the course of future military aviation in Germany. These men are now on our team. The lessons of the past and the forebodings of the future demand that they remain on it. These men, moreover, represent a ready source of first-hand information on Soviet aerial tactics, facilities, and operational conditions which would become especially valuable in the event of war. The tremendous potential of this project comes dramatically into focus when one turns from World War II pictures of our contributors working as high-ranking general officers on Luftwaffe problems of the day to see them working across the table, apparently as earnestly, on problems for the USAF.*

—Lt Col Wendell Hammer to Maj Gen William Barker  
AU Deputy Commander, letter, 31 August 1953

The GAF monograph project was unique among the American postwar military history programs in that it began and saw its years of greatest activity during the momentous period of West German rearmament. Far from merely providing an interesting backdrop for the study of the Karlsruhe project, the rearmament process could not help but influence the German writers. Many contributors left the project early to take key positions in the West German air force or Bundesluftwaffe, sapping the project's manpower. Although this was often frustrating for American staff members with deadlines in mind, this migration provided the USAF with highly placed friends in the Bundes-

luftwaffe who, heavily influenced by their years of employment with the Karlsruhe project, sought to reshape German officer education in the USAF mold. These efforts were ultimately unsuccessful, but the project, nevertheless, forged close relationships between former enemies.

Colonel Hammer effectively served as a military attaché during the mid-1950s, transmitting USAF doctrine to the burgeoning Bundesluftwaffe and bringing German officers to speak at USAF staff schools for the first time. The Air Force seems to have been pleasantly surprised by these aspects of the project and came to value them even more than the strictly historical work being conducted.

### **Demilitarization, the "Economic Miracle," and Historical Programs**

After instituting strict demilitarization in occupied Germany after World War II, the United States eventually supported the establishment of a West German military to stand against the Soviet Union. The Allies agreed during the war to demilitarize Germany to punish and prevent it from starting another conflict, although they disagreed on the exact level and character of its disarmament.

During the first years of the occupation, the Western victors forbade the wearing of old military uniforms or military memorabilia of any type to crush any remnants of German militarism. Veterans groups, any military-related research, commemorative plaques, the possession of weapons, war-related exhibits at museums, and the maintenance of related collections at libraries were also outlawed. Most important was the official dissolution of the Wehrmacht, including all legal rights and pensions for veterans and dependents. Agreement on this last measure was not unanimous, as elements of the British occupation leadership contested the efficacy of denying all benefits to Wehrmacht members. Reservations notwithstanding, the Allied authorities eventually decided that canceling all benefits, which would have been difficult or impossible to pay out, would "undoubtedly show the German people that the Allies were determined to carry out the terms of the Potsdam

Declaration that the German Armed Forces are to be utterly destroyed."<sup>1</sup> The Allied governments felt these restrictions would help purge remaining elements of militarism and Nazism, which they closely linked.<sup>2</sup>

The early employment of former German generals by the United States was illegal and ironic in the context of initial Allied policy towards the German officer corps. In the words of historian James Diehl, the Allies considered the German General Staff the "prime carrier of the virus of militarism." They also considered the officer corps in general to be a potential threat.<sup>3</sup>

A June 1945 American intelligence report summarized the history of the German officer corps from 1918 onward and explained how disaffected soldiers joined the *Freikorps* soon after the armistice. Trained and organized by former officers, these independent paramilitary units did much to destabilize the young Weimar Republic, and the report saw the insidious hand of the officer corps behind much of the instability and radicalism that followed.

Seeking to forestall such developments after 1945, the American report writers proposed exiling the German General Staff and other influential officers, the so-called "St. Helena" solution. They settled on interning the officers in Germany and closely monitoring them upon release so as not to make martyrs out of the officers. This would have the added benefit of providing "a fitting disposition of these persons before the eyes of other Germans."<sup>4</sup> Letters from former officers aggrieved by what they considered the unjust criminalization and persecution of the German officer corps bombarded American and British officials, but the Allies gave no ground.<sup>5</sup>

By early 1947 the United States had released most of its German POWs, but many higher-ranking officers and officials remained incarcerated for some time.<sup>6</sup> Allied policy led to different complications for each of the American history programs. In the case of the Army, the ban on historical research of a military nature and the prohibition of US government employment of former General Staff and senior German commanders almost killed its history program. Its cancellation was planned for 31 December 1947, but Gen Dwight Eisenhower, then Army chief of staff, personally intervened that August on the grounds that "this is our one opportunity to prevent our own military

history from being one-sided." In recognition of the uniqueness and value of the program, the Army received permission to employ up to 150 former German officers.<sup>7</sup> In this way, the Army program was able to acquire German contributors while they were still in American custody.

The NHT in Bremerhaven attempted to find cooperative admirals in summer 1948. At this time, most Kriegsmarine veterans were free men, but they were indignant over the prosecution of their former commanders as war criminals, in particular the still-imprisoned grand admirals Erich Raeder and Karl Dönitz. However, with the Berlin blockade providing the Germans with an unmistakable sign of the growing threat to the east, the US Navy was able to cajole eight admirals into joining. The Germans, for their part, were happy to have jobs and found that the NHT provided a convenient way to circumvent restrictions on veterans' groups.<sup>8</sup>

The West German economy improved dramatically by the time the GAF monograph project began in late 1952, raising new challenges for the American historical programs. Until 1950 West German economic recovery was behind that of the rest of the world; beginning that year, German industry started to catch up with and, from 1953 to 1954, surpassed the growth rate of the rest of the Western world. The 1955 West German gross domestic product was 55 percent higher than in 1950.<sup>9</sup>

During the early history projects, additional rations were satisfactory compensation for many of the German authors, both during and after their imprisonment; some officers who had no families even worked so that the families of their comrades would receive extra food parcels.<sup>10</sup> Beginning in the early 1950s, however, the authors increasingly preferred to be paid in cash. When Colonel Nye estimated the cost of the Air Force project in October 1952, he calculated based on the current salaries of his German contributors. By November 1953, the salaries increased by 60 percent (to \$145 per author monthly) due to the rising cost of living in Germany.<sup>11</sup> At the same time, the increasing availability of business jobs provided a source of competition for the Karlsruhe project, and the Americans offered higher wages accordingly.

German authors on the Karlsruhe project took longer to complete their assigned work than their predecessors because,

instead of sitting idly in prison camps, most finally found jobs and wrote in their spare time. The authors preferred to be paid secretly because of the national climate at the time. Hammer reasoned that "a majority would refuse to help us otherwise."<sup>12</sup> Some were sensitive about their countrymen knowing they were working with a former enemy. Also, by 1954 the West German government began paying pensions to many veterans. The project contributors worried that those payments might be cut off if the German authorities discovered they were receiving compensation from a foreign government. With these considerations in mind, the Air Force Historical Division's master list of German topic leaders, circulated in 1954, bore no security classification in the United States but in West Germany was classified "confidential."<sup>13</sup>

There were, of course, other incentives for the German contributors to the monograph project beyond pay. As with the earlier projects, the Americans attempted to induce Germans to join by appealing to their sense of history. If not they, then who would write the history of the Luftwaffe? The American and British official versions of events had already been published by 1952, and for many Germans, failing to respond with their side of the story was unappealing. From 1946 onward, American officers told the German writers that the new German government, once established, would receive copies of their studies. By 1952 the USAF added to that promise the assurance that copies of the monographs would go to the new West German military.

A critical factor in the search for contributors was the personal prestige of retired General der Flieger Paul Deichmann and, to an even greater extent, *Generalfeldmarschall* Albert Kesselring. One of the few airmen of any country to command an entire theater during the war—the Mediterranean—Kesselring held enormous credibility with former Luftwaffe officers. His well-publicized and controversial efforts to rehabilitate the reputation of the German military, no doubt, made him a persuasive person to bring other veterans around to the notion of helping the Americans. The growing distance from the years of American bombing raids against Germany, coupled with the intensification of the Cold War, made it easier to work for the former enemy.<sup>14</sup>

## **West German Rearmament**

The growing pressures of the Cold War reshaped the international security environment during the 1950s and led to the rearmament of West Germany, which few anticipated five years earlier. This lengthy process, which began as murmurs in the press in 1949 and culminated in West German fighter squadrons taking to the air in 1957, would influence and be influenced by the monograph project. West German chancellor Konrad Adenauer was the first to publically float the idea of remilitarization in the press in 1949, but it was not until the following year that detailed plans began to emerge, spurring intense debate within western Europe and in Germany itself. Events around the world, in particular the Berlin blockade that ended in May 1949, led to mutual defense treaties and the establishment of NATO in April 1949.

Even though Germany was the likely battlefield for a direct confrontation between NATO and the Soviets, most West Germans remained opposed to rearmament because of the utter destruction the last war wrought. Resistance to a new German army was also exceptionally strong in France.

Adenauer created a small council of military advisors in 1948 that secretly began considering some sort of German contribution to the defense of western Europe. Separately, American officials began similar preparatory work. Still, when Adenauer made a public offer of West German rearmament in French and American newspaper interviews in late 1949, which David Clay Large terms "Adenauer's trial balloon," Western governments, including Washington, strongly rebuked him. The proposal encountered an even cooler reception within the newly independent West Germany.<sup>15</sup> But the communist invasion of South Korea on 25 June 1950 caused a panic in West Germany, where many feared a similar invasion, and spurred governments into action.

In October 1950, 15 former senior German officers serving as advisors to the West German government met at the Himmerod monastery and laid down the first detailed plans for a new German military. These included plans for an 831-plane tactical air force equipped by and organized along the lines of

the USAF. However, unlike the USAF, which was by then an independent service, the air force outlined in the Himmerod memo was to be subordinate to the army, parceled out to and directly commanded by army divisions and corps. The proposal ignored air defense and assumed other nations' air forces would handle that role.

The only air force officer present at the conference was Robert Knauss, a retired General der Flieger.<sup>16</sup> Knauss held a doctorate in political science, wrote extensively, and soon became the Stuttgart radio's chief military and political commentator. In 1954 Deichmann and Hammer brought him onboard the Karlsruhe project, where he served as a high-level German language editor alongside Suchenwirth.<sup>17</sup> No matter how skilled Knauss was, he was outnumbered by army officers at Himmerod, as the resulting proposal to subordinate the future air force to the army showed.

Adenauer relieved his primary military advisor in October 1950 for making impolitic remarks and replaced him with Theodor Blank. The Amt Blank, the proto-West German defense ministry, became the scene of renewed disagreement between former German army and air force officers. James Corum explains the dichotomy of German opinion regarding the US military in "Building a New Luftwaffe: The US Air Force and the Bundeswehr Planning for Rearmament, 1950–60." German army officers saw no need to imitate the US Army and considered much of its equipment and doctrine obsolete. This was partly a result of psychological factors, Corum reasons, because World War II ground combat experience did not clearly demonstrate to either the Americans or the Germans that the German army was inferior on the tactical level. He counts the Army's German Military History Program as evidence that the Americans believed they could learn something from the German army, particularly with regards to the Soviet Union.<sup>18</sup>

The reverse was true in the air forces. The former Luftwaffe officers had quite a different experience during the war. Corum points out that the Luftwaffe lost air superiority over the German homeland more than one year before the Nazi surrender. Also, the rapid pace of technological advancement meant the German air force and aerospace industry lagged far behind the

United States and had no hope of catching up without full American support.

The Luftwaffe fielded the world's first operational jet fighter during World War II, but by the time of German rearmament the fourth generation of jets was already in development in the United States. War and demilitarization hurt all West German industries, but the slower pace of postwar technological advances in tanks and small arms meant that West Germany was not as far behind in the weapons of ground warfare. For example, Corum observes that West Germany was able to produce prototypes of excellent armored fighting vehicles by 1960. For years afterwards, however, the West German air force still relied on American and other European designs, with the Federal Republic producing foreign aircraft under license long before they could develop their own.<sup>19</sup>

If the Bundesluftwaffe were to model itself after the US Air Force, its leaders needed to meet with their American counterparts, but this became more difficult when France proposed the Plevin Plan in 1950. France recognized the need for an increased European contribution to defense but remained fearful of Germany, so it sought to confine its neighbor within a European Defense Community. Negotiations over this coalition structure continued for several years, and in the meantime, official contact between the militaries was prohibited.

The NHT served as a crucial back channel between the US Navy and German naval planners during this period, but the Air Force did not have a similar cover organization in place. USAF officials toyed briefly with the idea of running a clandestine liaison office out of a German historical program.<sup>20</sup> Instead, those involved decided in January 1952 that sending German officials to USAFE headquarters at Wiesbaden Air Base, Germany, would suffice. Ironically, Hammer wrote his supervisors with the following news two years later: "You would like to know, I am sure, that your boy has finally made the team. The communist radio in East Germany has broadcast that I, along with Field Marshal Kesselring, General Plocher and others, am working on plans for the new West German Luftwaffe. I feel complimented."<sup>21</sup> His boss replied, "You had better stay the Hell out of Berlin and away from the border."<sup>22</sup>

The USAF, which formally won its independence from the Army in 1947, was horrified to learn the West German air force might become an air corps wedded to ground forces and, therefore, emphasized maintaining close relations with Amt Blank. In August 1952 Amt Blank decided the Bundesluftwaffe would be an independent service, and the following year restrictions on American liaison with Germany began to disappear as the European Defense Community collapsed. The United States created a military assistance and advisory group in Germany in November 1953, and more detailed German plans emerged for a 12-division army and an air force of 20 wings and 1,300 frontline aircraft.<sup>23</sup>

The air evaluation staff at Maxwell AFB began sending Hammer translated USAF doctrinal manuals in July 1954 to distribute to German air force officials. Deichmann personally delivered the first batch of six translated manuals to Bonn "to insure they are placed in the right hands, i.e., the hands of the Luftwaffe people rather than the Army Over Command," Hammer wrote.<sup>24</sup>

Hammer took this opportunity to publicize the Karlsruhe project, but the Air Force staff was also genuinely concerned by the interservice debates going on in Bonn. He kept translated copies of the manuals at the Karlsruhe office so that any former officer who wanted to could view them. In addition to the manuals, Hammer transmitted American Reserve Officer Training Corps (ROTC) textbooks to Germany. In October 1954, one of the Bundesluftwaffe's two ranking planners and its future chief came across a volume meant for cadet education while perusing Hammer's files and excitedly requested any copies Hammer could find.<sup>25</sup>

The German officers loved the textbooks Hammer acquired from the ROTC commander. The books were "elementary and superficial," Hammer knew, but most of the former German flyers were "almost completely cut off from the stream of aeronautical and aerial warfare developments during the past eight years."<sup>26</sup> Although the ROTC textbooks were probably not as useful as the translations of American doctrine in the Bonn interservice debates, the Bundesluftwaffe planned to adapt them for use in their junior officer education.

## **Effects on the NATO Alliance**

The Karlsruhe project dramatically strengthened not only personal bonds among participants but also the German-American military alliance. Hammer described this "new, unforeseen by-product" at length in a February 1956 letter to Dr. Simpson, stressing America's desperate need for "the cooperation and loyalty of its Free World allies, especially Germany."<sup>27</sup> In fact, Nye foresaw this potential advantage of the project in a letter to Simpson on 20 November 1953, stating that his organization believed that "this project will provide invaluable dividends over many years from the spirit of cooperation and understanding it is fostering," which he added was "especially significant" given the goal of defending the Western world.<sup>28</sup> Hammer's 1956 appraisal proves Nye's prediction true and then some:

Through our Project, men who are now entering highly important positions in the West German Defense Establishment have been working with and for the United States Air Force over a period of several years. During that time, the highest respect for their personal and professional worth and integrity was shown them by the Air Force; respect of a type which for over ten years even their own countrymen had denied them. Thus, men who are entering positions corresponding to such of our posts as Chief of Staff, USAF; Chief of Staff, US Navy; Commanding General, Air Defense Command or Tactical Air Command; USAF Representative to the Joint Chiefs of Staff[;] Inspector General, US Army[;] Chairmen of the Civil Aeronautics Board[;] and Assistant Secretary of Defense for Procurement, have come to look on the Air Force as a trusted partner and friend—one which came to them for friendship and cooperation not after they had regained their positions of importance and prestige but at a time when they were desperately in need of such friendship. I cannot overemphasize the profound impression this has made and the feeling of deep loyalty which it has inspired among these men. This feeling is reflected by the fact that every one of them who is leaving has requested that he be permitted to work with us until our Project is completed even though such will mean giving us the few free hours left to him by the demands of his new position. And the individual selected to head the new Luftwaffe accepted the post on the condition that he be permitted to wait until May so that he might complete the major part of his work for us. I doubt that such genuine friendship and loyalty on the part of the top generals of a foreign, major military force could have been gained through other means, regardless of cost.<sup>29</sup>

Simpson was impressed by the number of contributors who moved into key positions and their desire to continue work "even at considerable personal sacrifice."<sup>30</sup> Hammer hoped that the accession of contributors to key defense posts might elevate the status of the Air Force's monographs. He wrote of the hard-working Josef Kammhuber, the first *Inspekteur der Bundesluftwaffe*, "Perhaps his new eminence will lend increased value and significance to his otherwise mediocre contributions."<sup>31</sup>

The new head of the West German air force gained notoriety within the project for being the first author asked to resubmit work, and he also became a close personal friend of the Hammer family. As the project was coming to a close in summer 1957, there was the possibility there would not be sufficient funds to pay those authors who had stayed with the project. In spite of this, all the contributors continued to produce work.<sup>32</sup>

### **A Historical Program Director as Air Attaché**

A series of visits by USAF officers and staff to Karlsruhe and, more importantly, by Germans to the United States further solidified the relationship. American generals and civilian officials from AU frequently toured the Karlsruhe offices, held conferences with German contributors, and went on short sightseeing trips around Europe. Often the Americans sought to "pick the brains" of the Germans on topics of future warfare and did not want to dwell on the monograph project.<sup>33</sup>

The handful of German visits to the United States, on the other hand, did not usually include tours of central Alabama and seemed to have made a much greater impression on all involved. The first, by Deichmann in July 1954, was primarily a research trip to quickly identify and catalog useful documents in American holdings in Washington, DC, and at Maxwell AFB.

The occasion also allowed Deichmann and Hammer to hold roundtable discussions with groups from the AU headquarters staff, Air Command and Staff College (ACSC), and AWC and its air evaluation staff, which was the body that wrote USAF doctrine.<sup>34</sup> The warm reception Deichmann received was a thrill. "It means a great deal to people like himself to be treated as a

respected member of the military flying profession," Hammer later wrote. The general did not hesitate to inform the other German contributors of his visit.<sup>35</sup>

The Karlsruhe project also prompted the beginning of a speaking series by German officers at USAF staff schools. As with so many other good ideas, Nye was the first to point out this potentially important, nonhistorical payoff of the project.<sup>36</sup> Hammer selected General der Flieger Egon Doerstling to speak at AWC because of the general's command of English and his experiences during the war.

Like Schmid, Doerstling once commanded units that directly opposed the American strategic bombing campaign over Western Europe. No matter how well the speech went, it would be noteworthy for bringing former adversaries together. A week before his speech, Doerstling produced 90 typewritten pages of disorganized thoughts. Hammer knew the general's "courtly, dignified bearing" would go far, but the language of the speech was "fearsome to behold. Grammatically correct, but stilted, repetitious, and made up of nineteenth century British words and usage." However, Hammer was hard-pressed to edit the speech for fear of wounding the general's pride, and Doerstling retorted that the AWC had told him to speak for as long as he wished.

Hammer asked his wife, Professor Suchenwirth, and Louis Jackets, the British archivist who was visiting Karlsruhe at the time, to suggest alterations.<sup>37</sup> Everyone involved was anxious for Doerstling to make a good impression. Interestingly, Doerstling flew on a plane that carried a German army general to the US Army War College for the same purpose. When Doerstling finally delivered his speech, the instructors "could not have been more satisfied or more enthusiastic." Angell considered it "by all odds the best given by any foreigner and as good as any of those that I regard as the best given by Americans."<sup>38</sup> While on his transatlantic flight, Doerstling evidently decided to speak from the version his American and British helpers heavily edited.

Friedrich von Boetticher, a longtime German military attaché to the United States, gave the next official speech at AWC in September 1956.<sup>39</sup> He fielded questions from American officers about the Bundesluftwaffe and its role in the German defense establishment. These early speeches put a face on German rearmament for the Americans and reaffirmed to the Germans

that their new allies took them seriously and valued their opinion. More visits to the United States followed, including one by General Kammhuber, in his new official capacity as head of the Bundesluftwaffe, and Deichmann to Washington, DC, and AU.

The project staff was never thrilled to lose authors to the Bundesluftwaffe because it slowed composition. Finding replacement contributors was always difficult and time-consuming. Kammhuber was the first to leave during the summer of 1956, but his two drafts were fairly complete. Walter Grabmann left the following spring, as did Plocher, who became the deputy chief of staff of the Bundesluftwaffe. Plocher worked as Deichmann's assistant and also penned over 2,000 pages on the Soviet Union air war. His resignation from the project, which was postponed several times by West German government delays, partly accounts for the lack of coverage of 1944 and 1945 in the monographs. Harry Fletcher, the project's final editor, identified another side effect of the impending departures: "Of course some of the studies were pretty superficial, and I wondered [if] the author in such cases simply 'called it a day' or decided to work for the emerging [West German Air Force]."40

Colonel Nye told Dr. Simpson in late 1953 that "the historical program is already conducting operations many of which are normally the role of a military attaché, and is establishing friendly, cooperative relations and securing unparalleled channels of information which normally would require years for a new attaché to build up. This feature of the program alone may prove to justify the funds expended."<sup>41</sup> Indeed, when in 1957 assistant air attaché to Germany Lt Col Leonard Hoffman took it upon himself to recommend Hammer for commendation, it was on the grounds that "the contacts which he has established, and transferred to this office, with key GAF personnel have been and will continue to be of great assistance in the accomplishment of our primary mission. In addition, he has done a really superb job of selling the USAF to important German officers."<sup>42</sup> Hammer ultimately received the Legion of Merit for his work on the project thanks to strong recommendations from the chief of the USAF HD and the deputy commander in chief of USAFE, then Maj Gen Herbert Thatcher.<sup>43</sup>

## **The West German Officer Education System Takes Shape**

The German project contributors who became most influential in the West German defense establishment sought to model the Bundesluftwaffe's officer education system on that of the US Air Force. Although they were ultimately unsuccessful in this effort, this does not alter the fact that, if not for the Karlsruhe project, key German air force officers would have had little or no firsthand exposure to USAF methods.

The Air Force Historical Division was part of AU, the Air Force command responsible for the service's staff schools, doctrine, and some of its nontechnical research. At the time of the monograph project, AU was a major command, meaning that it was directly subordinate to Headquarters Air Force, and was separate from Air Training Command, the organization responsible for pilot, aircrew, and technical training. Thanks to their involvement with the project, Kammhuber and Deichmann were able to tour AU facilities. The organization impressed them so much that they began formulating plans to create a Bundesluftwaffe organization along similar lines.

In the summer of 1956, Kammhuber returned to active duty and began pitching this idea to the new West German defense minister, Franz Josef Strauss. When the American staff in Karlsruhe informed the Historical Division of this development, deputy chief Angell called it "nothing less than thrilling."<sup>44</sup>

Fall 1956 saw Kammhuber and Deichmann, who was still the German control officer of the project, in daily telephone conversations as the two ironed out the details of a German air university. According to Hammer, Strauss and members of the *Bundestag* tentatively agreed to the proposal in December.<sup>45</sup> Plocher, who was still with the project but slated to serve under Kammhuber as the deputy chief of staff of the Bundesluftwaffe, weighed in that same month.

Political circumstances in Germany demanded that generals undergo additional screening before they could be reinstated in the new *Bundeswehr*. Plocher promoted the AU initiative in a speech before his examining board. He explained the role of AU in the USAF and noted that copying the organization directly

would cost more than West Germany could afford at the time. Nevertheless, he advocated establishing a command based on the American model. "Such an institution would undoubtedly become a rich source of knowledge in the subjects of military history and defense policy not alone for the soldier," Plocher proclaimed, "but for every individual who acknowledges and serves the State."<sup>46</sup>

The first serious challenge to the AU initiative came in January and February 1957. Kammhuber, Deichmann, and Hammer visited Washington, DC, and Maxwell AFB, where Kammhuber toured AU for the first time. He returned to Germany convinced not only of the need for a German air war college but also a German version of ACSC, the USAF school for midlevel officers.

Unfortunately, the party was in for a surprise. During Kammhuber's absence from Bonn, German army officers led by Gen Hans Speidel pushed through their own plan for a joint German general staff officer school administered by the army in the Heidelberg area. A joint German historical division would be subordinate to this organization. Education and historical programs under the auspices of the whole German armed forces or the army would deny the Bundesluftwaffe much of the autonomy Kammhuber sought. Kennedy, the American project editor who stayed behind in Karlsruhe, found out about this development in the newspapers.<sup>47</sup>

Kammhuber, however, was not easily silenced. He protested that Heidelberg did not have technical civilian schools or an airfield in which air force officers could maintain their flying proficiency.<sup>48</sup> When these arguments proved insufficient, Kammhuber brought Strauss to Karlsruhe during the first week of March 1957, where Deichmann gave a detailed briefing on the merits of the AU proposal.

Under the plan, the organization would have three separate divisions: a doctrine writing and research unit that combined the functions of AU's RSI and the air evaluation staff; an administrative and inspectoral group that would recommend, provide for, and supervise educational subject matter, methods, and materials; and finally a two-tiered Air Force staff school system.

For nearly two hours, the three men conferred and toured the project offices, pouring over the drafted historical studies

and document collection. No Americans were present, but a German staffer later told Hammer what transpired. Strauss asked, "How are the French and British organized to perform these functions?" Deichmann replied, "I don't know, but I am convinced our guide should be the United States Air Force." Strauss indicated "enthusiastic approval" for the Karlsruhe project and agreed to the German air university.<sup>49</sup>

The success of what Hammer called the "surreptitious visit" was short-lived.<sup>50</sup> Budgetary restraints and likely the clout of the German army killed Kammhuber and Deichmann's air university initiative for good in May 1957. The plan was to set up the organization within the Luftwaffe's planned southern regional command. Strauss and Kammhuber wanted Deichmann to return to active duty; he agreed on the condition that he take command of this organization. Deichmann told Hammer that his insistence partly stemmed from his desire to be able to dispatch some of his Bundesluftwaffe personnel to help complete the monograph project in Karlsruhe.<sup>51</sup>

In the summer of 1957, the German parliament put the planned southern Germany Luftwaffe area on hold. "Kammhuber and his boys in making their plans had not yet become aware that it is 1957 instead of 1937," Hammer said. "The peoples' representatives now must approve the General's plans and the budget committee of the Bundestag walked in with a big axe."<sup>52</sup>

While the parent organization of the proposed German air university went "on ice," the Army-backed joint general staff school proposal moved forward.<sup>53</sup> This setup had the advantage of being cheaper than running separate service schools. It was also intended to educate officers in a joint environment, thereby better preparing them for joint operations.<sup>54</sup> The Führungsakademie der Bundeswehr, or German Armed Forces Staff College, was established on 15 May 1957.<sup>55</sup>

### **The USAF Extends the Project at the Request of the Bundesluftwaffe, 1957**

The West German parliament's thriftiness also hurt Deichmann's plans to edit the Luftwaffe monographs in the German

language. Budget cutbacks led to the clearest demonstration of the project's impact on the German-American air force relationship in the spring of 1957. Two years earlier, the West German government demonstrated interest in the American project when Hammer visited the Luftwaffe offices of the Amt Blank in Bonn. West German officials proposed sending over one or two German historical officers to work with the Air Force team. They stated that when the American project was complete, the German government hoped to inherit the staff and contacts to form the historical division of the new German defense forces.

The Air Force Historical Division decided to hold off on the German offer.<sup>56</sup> When Kammhuber and Deichmann began their failed effort to establish a German air university in mid-1956, Deichmann seemed intent on including historical research in that organization, although there was little direct talk of working on the Luftwaffe monographs themselves.

As the planned termination of the Karlsruhe phase of the monograph project at the end of fiscal year (FY) 1957 neared, Kammhuber and Plocher, then the leaders of the Bundesluftwaffe, requested that the USAF continue the project for another year.<sup>57</sup> They stated that budgetary limitations and delays in setting up the German air university would mean that the German government could not support further work on the monographs in FY 1958. However, \$30,000 would be enough, they claimed, to continue the project on a reduced scale until 30 June 1958, when the Germans would be able to fully support the project themselves.<sup>58</sup>

Within the Air Force Historical Division and project staff, opinions on continuing the project varied.<sup>59</sup> All agreed the extra year would be beneficial. According to Hammer, the German phase was well over 75 percent complete at the end of FY 1957, which left nine studies incomplete at a time when all writing was supposed to be finished.<sup>60</sup> Still, Hammer maintained that the Air Force should demand matching funds from its ally. With the publication of studies in mind, he also argued that some of the money should be used to translate the drafted studies. Hammer, nevertheless, backed the continuation of the project, even though only Kennedy remained in Karlsruhe for the final year.<sup>61</sup>

With the strong support of the Air Force Historical Division, Headquarters USAF approved the funds for FY 1958 with no

strings attached on 25 June 1957.<sup>62</sup> It must have been surprising for Hammer or anyone associated with the project to witness the speed and enthusiasm of the Air Force's reaction to this plea from the Bundesluftwaffe. Thirty thousand dollars was not a tremendous amount of money in the grand scheme of 1950s defense budgets, but only one month before Hammer scrounged for a few thousand dollars to translate monographs. The Air Force's momentary generosity did not translate into any newfound priority for the project within the United States. In fact, the Karlsruhe project became even more understaffed than it already was as Hammer moved on to a new Air Force post.

Almost as soon as Headquarters USAF released the additional funds, the Air Force Historical Division informally asked Deichmann and Kammhuber to use a portion of the money to translate some of the drafted studies into English. The Germans stood their ground, saying they had always been clear that their priority was to edit drafts in the German language so that the studies could be used by the German armed forces.

Hoffman, the assistant air attaché, pointed out that giving the Germans the money without conditions essentially made it a gift. He wrote, "We are, therefore, in an extremely awkward position to attempt to 'take back' part of our gift so that we may use it for our own translation purposes."<sup>63</sup> The Air Force Historical Division quickly gave up trying to win over Deichmann, realizing that further efforts might create ill will. The division understood that the project was on a shoestring budget with only \$30,000 allotted for FY 1958, and further German language editing of the studies would produce more useful German drafts for the Air Force Historical Division.<sup>64</sup>

With the additional year, Kennedy and the German team at Karlsruhe finished a considerable amount of work, including drafts of all planned studies. West German historians toured the USAREUR Historical Division in November 1958, where copies of the German drafts of the Luftwaffe monographs remained even after the Air Force shop closed. The German historians said these were "the most valuable material[s] they had been able to procure so far" because they were written by participants in the events and had corroborating evidence.<sup>65</sup>

Deichmann became the director of a study group at the Führungsakademie der Bundeswehr after the monograph project's

German office closed. In April 1959 he requested educational materials from AU for use at his new job.<sup>66</sup> Deichmann continued to exchange letters with Simpson and others at the Air Force Historical Division during the 1960s. In 1963 he became the first foreigner to receive the AU award for "outstanding contributions to the United States Air Force's officer education program."<sup>67</sup>

In a 1964 letter to Simpson, Deichmann lamented that the USAF was more interested in the Luftwaffe's history than the Luftwaffe was. The studies in Alabama were, in his estimation, the most complete history of the German air force in World War II.<sup>68</sup> In none of his letters to the Air Force Historical Division did Deichmann hint at continued work on the Karlsruhe monographs after the Americans left in summer 1958.<sup>69</sup> Copies of the studies reside in German archives, as does the original Karlsruhe document collection, which the Americans returned to West Germany in January 1967.<sup>70</sup>

### **Relational Rearmament**

Forging personal bonds between German and American officers was important for the armies and navies during German rearmament, and the NHT and German Military History Program were some of the earliest sites of postwar professional interaction between members of the corresponding services. For the air forces, this relational rearmament process in the form of the Karlsruhe project was absolutely crucial. This did not stem from some unique aspect of aerial combat that demanded especially close connections between allied fliers, although it would have been ideal to have all Western air forces on the same page in the event of a war against the Soviet Union.

The nature of German aerial rearmament was what really exaggerated the importance of personal ties between allied air officers. As Corum observes, German air force planners latched tightly onto the American model in the early 1950s for a variety of reasons, not the least of which was to prevent the establishment of a West German army air corps. Moreover, because the Bundesluftwaffe was so far behind technologically, the learning curve was particularly steep as it tried to restart jet opera-

tions. Considering the crises the service faced in its painfully slow rebirth and the level of dependence it continues to have on the US Air Force, it is well that the first generation of West German air force leaders had longstanding, positive relationships with the Americans, thanks to the Karlsruhe project.<sup>71</sup>

If the Bundesluftwaffe of the 1950s considered the US Air Force the ideal teacher (i.e., an independent service that had world-class aircraft and the industrial base to support them), then the Bundesluftwaffe was a student who took notes religiously. The relationship between the German and American armies was quite the opposite, as evidenced by the German army's disdain for American procedures and equipment and the US Army's appetite for all things German.

As noted, the US Army submitted its doctrine for review by Halder and members of his historical team in February 1952. The Americans took the resulting harsh criticisms so seriously that they made sweeping revisions to their doctrine.<sup>72</sup> In November 1953, Nye, the USAREUR Historical Division's chief, told Dr. Simpson that the Air Force could use the Karlsruhe project members in a similar manner. The Air Force never tasked its former Luftwaffe employees to provide, as Nye suggested, "evaluation and criticism of key Air Force documents such as Air Force Manual 1-2, *Air Force Basic Doctrine*. On the contrary, the Air Force's historical project provided top Bundesluftwaffe leaders with copies of American air doctrine and even, when the Germans requested it, ROTC textbooks. That is not to say that the Americans did not show respect for their German counterparts. The very act of asking the former German generals to contribute to the Karlsruhe project showed that the senior partner in the North Atlantic alliance valued them and their opinions. This meant a great deal to men who suffered such a total defeat and were deemed criminals after the war.

The manner in which the Karlsruhe project came to an end reveals striking similarities between the two air forces by showing the relative weight they assigned to historical writing and international cooperation. When the Germans requested additional funding to continue the project into 1958, the USAF snapped into action. This was after AU annually struggled to provide adequate funds for the Karlsruhe project. Of course, the \$30,000 the USAF quickly allocated paled in comparison to

the \$9.3 million it gave to the Bundesluftwaffe in 1956 to ensure that the organization got off the ground.<sup>73</sup> Still, the speed with which the Air Force allocated \$30,000 to the Bundesluftwaffe, the fact that funding came not from the Historical Division but from Air Force headquarters, and the decline of the project after it no longer involved cooperation with the West Germans speaks to the importance the Air Force assigned to the alliance-building aspect of the GAF monograph project.

When the USAF historical office in Karlsruhe shut down in 1958 and the cooperative phase of the project ended, neither side took the monographs as seriously as before. This was partly a result of practical considerations. With composition mostly complete, the studies, edited or not, could at least serve as reference works for the extensive Karlsruhe document collection. The Americans continued to rework the monographs for 11 more years but with a reduced staff and downgraded publishing expectations.

It appears the West Germans did not distribute the studies within the military either, even though Deichmann said they would be useful for West German staff schools. One explanation for this may have been a shift in mission for the Bundesluftwaffe directed by Chancellor Adenauer in the late 1950s.

Intent on West Germany reaching the status of a major Western power, Adenauer ordered the air force to select the F-104G, a version of the American-made fighter tailored to deliver a tactical nuclear weapon. Owing to a NATO agreement, the United States controlled tactical nuclear weapons in Europe, but the Starfighter provided the Bundesluftwaffe with the nuclear strike capability that every self-respecting air force had to have.<sup>74</sup>

#### Notes

1. Diehl, *Thanks of the Fatherland*, 59.
2. Large, *Germans to the Front*, 25.
3. Diehl, *Thanks of the Fatherland*, 55.
4. *Ibid.*, 58.
5. *Ibid.*, 62–64.
6. *Ibid.*, 66.
7. Detwiler, *World War II German Military Studies*, 5.
8. Peifer, *Three German Navies*, 110–13.
9. Kramer, *West German Economy*, 178–80.

THE "UNFORESEEN BY-PRODUCT"

10. Karlsruhe Collection, AFHRA; Heitman, "German Generals Helped Us"; and Peifer, *Three German Navies*, 108.
11. Wilbur S. Nye to Albert F. Simpson, letter, Karlsruhe Collection, AFHRA.
12. Wendell A. Hammer to Simpson, letter, Karlsruhe Collection, AFHRA.
13. Joseph A. Angell, Jr. to Dr. Eugene Emme, letter, Karlsruhe Collection, AFHRA.
14. Entry on death of Albert Kesselring, Karlsruhe Collection, AFHRA.
15. Large, *Germans to the Front*, 54–56.
16. Corum, "Building a New Luftwaffe," 90–91.
17. Hammer to Simpson, letter, Karlsruhe Collection, AFHRA.
18. Karlsruhe Collection, AFHRA; and Corum, "Building a New Luftwaffe," 95.
19. *Ibid.*, 95–97.
20. *Ibid.*, 99.
21. Hammer to Simpson, letter, Karlsruhe Collection, AFHRA.
22. Simpson to Hammer, letter, Karlsruhe Collection, AFHRA.
23. Karlsruhe Collection, AFHRA; and Corum, "Building a New Luftwaffe," 100–101.
24. Hammer to Colonel Page, letter, Karlsruhe Collection, AFHRA.
25. Hammer to Deichelmann, letter, Karlsruhe Collection, AFHRA.
26. Hammer to Page, letter, Karlsruhe Collection, AFHRA.
27. Hammer to Simpson, letter, Karlsruhe Collection, AFHRA.
28. Nye to Simpson, letter, Karlsruhe Collection, AFHRA.
29. Hammer to Simpson, letter, Karlsruhe Collection, AFHRA.
30. Simpson to Hammer, letter, Karlsruhe Collection, AFHRA.
31. Hammer to Angell, letter, Karlsruhe Collection, AFHRA.
32. Hammer to Simpson, letter, Karlsruhe Collection, AFHRA.
33. Angell to Hammer, letter, Karlsruhe Collection, AFHRA.
34. Simpson to Hammer, letter, Karlsruhe Collection, AFHRA. This last meeting was the one that first put USAF doctrinal manuals in Paul Deichmann's hands.
35. Hammer to Page, letter, Karlsruhe Collection, AFHRA.
36. Nye to Simpson, letter, Karlsruhe Collection, AFHRA.
37. Hammer to Angell, letter, Karlsruhe Collection, AFHRA.
38. Angell to Hammer, letter, Karlsruhe Collection, AFHRA.
39. Hammer to Angell, letter, Karlsruhe Collection, AFHRA.
40. Harry R. Fletcher, questionnaire, Karlsruhe Collection, AFHRA.
41. Nye to Simpson, letter, Karlsruhe Collection, AFHRA.
42. Lt Col Leonard Hoffman to Simpson, letter, Karlsruhe Collection, AFHRA.
43. Simpson to Hoffman, letter, Karlsruhe Collection, AFHRA.
44. Angell to Hammer, letter, Karlsruhe Collection, AFHRA.
45. Hammer to Simpson, letter, Karlsruhe Collection, AFHRA.
46. *Ibid.*
47. Edwin P. Kennedy to Angell, letter; and Hammer to Angell, letter, Karlsruhe Collection, AFHRA.

48. Hammer to Angell, letter, Karlsruhe Collection, AFHRA.
49. Hammer to Simpson, letter, Karlsruhe Collection, AFHRA.
50. Hammer to Angell, letter, Karlsruhe Collection, AFHRA.
51. Ibid.
52. Hammer to Simpson, letter, Karlsruhe Collection, AFHRA.
53. Ibid.
54. Bruenner, "Professional Military Education."
55. Führungsakademie der Bundeswehr, <http://www.fueakbw.de/>.
56. Hammer to Angell, letter; and Hammer to Simpson, letter, Karlsruhe Collection, AFHRA.
57. Note: Prior to 1976 and the Congressional Budget and Impoundment Control Act, the fiscal year began on 1 July and ended on 30 June.
58. Bonn air attaché to Air University commander, letter, Karlsruhe Collection, AFHRA.
59. Angell to Kennedy, letter, Karlsruhe Collection, AFHRA.
60. Hammer, status of USAF Project, Karlsruhe Collection, AFHRA.
61. Hammer to Simpson, letter, Karlsruhe Collection, AFHRA.
62. Simpson and Angell's report of temporary duty, Karlsruhe Collection, AFHRA.
63. Hoffman to Simpson, letter, Karlsruhe Collection, AFHRA.
64. Kennedy to Angell, letter, Karlsruhe Collection, AFHRA.
65. Helmut Heitman to Kennedy, letter, Karlsruhe Collection, AFHRA.
66. Paul Deichmann to Simpson, letter, Karlsruhe Collection, AFHRA.
67. Deichmann, *Chef im Hintergrund*, 8–9.
68. Deichmann to Simpson, letter, Karlsruhe Collection, AFHRA.
69. The author's tentative conclusion is that the West German government did not continue to edit the monographs after the closure of the Air Force Historical Division's Karlsruhe office.
70. Wolfe, *Captured Germans and Related Records*, 86.
71. For a detailed treatment of the difficulties in setting up a training establishment for the Bundesluftwaffe in the 1950s, see Corum, "Starting from Scratch."
72. Soutor, "To Stem the Red Tide," 676–79.
73. Corum, "Building a New Luftwaffe," 105. Adjusting for inflation as of 2009, \$30,000 and \$9.3 million are roughly equal to \$230,000 and \$73.7 million, respectively.
74. Ibid., 109–10.



## Chapter 4

### **Insulated but Ignored**

#### **The Muted Air Force Response to the Karlsruhe Project**

*It is an old axiom that there is more to be learned from defeat than from victory. If this is true, then the defeat of the Luftwaffe in World War II offers many lessons that we cannot afford to ignore. It is the purpose of the German Monograph Project to make these lessons available to the United States Air Force.*

—Dr. Albert F. Simpson  
Chief, USAF Historical Division  
To Research Studies  
Institute Director, Memorandum  
29 August 1958

Despite the logic of the above quotation, the Air Force's wider interest in the Karlsruhe historical studies, as opposed to the diplomatic benefits of West German–American cooperation, diminished years earlier. Inadequate support and project delays culminated in a single focus to simply complete the monographs. As a result, staff members became reluctant to cooperate with the operational Air Force. By the end of 1953, it became an official history project in a bubble, little noticed and given just enough funding to survive.

Insulated from outside pressure to pursue a narrow “lessons learned” approach like the Army's German Military History Program, the Luftwaffe authors generally provided accurate appraisals of the war, which were largely free of the distortions that colored Army studies. Although some Karlsruhe monographs amount to technical reports, the Air Force prioritized others for publication based partly on their quality as traditional, broad, and meticulously researched histories. But the origin of the Air Force Historical Division's free hand—the low level of outside interest—persisted when it completed the first German monographs. Thus, the studies have seen significant use by historians but had little direct influence on the military.

Whereas the Army's poor position in the 1950s defense establishment incentivized historical work that legitimated mobile defense and therefore the service itself, the opposite was the case for the Air Force. Rapid technological change in air weaponry coupled with the unique capability of long-range bombers to bring nuclear destruction to the enemy's homeland contributed to Air Force dominance of the Pentagon budget and war plans. This discouraged questioning doctrine or evaluating history that might call into question the efficacy of strategic bombing.

### **The Influence of Rapid Technological Change**

If the typical aircraft of 1945 would have dazzled observers in 1935, then the fleets of jets waiting on alert to launch an intercontinental nuclear attack in 1955 would have left those same observers speechless. Engineers made dramatic advances in range, speed, and payload during World War II, and after the war they did not let up. With its pressurized cabin, remotely controlled defensive armament, range of 4,100 miles, and payload of 20,000 pounds, the Boeing B-29 was ahead of its time when it entered service in 1944. Within a few years, however, other aircraft eclipsed its performance. The B-52, which first flew in April 1952 and entered service with Strategic Air Command (SAC) three years later, had a significantly longer range and could be modified to carry four times the bomb load of the B-29. More important than the specifications of particular aircraft was the advent of aerial refueling. Experiments during the 1920s and 1930s showed its feasibility, but it was not until after the war that it became commonplace. Three in-flight refuelings made a nonstop flight around the world by an American bomber in early 1949 possible. The operational use of tanker aircraft dramatically increased the range, striking power, and persistence of military aircraft, making it theoretically possible to keep an aircraft aloft indefinitely.

Technological change greatly altered how aircraft fought. The first jet-versus-jet combat occurred during the Korean War, but fighters still relied primarily on guns or cannons. Fighters employed unguided rockets during World War II against bomber formations and ground targets, but these weapons were not

suited for engaging maneuvering aircraft. Following the introduction of guided missiles and radar into fighters in the mid-1950s, it became possible to engage hostile aircraft while they were still several miles away. The first operational fighter to carry no guns, the Convair F-102A, entered service with the USAF in 1956 armed with air-to-air guided missiles. The following year, the Air Force deployed the Genie, an unguided, nuclear-tipped air-to-air missile intended for use against enemy bomber formations.

Advances in aircraft, missiles, radar, and computers brought changes in anti-aircraft defenses during the 1950s. In World War II defending fighters and anti-aircraft artillery were the scourge of bomber formations, but new jet bombers could fly much higher and faster. Defenses kept pace, however, with the abandonment of larger and farther-reaching guns in favor of the development of radar-guided artillery and surface-to-air missiles. An American Nike Ajax missile downed an unmanned World War II bomber in a 1951 test, and the United States started deploying the system in 1953. The Soviet Union matched it with its SA-2 in 1957.

In 1958, the year the USAF Historical Division's office in Karlsruhe closed, production began on the supercomputers that would form the basis of the semiautomatic ground environment. The American integrated air defense system became operational the following year and was able to literally fly American interceptor aircraft toward incoming Soviet bombers by relaying commands to the planes' autopilots.

The ballistic missile threatened to make any defense impotent in the event of nuclear war. The launch of Sputnik on 4 October 1957 famously demonstrated that the Soviet Union was capable of mounting an intercontinental strike, but it would be some time before the superpowers produced substantial numbers of true intercontinental ballistic missiles (ICBM). The USAF deployed a few of its Atlas ICBMs in 1959; the US Navy followed by testing its own Polaris missile in 1960; and the Soviets began fielding ICBMs on a large scale in 1961. By 1964 the number of Air Force ICBMs on alert surpassed the number of bombers on alert.<sup>1</sup>

This list of technological advances is not meant to be exhaustive; rather, it is included to illustrate the key trends af-

fecting Airmen's conceptualization of aerial warfare during the 1950s. Rapid technological change called into question most aspects of airpower, from how pilots would engage the enemy to whether manned aircraft would remain the preferred mode of attack. In short, air warfare appeared to be totally transformed. With guided missiles and nuclear weapons in the arsenal, it was difficult to draw tactical lessons from the World War II experience. Not surprisingly, the USAF was not as enthusiastic about its German history program as the Army was with its own because there seemed to be few convenient "lessons" to be gleaned from investigating the Luftwaffe's experience.

Tactical lessons and concepts were more readily transferrable from the German army to its American counterpart. US Army officers preparing to fight the Red Army identified with the German descriptions of the eastern front because they, too, would be "badly outnumbered and on the defensive" in the event of war. In describing how US Army officers eagerly responded to the emerging German army reports, Soutor writes: "The Americans would fight the same enemy as the Germans had, one that retained the same field commanders and used the same tactics; and conventional technology had changed little since World War II's end."<sup>2</sup>

The weapons soldiers used in the 1950s were by and large slight improvements over those of World War II. For example, the Red Army's main battle tanks during and after World War II were remarkably similar. The earlier T-34 had a road speed of 31 miles per hour and an 85 millimeter (mm) main gun. The T-54 was introduced in 1947 and served as the Warsaw Pact's standard tank until it was replaced in 1960. It was more heavily armored than the T-34, carried a 100 mm gun, and had the same top speed as its predecessor.<sup>3</sup> Of course, speed and gun caliber are far from the only measures of effectiveness for a tank (importantly, focus shifted to improving ammunition, armor, and fire-control systems), but compared to the dramatic advances in aerospace technology of the era, these were incremental, not transformational, improvements.<sup>4</sup>

If the USAF was obsessed with fielding the most technologically advanced weapons systems, it was not without good reason. During World War II, American engineers and officers were disturbed to find their German counterparts far ahead in many

areas of research and development. German rocket, jet engine, and high-speed wind tunnel testing were particularly advanced, while the Allies had superiority in other technologies such as large piston engines and turbo superchargers. Germany produced the world's first ballistic missile, cruise missile, and operational jet fighter during the war. These weapons did not translate into victory for the Axis powers, but their earlier production in larger numbers would have caused significant problems for the Allies.

In recognition of this threat and the especially close relationship between aircraft technology and combat capability, the Western Allies established extensive technical air intelligence programs during the war. Until 1944 the British Royal Air Force (RAF) had the lead, but after American troops landed on the European continent, the USAAF began to assert itself. On 22 April 1945, Gen Henry "Hap" Arnold approved the consolidation of all American air intelligence efforts in Europe under Operation LUSTY, a derivation of the term "Luftwaffe Secret Technology".<sup>5</sup> While the parallel Operation Paperclip focused on acquiring German rocket technology and expertise, Operation LUSTY brought Luftwaffe equipment, aircraft, and documents to the United States.

The number of German scientists working in the United States through Operation Paperclip never exceeded 500, but historian and retired Air Force intelligence officer Charles Christensen estimates the total number of German scientists and engineers who became contributors to the American aerospace industry numbered in the thousands. He concludes that the exploitation of German science and engineering saved the US government at least \$1 billion, and it cut the development times of weapons ranging from jet aircraft to guided missiles by several years.

Particularly crucial to the development of postwar American airpower was German high-speed wind tunnel technology. Christensen observes that these facilities were the "foundation for developing the aerodynamic structures capable of operating above the speed of sound" before the advent of computer simulation, and in 1945 the Germans were at least five years ahead in this area.<sup>6</sup> These postwar intelligence efforts spurred the creation of larger and more dedicated aerospace research and

development facilities in the United States, which immediately paid dividends in the form of the Boeing B-47.

The Air Force's first operational jet bomber, the B-47s swept wings, pylon-mounted axial-flow turbojet engines, and even its ribbon drag-and-brake parachutes were all German innovations. Between 1947 and 1956, more than 2,000 B-47s were delivered to the Air Force, and the novel design paved the way for the B-52 and the 707 commercial airliner, as well as its many military and civilian derivatives.<sup>7</sup> Developments such as these focused the attention of militaries, and especially that of the US Air Force, on achieving technological superiority.

### **The Era of Air Force Dominance and Doctrinal Stagnation**

Like the rapid pace of technological change during the early Cold War, the Air Force's dominance within the American defense establishment did not incentivize reflection. Stephen McFarland characterizes the ascendance of the newly independent Air Force in the early Cold War as the "birth of a new defense paradigm," one in which the Air Force replaced the Navy as America's first line of defense. This shift stemmed from the Air Force's effective monopoly on nuclear weapons and the development of long-range bombers like the B-36.

Although the Navy first deployed nuclear weapons aboard an aircraft carrier in 1950, McFarland explains that because of the shorter range of Navy aircraft, the carriers would have been forced to operate in the confined and dangerous waters of the Baltic and Mediterranean Seas. Therefore, land-based Air Force bombers were the best means of attacking targets deep inside the Soviet Union until ICBMs appeared in the late 1950s.<sup>8</sup>

The disparity between the strength of the American and Soviet armies coupled with domestic political pressures in the United States made assigning priority to the strategic air force the only attractive option. According to a fall 1946 report generated by the War Department, even after partial demobilization, the Soviet Union maintained 208 divisions and 15,500 combat aircraft, of which approximately half sat opposite Western forces in Europe. Soviet satellite states had another 100 divisions and

3,300 combat aircraft. The report also correctly predicted that the Soviets would acquire nuclear weapons by 1949.

The United States planned to draw down to only one or two divisions and 12 air groups in Germany in 1947.<sup>9</sup> With World War II won, the United States had little appetite for maintaining a large, expensive standing army or for a strategy that would pit it against the land power of the Soviet Union. The only realistic course of action in the event of a Soviet offensive in Western Europe was to retreat on the ground while striking at the sources of Soviet power with Air Force nuclear bombers.

While strategic nuclear attack became the centerpiece of American war plans beginning in the immediate postwar years, with the Western European recovery and the establishment of NATO, it became less acceptable to plan on abandoning continental Europe at the outset of hostilities. The United States and its European allies increased the sizes of their conventional forces after witnessing communist aggression in Korea. In 1951 the USAF planned to increase the size of its forces in Europe sixfold by 1954 to 185,000 personnel. Soon, however, the service scaled back its goals and eventually increased its commitment to only 136,000.<sup>10</sup> This number was still a substantial increase, but the downward revision of American conventional force levels reflected broader trends in American defense policy. The premise of President Eisenhower's massive retaliation strategy, articulated in 1954, was that the United States would use nuclear weapons as a first resort—weapons that the Air Force was best situated to employ. Allied nations were expected to bear the burden of fielding conventional forces to defend their own territory. West German rearmament was the embodiment of this principle.

The emphasis the United States placed on the strategic nuclear deterrent meant that the Air Force received a growing portion of the defense budget during the 1950s. Until the start of the Korean War in 1950, the armed forces had to compete for dwindling funds, leading to discord. The onset of war in Korea soothed interservice rivalries to a large extent as the defense budget quadrupled between FYs 1949 and 1951, from \$11 billion to \$47.8 billion. The budget continued to fluctuate through the 1950s but never again came close to the lows of the late 1940s, ending at \$41.4 billion in 1960.

More important for the present discussion, the proportion of spending that went to the Air Force gradually increased during the 1950s. In FY 1951, the most desperate phase of the Korean War, the Army received 41 percent, the Navy 26 percent, and the Air Force 33 percent. The next fiscal year, with the Korean front stabilized, the Air Force received 44 percent, with the remainder split evenly. At mid-decade, the Air Force received 40 percent, and in FY 1960, it received 47 percent of the budgeted funds for defense. McFarland observes that the rising defense budgets that supported America's post-Korea buildup allowed all services to achieve at least some of their force-level increases and procurement goals, but it is clear that the Air Force came out on top.<sup>11</sup>

Mirroring the broader trends in the military, SAC was dominant in terms of funding and representation in the Air Force leadership. Established in March 1946, a year and a half before the Air Force became independent, SAC was responsible for the nation's growing fleet of land-based strategic bombers and, for a time, all of its nuclear weapons. The USAF's devotion to strategic bombing was nothing new. During the interwar years, proponents of an independent air force latched onto strategic bombardment of the sources of enemy power partly because it was a unique mission that the other services could not perform.

The 1957 launch of Sputnik demonstrated America's vulnerability and further strengthened SAC. With its units constantly on alert, SAC's operating cost was six times higher than those of the Tactical Air Command (TAC) in 1958 and nine times higher in 1961. SAC dominance peaked in 1961 when Gen Curtis LeMay left his post as head of SAC to become the Air Force chief of staff; by the end of the year, all major operational commanders and the vast majority of Air Staff members were bomber generals.<sup>12</sup>

In the meantime, TAC struggled to survive during the 1950s even though it bore the brunt of actual combat in Korea, while SAC postured to deter a wider war with the Soviets. From December 1948 to November 1950, TAC and Air Defense Command had actually been made subordinate to Continental Air Command, while SAC remained separate.<sup>13</sup>

Thomas Finletter, who was secretary of the Air Force for almost the entire war, later summed up the service's opinion on

the conflict. While acknowledging that the Korean War made possible the expansion of the military, he lamented that it “had the unfortunate effect of emphasizing the importance of the weapons and tactics of the past.”<sup>14</sup> It was clear to the leaders of TAC, just as it was to the Army and Navy at the time, that the only way to ensure institutional survival was to acquire nuclear weapons.

In July 1951 the Air Force directed the modification of tactical aircraft to carry nuclear weapons that would, with the help of SAC bombers, attempt to retard a Soviet offensive.<sup>15</sup> TAC went a step further on 8 July 1955 when it created the Composite Air Strike Force (CASF), which historian Caroline Ziemke calls a “miniature SAC.” Equipped with fighters, fighter-bombers, light bombers, and reconnaissance aircraft, the CASF concentrated TAC’s nuclear weapons-capable aircraft, providing the Air Force with “massive retaliatory capability on the regional rather than the global level.”<sup>16</sup> The CASF proved useful as a rapid reaction force, deploying to crises in Lebanon and Taiwan in 1958, but its existence, nevertheless, illustrated the nuclear focus of the Air Force.<sup>17</sup>

With the attention of even those Airmen tasked with the employment of tactical airpower fixated on nuclear weapons, Air Force doctrine stagnated in the 1950s. While the Army developed its own organic aviation, the Air Force stubbornly clung to its nuclear deterrent role. On 17 February 1958 a study group led by Col Taylor Drysdale of the Air Research and Development Command concluded the Air Force was neglecting the theory of war and focusing too much on technology.<sup>18</sup> The following year, the Air Staff attempted to remedy this by assigning additional doctrine writing and research duties to the RSI at AU, but, in typical fashion, it did not assign additional personnel or funding to RSI so that it could execute this new mission. The Air Force did not release doctrine that was substantially new until 1964.

### **Delays Contribute to Loss of Air Force Interest**

At the time the Karlsruhe project started, Generaloberst Franz Halder’s panel of six former German general staff officers was

critiquing the US Army's current version of operational doctrine, FM 100-5, *Operations*, a year-long process completed in April 1953.<sup>19</sup> By November 1953, the year-old Karlsruhe project was already over budget and behind schedule, which prompted Nye to appeal to Air Force Historical Division chief Dr. Albert Simpson for more funds. In his letter, Nye touted the current and potential benefits of the project, giving Simpson arguments to defend the project if need be. Nye proclaimed the value of the Luftwaffe veterans as an intelligence source, a historical question-and-answer service for AU agencies, and doctrinal critics.<sup>20</sup>

In fact, Colonel Hammer, the Karlsruhe project officer, had already suggested all these attributes to deputy AU commander Maj Gen John Barker on the eve of the latter's retirement three months earlier. The Air Force's response to Hammer's suggestions varied greatly. Hammer's proposal that "our [German] generals evaluate, or prepare a new version of, AF Manual 1-2 and such AU doctrinal manuals as those on Theater Air and Air Defense Operations" was never enacted.<sup>21</sup> This was despite initial support from Simpson, who indicated that he wanted studies on AF Manual 1-2, *Basic Doctrine*, and a summary report on "lessons in aerial warfare revealed in the German air force studies."<sup>22</sup> However, both Hammer and Simpson qualified their remarks by classifying such tasks as ancillary to historical work. Hammer would have had to wait until the majority of monographs reached maturity to write "lessons."

In the early stages of the project, it is likely that everyone thought there would be time and support for such tasks later. The Army not only requested German review of its operational doctrine but also revised FM 100-5; as a result, the Air Force, reluctant to review its doctrine to begin with, never followed suit. The Karlsruhe project made a start toward doctrinal review, but there was no sense of urgency. Without outside pressure, the Air Force Historical Division remained focused on the strictly historical work that was its primary responsibility.

Similarly, Nye and Hammer initially believed that the Karlsruhe team could answer Luftwaffe history questions for the USAF. However, as the project fell behind schedule, Hammer was less eager to answer questions that would be addressed in the monographs. Concerned primarily with meeting monograph deadlines, he attempted to lower expectations of the project's

ability to provide this service. In November 1954 he wrote to an AU official that “you will understand, of course, that the answers will be somewhat off-the-cuff unless we already have related material prepared.” Hammer cited the already heavy commitments of the contributors and their reluctance to give answers “short of a full-scale, time-consuming research effort” as reasons why the Karlsruhe team was not ideally suited for this role. Still, he said they would accept “important questions that require immediate answers.”<sup>23</sup> The German contributors only performed this service three times.<sup>24</sup>

The operational Air Force was much more interested in the Luftwaffe veterans’ photographs of the Soviet Union. During the project’s first year, German contributors donated (and sometimes literally dug up) hundreds of privately owned photographs and revealed a 40,000-page hidden official Luftwaffe document collection. “We have found many Germans are willing to contribute data to a historical effort which they would refuse for various reasons if they knew it were to be used solely for intelligence purposes,” Nye wrote. At the personal direction of the chief of the intelligence division of Headquarters USAFE, his personnel began screening all incoming materials, “especially photographs of operational conditions and aerial mosaics of cities and installations behind the Iron Curtain.”<sup>25</sup> The Air Force Historical Division circulated some German photos within AWC.<sup>26</sup> It is unclear how long this continued or whether reconnaissance and targeting personnel ever worked directly with contributors.

The flow of photographs piqued the interest of officials at Headquarters USAFE, which provided administrative support for the project. In the project’s first year, Hammer told the Air Force Historical Division’s chief that he “heard hints that [USAFE] would like to take us over,” a move that Hammer discouraged based on the Army’s greater experience and historical infrastructure. Hammer’s “more basic, though unvoiced, grounds” were the “roadblocks” that a USAFE takeover would erect between the project and the Air Force Historical Division.<sup>27</sup>

When the Air Force Historical Division began its lengthy search for a Karlsruhe project editor in 1955, Hammer vehemently opposed assigning the individual to USAFE, writing that “a good part of my time is devoted to severing or resisting ties which USAFE would place on our project by virtue of my being

assigned to it.”<sup>28</sup> Jaded by numerous USAFE administrative foul-ups and intensely loyal to AU (this was his second consecutive assignment there), Hammer’s primary concern was that AU retain control of the project since it was ultimately responsible for finishing and distributing the monographs. In the process, he may have worsened the project’s financial situation. Beginning in late 1953, Hammer avoided approaching USAFE with the project’s frequent financial problems “even though [USAFE] quite possibly might have some unused [deutschmarks] lying around at the end of the fiscal year.” Hammer wrote in summary that “comptroller and controller are pronounced too much alike for my comfort.”<sup>29</sup>

In contrast to this territorial dispute between USAFE and AU, the Army’s European theater command administered its German history program, reflecting a more intimate relationship between those writing Army studies and the intended audience. While USAFE showed strong interest in the Karlsruhe project as an intelligence source, this lasted only as long as the authors provided eastern front photographs. After 1953 the Air Force neglected its project. Whereas Colonel Momyer, the head of the air evaluation staff, was keenly interested in the monographs, his successor showed “manifest ignorance of our project” in spring 1954, according to the assistant chief of the Air Force Historical Division.<sup>30</sup> In a way, the project achieved relative independence, as Hammer wanted but at the cost of further distancing itself from the operational Air Force.

Outside interest in the Karlsruhe project never returned, partly because its years of greatest activity coincided with the decline of research activities across AU. According to Air Force historian Frank Futrell, Gen Muir S. Fairchild, the founder of AU, envisioned that it would not only disseminate knowledge throughout the service but also “develop knowledge through research.” Unfortunately, “after an early incandescence in the early 1950s, the flame of research began to flicker at Air University by 1956,” when AWC no longer required its students to research “problems of Air Force and defense interest.” Targeted manpower and force reductions the following year “left no doubt that the training mission of Air University had a higher priority than research.”<sup>31</sup>

## **The Karlsruhe Project's View of Its Own Role**

The process by which the Air Force Historical Division prioritized studies reveals that the organization aimed to please both the Air Force and the historical community with its Luftwaffe monographs, which differed from the policy-focused Army and Navy programs. In the early 1960s, the Air Force Historical Division realistically downgraded its expectations, hoping that it could complete 15 studies, which it selected based on the following: "(a) interest to the Air Force, (b) quality of the German manuscript and subject matter, and (c) historical importance and significance for reference purposes."<sup>32</sup>

The first criterion clearly applied to the six Soviet studies, while the other two encompassed Professor Suchenwirth's works, not surprising given his background as a historian and the gravity of his addressed subjects. The last three published studies were *The GAF General Staff, Airlift Operations*, and *Operations in Support of the Army*, which are each relatively broad and scholarly and were easy to edit.<sup>33</sup> Many other monographs the Air Force Historical Division had high hopes for fell by the wayside over time. A good example was Kamhuber's studies on nighttime air defense, which initially generated great interest at AU. Enthusiasm diminished when the staff discovered that the general did not make a good historian.

Insulated from outside pressure to pursue particular topics but led by government-service historians, the project's natural tendency was to drift toward the best works in the traditional historical sense and those that would prove most useful for historians. As late as January 1969, the goal was still to complete 15 monographs, but when Simpson became incapacitated, Maurer took over and ended the Karlsruhe project.<sup>34</sup> Studies of the Mediterranean and Western theaters would have been the last three monographs published if work had continued into the 1970s.<sup>35</sup>

Project staff members, and Hammer in particular, were more concerned with how historians would receive the monographs than they were about their immediate usefulness to the Air Force. If the staff was not keenly aware of the dangers of employing high-ranking veterans of the Third Reich, the highly

unfavorable press that greeted Albert Kesselring's memoir, *A Soldier to the End*, caught its attention.

Published in 1953, the memoir was a shameless apologia in the opinion of most. One German reviewer explained that the author's true meaning of "soldier" in the title was that of a professional who was just following orders, while "to the end" was an attack on those who gave up the ghost before the field marshal accepted defeat. In reference to the atrocities that took place in Italy under Kesselring's command, another reviewer dubbed the book *Executioner until the End*.<sup>36</sup> The book's reception was not as cold in the United States, but it strengthened the Air Force Historical Division's conviction to produce monographs that were as heavily documented and apolitical as possible. Hammer's supervisors sent him copies of the negative reviews and surmised that the usually savvy officer "appreciates the danger."<sup>37</sup> Hammer, to whom Kesselring gave an autographed copy of his memoir, agreed with the reviewers.<sup>38</sup>

The last thing that the Air Force Historical Division wanted was for the Karlsruhe monographs to become a venue for uncontrolled venting on the part of the German authors. Hammer had a prescient understanding of the role the monographs would one day play in the historiography of the war. They would not be definitive histories but instead would fill the void of literature on the air war from the German perspective, which henceforth was satisfied primarily by memoirs like Adolf Galland's *The First and the Last*. He correctly believed that reconstructing the past would be "a manifestly impossible task so long as only the evidence and testimony of the Allies have been heard."

Hammer did not minimize the many faults that would be apparent to the "critical historian" but believed the monographs would be valuable in spite of them because the final drafts would "present much usable testimony and evidence of one party to the world conflict whose story it is the business of professional historians to tell fully and accurately." It was his responsibility to ensure the authors cited their sources, just as it would be the job of future Air Force and civilian historians to "weigh our product, rule out the irrelevant, inadmissible and invalid, and use that which remains in rendering your final judgments."<sup>39</sup>

A potential obstacle to presenting sound histories was the Air Force Historical Division's commitment to staying true to

the original meaning of the author. This approach was risky, given the tendency of some German veterans to spout off racially-based explanations of Russian combat effectiveness.<sup>40</sup> It was more likely that the authors might misunderstand events, which a Luftwaffe expert might be able to catch. Unfortunately, as Hammer explained, none of the project's American staff members were "qualified students of the Luftwaffe, and if we were we would not have the right . . . to edit changes arbitrarily into the author's content or intent." To minimize major factual errors, Hammer hoped the historians at Maxwell would be able to review preliminary drafts and suggest revisions so that the monographs would still reflect the feelings of the German authors. Delays in composition and a shortage of translators frustrated plans for early editing.

It is hard to imagine a member of the Army's program being overly concerned with historians' opinion of, for example, its D-285 study, "The 35th Infantry Division between Moscow and Gzhatsk, 1941." In fact, until 1954 the Army classified its studies, preventing their use by academia; it declassified them only when the service acquired its first tactical nuclear weapons, which caused the historical program to dwindle in importance.<sup>41</sup> Oddly enough, for all of Hammer's concern about contributing to the historical record, the Air Force also classified its monographs at first. The Air Force initially released them as part of its Numbered Historical Studies series, which began during World War II and included studies such as "The Glider Pilot Training Program, 1941-1943."

Written at the behest of the AAF commanding general, these numbered studies were intended for staff and operational use and presented a "first narrative" for inclusion in the larger official histories of the AAF. The Air Force later declassified these works for use by private researchers. Harry Fletcher, the Karlsruhe project editor for its last six years, expected the German monographs to follow a similar course. In 1968, however, the Air Force Historical Division suddenly contracted with Arno Press, a division of the *New York Times*, to publish its completed studies for public dissemination, reflecting the monographs' lack of any connection to current doctrine and planning.

There was no response to the Karlsruhe monographs in Air Force professional journals as there had been in the Army,

where articles heralded the arrival of one German report after another. Timing undoubtedly played a role. Most Army reports emerged less than a decade after the end of World War II, while the Air Force did not publish its studies until two decades after the events in question. Still, the lack of response to even the studies on the Soviet Union is noteworthy.

On the other hand, since the early 1980s the monographs and the Luftwaffe document collection have seen considerable usage by noted airpower historians Horst Boog, James Corum, Von Hardesty, Edward Homze, Richard Muller, Williamson Murray, and Richard Overy.<sup>42</sup> Uniformed officers have also made extensive use of both the published and unpublished monographs in research papers, a task facilitated by the Air Force Historical Research Agency's (successor of the Air Force Historical Division) location next door to the service's staff schools at Maxwell AFB.

### **Avoiding the Pitfalls of Army History**

The muted Air Force response to its German monographs had some indirect benefits. In contrast to the Air Force, which early in the Cold War seemingly believed it had little to learn from the Luftwaffe or anyone else, the US Army developed an acute inferiority complex toward the German army that went beyond a healthy respect for German operational and tactical prowess. The German report series contributed heavily to this phenomenon, with its one-sided accounts of German operational virtuosity. The scores of reports, translated into English and disseminated across the Army, reinforced the image of the German army (and, not incidentally, its generals) as the best in the world, only brought down by the sheer weight of forces arrayed against it.

The US Army was hungry for any information on the Red Army, but because few Westerners could vouch for the German accounts of pivotal eastern front land battles, the service generally accepted these accounts wholesale. American fascination with German martial skill was neither baseless nor entirely new, for Army reformers began emulating the Prussian military system soon after its victory over France in 1871; however, fol-

lowing World War II, American officers, German veterans, and historians created an obsession.<sup>43</sup>

The post-World War II publication of dozens of memoirs by famous German generals, as well as several influential histories that emphasized German skill and American ineptitude, produced a fundamental underestimation of the US Army in World War II that scholars have only recently remedied. Dennis Showalter summarized the pattern of most memoirs, with their “tendency to devote several hundred pages to the glory days of Operation Barbarossa, then plug in a chapter deploring Hitler’s interference with one’s military genius, and finally skip lightly over the three years that brought the Russians from the Volga to the Elbe.”<sup>44</sup> This description applies to a certain extent to the Army monographs as well.

One of the largest and best-known pamphlets, *Small Unit Actions during the German Campaign in Russia*, combines analyses of 50 engagements. Of these, only 17 address actions that took place later than January 1943; only eight cover actions in 1944, three of them in the first half of the year; and only two cover 1945.<sup>45</sup> Considered as a whole, the mass of literature by Wehrmacht veterans encouraged Western scholars and soldiers alike to sympathize with the German army and emphasized the years of German victory, a dangerous distortion for anyone attempting to learn from the German experience.

What some have simply called a love affair with all things German, historian and Army major general Daniel Bolger derisively dubbed “Wehrmacht penis envy.”<sup>46</sup> Whatever the name, the influence of German arms on the US Army became abundantly clear during the 1980s.<sup>47</sup> Articles on German methods featured prominently in professional Army journals, and with the promulgation of maneuver warfare theory, terms like *Schwerpunkt* (center of gravity) and *Auftragstaktik* (mission tactic) became part of the vernacular. The former Wehrmacht generals nursed this infatuation, whether consciously or unconsciously, as they sought to influence NATO defense plans.

In an American-sponsored war game in May 1980, retired *General der Panzertruppe* Hermann Balck and his former chief of staff F. W. von Mellenthin easily turned the tables on an overwhelmingly superior mock Warsaw Pact aggressor and launched a counterattack toward East Germany.<sup>48</sup> Actual Ger-

man operational skill notwithstanding, it was not until the mid-1980s that historians began to seriously question the mystique of the German army.<sup>49</sup>

The Army's German history program was both a reflection and cause of this trend, and even though it represents only one factor behind the glorification of the German army and the diminution of the American Army, it was an essential one. While German memoirs and postwar histories showed that the German army was exceptionally skilled at the operational art, the Army's history program, through Halder's criticism of American doctrine and the numerous journal articles citing German methods, demonstrated to the service that the German generals were the gracious teachers and the Americans their willing students.

Two elements of the Wehrmacht narrative made emulating the German army palatable for American officers. Seizing the unprecedented opportunity to shape the memory of the war through a history program sponsored by the former enemy, Franz Halder established the standard narrative, which blamed defeat on Hitler's frequent meddling and separated the Wehrmacht from the *Schutzstaffel* (SS).<sup>50</sup> Hitler—dead and universally despised—made the perfect scapegoat. Hitler was not the military expert he fancied himself to be, but one could argue that the Red Army would have reached Berlin even sooner if the military had free reign.<sup>51</sup>

The second part of the Halder narrative attempted to distance the German military from genocide. Naturally, the German generals led their apolitical army in honorable combat, while unbeknownst to them the SS had committed criminal acts. Subsequent research, pioneered by the Bundeswehr's official historical section, has given the lie to both tenets of the generals' version of history but not before they colored postwar historiography and made the German army a far easier institution for American officers to idolize.<sup>52</sup>

The Luftwaffe monographs are largely free of such distortions. Hitler, Göring, and the top leadership of the Luftwaffe receive much blame in Suchenwirth's *Historical Turning Points in the GAF War Effort*, but adequate evidence supports the author's claims. Poor operational leadership, an inadequate training system, and Allied superiority are more often cited as the

root causes of defeat. One of the key conclusions of the series was that the Luftwaffe's failure to mount a strategic air campaign against Soviet industry in late 1941 was one of the greatest lost opportunities of the war, an omission for which uniformed officers clearly bore responsibility.

Like the Army studies, there is little discussion of atrocities. This is partly attributable to the fact that the Luftwaffe had a less direct role in mass killings than the army or SS, unless one counts its indiscriminate city bombings. The USAF did not request detailed treatment of such a controversial topic, not surprising given its own history. Luftwaffe generals probably addressed their greatest defeats more honestly, at least in part, because American officers had intimate knowledge of most pivotal battles and could therefore ask more pointed questions. In addition, Allied airpower made the Luftwaffe a nonfactor for the last year of the war, which would have made American superiority hard to dispute. By contrast, when forced to discuss defeat, German army officers could reference the mysterious and immense eastern front, of which the Americans had little knowledge, and amaze their audience with tales of their own brilliance in fighting the "Bolshevik hordes."

To the German population it was clear that the Luftwaffe was not faring as well as British and American bombers, undeterred by high losses that routinely pounded their industry and cities. The qualitative difference between receiving censored news of faraway battles and witnessing the bombardment of Germany for two years may have also played a role in the Luftwaffe veterans' more forthright accounts.

The Air Force's neglect of its German monographs also freed the service from the "selective thinking" that marked the Army program, if only because the Air Force did not seriously reflect on the Luftwaffe example at all. Basing US Army doctrine on the Wehrmacht's was problematic and dangerous on multiple levels. According to Kevin Soutor, the Army failed to emphasize German techniques like splitting enemy infantry from armor while on the defensive. The Army also neglected German defensive tactics like zone defense and delay in successive prepared positions. Instead, it focused exclusively on mobile defense with armored formations, which the service could not afford. Soutor argues that this one-track approach could have "stereo-

typed" American defenses in the event of war and spelled disaster on the battlefield.<sup>53</sup>

A second major issue was the conspicuous differences between the American Army of 1953 and the German army of 1943. The US Army faced a somewhat similar Soviet foe, terrain, and equipment, but NATO forces were at a much greater numerical disadvantage than the Wehrmacht was during most of World War II.<sup>54</sup> Moreover, over the long term, Nazi indoctrination and a brutal disciplinary system were among the roots of the German army's strength on the eastern front, as historian Omer Bartov argued. Would inexperienced West German or American draftees have fought as well in the crucial first hours of World War III as the hardened, zealous men of the Wehrmacht (which had, of course, lost)?

The West Germans of military age during the 1950s were the products of a society that was effectively demilitarized, and they would have been called upon to fight other Germans. At the same time, American war plans involved the questionable proposition of maintaining a small force in Europe and reinforcing it at the first sign of trouble.

### **Vietnam Parallels: "Lessons" Lost?**

While there were many flaws in the US Army's utilization of its German studies and its idolization of their authors, at least the service cannot be accused of ignoring the past, which was the case with the Air Force during the early Cold War. The technology of aerial warfare changed so rapidly in the early postwar years, and the nuclear war focus was so strong, that the Air Force neglected the studies authored by formidable former adversaries and essentially dismissed past air war as irrelevant. The only historical examples that the Air Force cited were the strategic bombing campaigns against Germany and Japan, and then only to assert USAF decisiveness and the primacy of airpower. There were, however, trends and dangers illustrated in the Luftwaffe's experience that could have benefitted the Air Force in the Vietnam War.

The notion that no defense could withstand a determined air attack was central to airpower theory during the interwar years.

In spite of the extremely high losses the Luftwaffe inflicted on American and British bombers during World War II, this idea persisted in the Cold War. On a certain level, this proposition is true, for it has been rare for attacking forces to turn back even in the face of stiff opposition. The invention of nuclear weapons complicated matters, making it even more critical to present an airtight defense. In fact, the American Air Defense Command became a backwater partly because planners recognized that no defense could assure complete protection, making offensive forces the only credible deterrent.

The logic that an air force could easily endure losses while dealing terrible destruction on the enemy applied less to a protracted air campaign like the one that occurred over North Vietnam. Attrition rates that would have been acceptable during a brief nuclear exchange were less tolerable over the course of a decade. The Air Force's nuclear focus led it to dismiss the toll that the combination of surface-to-air missiles, antiaircraft artillery, and MiGs might take. A fundamental overestimation of the offensive power of air attack, an underestimation of defensive capabilities, and a repetition of high attrition rates were the result. To make matters worse, political considerations frequently limited military options, barring attacks on targets such as airfields (which also occurred during the Korean War) that would have disrupted North Vietnamese counterair operations.

In addition, the offensive culture of the Air Force obscured the need to protect airfields and rear areas, a necessity which was highlighted in the monograph *Airpower and Russian Partisan Warfare*. During the Vietnam War, approximately 30 percent more USAF aircraft were lost on the ground than were shot down by North Vietnamese aircraft.<sup>55</sup> Although the monograph specifically addresses infiltration by air, it underscores the difficulties inherent in interdicting the movement of unconventional enemy forces, as the USAF discovered on the Ho Chi Minh Trail, even with more advanced technology.

The Luftwaffe's experience also demonstrated airpower's impotence when the sources of enemy strength are effectively immune to attack. The Luftwaffe was never able to threaten the United States or the far reaches of the British Empire, and it squandered any chance it had to damage the Soviet Union's relocated industry within the first year of the Soviet-German

War. By the time the Luftwaffe decided to mount a concerted strategic air campaign in late 1943, vital targets had fallen out of range, and relative German weakness and Soviet strength almost certainly would have rendered such action inconsequential in any event.<sup>56</sup>

In a similar fashion, while the USAF may have been physically capable of touching any spot on the globe in 1968, its operations in Southeast Asia were hamstrung by political restrictions. That year Deichmann told Simpson that he feared this lesson of the Luftwaffe's experience was holding true in spite of technological change.<sup>57</sup> Infrequently allowed to attack militarily significant targets within North Vietnam and forbidden from striking the enemy's sources of supply in China and the Soviet Union for fear of sparking a general war, Air Force leaders protested Washington's micromanagement and blamed defeat on such restrictions. Given the Korean example, Air Force leaders should not have been surprised when the technical limitations of the 1940s gave way to political limitations during the Cold War. Moreover, they failed to question whether the unconventional nature of the conflict, the total goals of the enemy, and the relatively preindustrial state of the North Vietnamese economy made air attack a suitable instrument of military and political power. Instead, they continued to adhere to the dogma of strategic attack against the enemy's industrial web before, during, and after the Vietnam War.

While the Luftwaffe placed priority on cooperation with ground forces and the AAF developed effective liaison procedures for this mission during World War II, the Air Force allowed its capability to atrophy after the war. On the eastern front in particular, circumstances forced the Luftwaffe to remain heavily involved in supporting army operations as a substitute for ground combat power. Being wedded so closely to its sister service was anathema to the USAF, which had long touted strategic bombing as its primary mission.

The Air Force's devotion to strategic attack against the sources of enemy power from the 1920s through (arguably) today likely contributed to the lack of attention it paid to the Luftwaffe's history. From the American perspective, its enemy had been a tactical air force that merely supported the German army. This was certainly true on the eastern front as early as

the fall of 1941, which meant there was little the USAF could learn directly from the Germans about Soviet reactions to strategic bombing. Importantly, the Air Force chose not to pay attention to just how crucial the Luftwaffe's support of ground forces really was on the eastern front, where it helped slow Soviet advances into 1944. This reflected the service's historic aversion to ground support as opposed to strategic bombing.

When the USAF has not been able to escape providing ground support, it has favored interdiction over close air support, partly because the former involves less subordination to ground forces. Moreover, the close integration of air and ground units necessary to safely execute close support missions, the increased danger to aircraft from enemy fire, a sincere belief that interdiction was more effective, and, most of all, the focus on nuclear war frustrated the development of an Air Force capability to adequately support the Army. Unfortunately, in both Korea and Vietnam, the Air Force had to reinvent the wheel in close support procedures and training. Procurement policies frustrated adaptation because the highly sophisticated aircraft developed for nuclear attack were frequently ill-suited for the ground support.<sup>58</sup>

Unlike the RAF and USAAF, the Luftwaffe was organized into *Luftflotten*, agile organizations that included aircraft of all types and were usually paired with an army group, which facilitated joint operations. Until the end of the Cold War, the USAF was divided into tactical and strategic commands, which essentially segregated fighters and bombers. During the Vietnam War, theater commanders had to pry bombers away from SAC for use in the field. Of course, SAC was reluctant to allow this because it might weaken the nuclear deterrent. Still, this was a poor arrangement, leading to SAC crews not being ready for conventional bombing missions over North Vietnam.

Recently, the Air Force began to mirror the Luftwaffe example with its self-sustaining Air Expeditionary Force model, although the Luftwaffe's organization had weaknesses. For example, it likely hampered efforts to form a bombing force designed exclusively to wage strategic air war against the Soviet Union. It also engendered too strong a focus on ground support operations, to the detriment of the air arm's independence.<sup>59</sup>

Tragically, the above parallels were not simply a matter of neglecting German history but of neglecting American history as well. The AAF's own experience in World War II revealed the terrible losses a determined defender could inflict. In addition, the overrunning of USAAF bases in China had been a frequent concern. The Korean War highlighted many of these same themes, in particular, the need for better air-ground cooperation, the difficulty of interdicting enemy lines of communication during periods of low-intensity combat, and the inevitable restrictions imposed on targeting during limited war. The Air Force largely ignored this body of knowledge. As a whole, the US military in Vietnam mirrored a final disturbing hallmark of the Wehrmacht by marrying operational, tactical, and technological brilliance with strategic incompetence.

### **Jumping to the Wrong Conclusion**

It could be said that selecting lessons lost with the benefit of hindsight is an elementary, even unfair, exercise. Indeed, there is danger in inferring that the USAF would have acted differently had it only studied the Luftwaffe's defeat more closely. Such a belief would establish a false dichotomy between choosing to learn history's lessons versus repeating its mistakes. History can show what is possible and reveal trends, but attempts to divine its so-called lessons carry an enormous potential for folly.

To state the obvious, incorporating past experience into doctrine, force structure, training, war plans, and actual operations is no simple task. The rapid pace of technological change and an array of institutional factors made this task especially challenging for the newly independent USAF. Still, attitudes within the service expose an organization that was inclined to dismiss any evidence that contradicted its vision of airpower.

The Air Force's oft-cited ahistoricism and anti-intellectualism contributed to failures in Vietnam by fostering an intellectual climate in which few questioned service priorities, even when past experiences should have called its assumptions into question. The Karlsruhe monographs were not alone in detailing events that could have informed and improved the Air Force's

preparedness to meet national policy objectives. The Korean War was similarly dismissed out-of-hand by nuclear warfare-minded officers as irrelevant. Within months of the outbreak of the war, several Air Force leaders, including the vice chief of staff and the local commander in Korea, convened evaluation groups to investigate the use of airpower in combat there.

Frank Futrell, in his monumental *Ideas, Concepts, Doctrine*, concluded that “one of the major values of these evaluations was the identification of the special circumstances prevailing in the limited war that would doubtless not be typical of general hostilities.”<sup>60</sup> The secretary of the Air Force during the Korean War lamented soon after leaving office that although the war thankfully prompted the expansion of the American defense budget, it “had the unfortunate effect of emphasizing the importance of the weapons and tactics of the past.”<sup>61</sup> Historian and former Air Force officer Mark Clodfelter observed that “although they conceded the possibility of [another] limited war, air planners made few preparations for it.”<sup>62</sup> Air Force Manual 1-8, *Strategic Air Operations*, which remained unrevised from 1954 to 1965, affirmed that “the best preparation for limited war is proper preparation for general war.”<sup>63</sup>

One of the Karlsruhe project’s few interactions with outside Air Force agencies shows that the service was potentially prepared to use the German monographs to bolster its dismissal of the Korean experience. In response to the Air Force Historical Division’s call for research topics in October 1952, Momyer, then head of the air evaluation staff and later the senior Air Force commander in Vietnam from 1966 to 1968, laid out multiple topics in a six-page, single-spaced memo. The first specific area that he addressed was the Spanish Civil War:

It seems to me that to really analyze German experience in World War II, one must have some understanding of the [Germans’] experience in the Spanish war for I suspect that this Spanish war suggested certain tenets that were animated and put into effect in the campaigns of 1939–40. As another illustration of the utilization of the German experience, I further suspect, although this is not confirmed, that some of the experiences of the Spanish civil war were utilized out of context of the situation, and consequently their approach to a generalized war were not valid. As you can see, such inferences have a particular appropriateness to the present circumstances in Korea in which we are apt to conclude certain

operational doctrine from a limited conflict and establish those precepts as valid to the conduct of a generalized war.<sup>64</sup>

Momyer's instincts were right on one level. The Luftwaffe indeed took some of the lessons of Spain too far. Most famously, the success of the dive bomber (which he later mentions specifically) confirmed the Germans' affinity for this weapon system, although their failure to build a viable long-range heavy bomber stemmed more from other factors, specifically the failure to develop a suitable engine for such a bomber. Nevertheless, it is indicative of the prevailing attitude in the Air Force that senior officers at AU were prepared to use the German studies to reinforce existing falsehoods, namely the service's overriding emphasis on general war at the expense of preparing for limited war. Given this predisposition and the aforementioned pitfalls of the Army's German Report Series, perhaps it is well that the Air Force as an institution did not make greater use of the Karlsruhe monographs.

#### Notes

1. Bishop, *Encyclopedia of 20th Century Air Warfare*.
2. Soutor, "To Stem the Red Tide," 671-72.
3. Miller, *Tanks of the World*, 238, 252-53.
4. That is not to say there were not important advances in US Army equipment or methods during the 1950s. Ultimately, the most important was the helicopter, which changed how that service waged war. Still, Army weapons development did not proceed as rapidly as the Air Force's during the decade. Interestingly, the US Army fully accepted helicopters in large numbers and created airmobile units only after they were combined with turboshaft powerplants. This form of gas turbine engine was first built by a French firm in 1948 and integrated into an existing helicopter design by an American in 1951. Early prototypes of the famous Bell UH-1 "Huey" flew in late 1956.
5. Christensen, *History of the Development of Technical Intelligence*, 60-61.
6. *Ibid.*, 192-94.
7. Samuel, *American Raiders*, 153, 434; and Bishop, *Encyclopedia of 20th Century Air Warfare*, 262.
8. McFarland, "The Air Force in the Cold War."
9. Borowski, *Hollow Threat*, 95-96.
10. Corum, "Building a New Luftwaffe," 92.
11. Trest, "View from the Gallery," 21.
12. Worden, *Rise of the Fighter Generals*, 86-89.
13. Futrell, *Ideas, Concepts, Doctrine*, vol. 1, 307, 313.
14. *Ibid.*, 304.

15. Ibid., 310–11.
16. Ziemke, “In the Shadow of the Giant,” 302.
17. Futrell, *Ideas, Concepts, Doctrine*, vol. 1, 610–15.
18. Ibid., vol. 2, 161.
19. Soutor, “To Stem the Red Tide,” 676–78.
20. Wilbur S. Nye to Albert F. Simpson, letter, Karlsruhe Collection, AFHRA.
21. Wendell A. Hammer to Maj Gen John Barker, letter, Karlsruhe Collection, AFHRA.
22. Minutes, discussion with Simpson, Karlsruhe Collection, AFHRA. Regarding lessons, Simpson remarked that “Hammer should—and will—do this job.”
23. Hammer to Dr. Eugene Emme, letter, Karlsruhe Collection, AFHRA.
24. Hammer/Edwin P. Kennedy to Joseph A. Angell, letter, Karlsruhe Collection, AFHRA. The project provided Air Materiel Command a brief on the relationship between politics and logistics in the Luftwaffe at the request of its commander, Gen Edwin Rawlings. Hammer to Angell, letter, Karlsruhe Collection, AFHRA. Hammer declined having the contributors write a paper on the Battle of Britain and provided brief answers to a query on four-engine bombers in the Luftwaffe.
25. Nye to Simpson, letter, Karlsruhe Collection, AFHRA.
26. Karlsruhe Collection, AFHRA, Simpson to Hammer, letter.
27. Hammer to Simpson, letter, Karlsruhe Collection, AFHRA.
28. Hammer to Angell, letter, Karlsruhe Collection, AFHRA.
29. Hammer to Simpson, letter, Karlsruhe Collection, AFHRA.
30. Angell to Hammer, letter, Karlsruhe Collection, AFHRA.
31. Futrell, *Ideas, Concepts, Doctrine*, vol. 2, 160–61.
32. Information sheet, conference; and suggested studies, Karlsruhe Collection, AFHRA.
33. For a review essay of selected monographs, see appendix E.
34. List of GAF monographs, Fletcher, questionnaire, Karlsruhe Collection, AFHRA.
35. Dr. Simpson had already authored a study on Allied operations in the Mediterranean theater, and the unpublished monographs on Western air operations have yielded important insights on the combined bomber offensive.
36. Von Lingen, *Kesselring’s Last Battle*, 280–82.
37. Angell to Hammer, letter, Karlsruhe Collection, AFHRA.
38. Hammer to Simpson, letter, Karlsruhe Collection, AFHRA.
39. Ibid.
40. This seems to have been less a problem for the Air Force program than it was for the Army’s but occurred, nevertheless. See discussion of Uebe’s monograph in appendix E.
41. Soutor, “To Stem the Red Tide,” 683.
42. Boog, “Higher Command and Leadership”; Corum, *The Luftwaffe*; Hardesty, *Red Phoenix*; Homze, *Arming the Luftwaffe*; Muller and Caldwell, *The Luftwaffe over Germany*; Murray, *Strategy for Defeat*; and Overy, *Why the Allies Won*.
43. Cassidy, “Prophets or Praetorians?”

44. Showalter, "Fighting the Russians: An Ultimate Test?"
45. Army, *Small Unit Actions*.
46. Bolger, "Maneuver Warfare Reconsidered," 27.
47. For one of the earliest refutations of the image of the vaunted German army, see Brown, "Colonel Trevor N. Depuy."
48. Showalter, "Dubious Heritage." Showalter writes that "the old Wehrmacht hands made it look easy."
49. For a summary of the works that alternately reinforced and questioned German army combat effectiveness and American weakness, see Mansoor, "GI Offensive in Europe."
50. Bernd, "Erschriebene Siege," 150.
51. Megargee, *Inside Hitler's High Command*. As Megargee has demonstrated, the German High Command was far from the efficient, professional, apolitical entity that its members later fashioned it to be; instead, the military was intimately involved in every disastrous strategic and operational mistake of the war. Given the Wehrmacht's perpetual disdain for staff functions like intelligence, personnel, and logistics (which could hardly be attributed to the *Führer*), the aggressive maneuvers advocated by the Mansteins and Guderians often would have caused the panzers to run out of gas sooner and in more precarious positions than they did. Bold, bloody, but ultimately futile operations like Citadel or the odyssey of *Kampfgruppe Peiper* during the Battle of the Bulge became increasingly likely as the Allies matched and then surpassed the Wehrmacht, a trend which itself was the result of Germany's shocking, imperfect early victories. Will and initiative, so central to the ethos of German arms, were inadequate substitutes for sound planning and organization. Regarding the generals' postwar attempts to claim innocence for defeat and pin all blame on Hitler, Megargee writes, "At best, they deceived themselves. At worst, they cynically tried to deceive everyone else."
52. For a brief summary of the destruction of the myth of the apolitical German army beginning with the 1979 publication of the first of the West German *Militärgeschichtliche Forschungsamt's* World War II series, see Detwiler, "New Light on the Darkest Chapter."
53. Soutor, "To Stem the Red Tide," 680–81.
54. *Ibid.*, 681. In 1953 the Soviets had at least 10 times the number of divisions in or immediately deployable to Europe as the United States had permanently stationed there.
55. Vick, *Snakes in the Eagle's Nest*.
56. Suchenwirth, *Historical Turning Points*, 88–89; and Muller, "German Air Force."
57. Paul Deichmann to Simpson, letter, Karlsruhe Collection, AFHRA.
58. Cooling, *Case Studies*, 398–99, 411–12.
59. Hayward, "The Luftwaffe's Agility."
60. Futrell, *Ideas, Concepts, Doctrine*, vol. 1, 305.
61. Finletter, *Power and Policy*.
62. Clodfelter, *The Limits of Air Power*.
63. Air Force Manual 1-8, *Strategic Air Operations*, 27, 30, 31.
64. Momyer to Angell, letter, Karlsruhe Collection, AFHRA.

## Chapter 5

### **Conclusion**

The story of the Karlsruhe project troubles and confirms widely held views of the USAF during the early Cold War. It was an excellent example of interservice cooperation during the 1950s, a period better known for discord. It was born out of the generosity of the Army, which initially requested only \$250 per study—a “token payment” in the words of the project editor, Kennedy. However, goodwill alone could not sustain the effort or keep it on schedule. Both services’ historical offices had unrealistically high expectations for the project at the outset, despite the earlier failure of the von Rohden project. Like its predecessor, the Karlsruhe project suffered from the dearth of documentary material on the Luftwaffe, and the age and health of German contributors became an increasingly serious issue. Slowly, the small yet superb team led by Deichmann and Hammer met these and other challenges, but early delays meant that most studies were never edited.

The very existence of the GAF monograph project complicates the traditional image of the USAF as an ahistorical service, concerned merely with advanced technology and ensuring its own independence. In fact, officials at AU were keenly interested in the project, especially its Soviet studies when it began in 1952, but this was when they expected a cheap, quick return on their investment. As the project fell further behind schedule and the Army requested more money, Air Force interest diminished. Almost on cue, an “unforeseen by-product” emerged that caught the attention of Air Force leaders and guaranteed the survival of the project. The interchange of ideas between West German and American air force officers made possible by the historical program directly influenced West German interservice debates during the rearmament period, providing the USAF a conduit for transmitting doctrine and educational books to the Bundesluftwaffe, which was based on the American model.

The bonds cemented between West German and American air officers were soon tested, not in war but in peace. In the early

## CONCLUSION

1960s, the Bundesluftwaffe purchased license-built, multirole versions of the Lockheed F-104 Starfighter. A combination of inexperienced pilots and poor maintenance in the newly formed air force proved fatal, and by the time the Bundesluftwaffe grounded the fleet in 1966, 110 pilots had died. Fortunately, Bundesluftwaffe leaders had more than a decade of experience working closely with their American partners, which helped the alliance weather the storm of the so-called Starfighter crisis. The fact that the F-104 was an American design and many of its pilots had trained at American bases made the episode even more controversial and underscores the Bundesluftwaffe's nearly total reliance on the USAF and the importance of relational rearmament through the Karlsruhe project.

Despite the positive impact the Karlsruhe project had on the West German–American alliance, the Air Force squandered the opportunity to benefit from the experience of the Luftwaffe generals. Whereas the Army project's lessons learned approach and the Navy's emphasis on intelligence gathering rendered their studies useless in all but a few circumstances (i.e., conventional war against the Soviet Union in Europe), the broader scope of the Air Force monographs made them applicable in a wider array of situations, including the Vietnam War. Had the service paid attention, there was much in the Luftwaffe monographs that could have informed future Air Force operations around the world.

Despite the technological advances that changed the face of air warfare, much of its nature remained—and still remains—unaltered. This was particularly true regarding airpower's inherent limitations, which the Luftwaffe's defeat highlighted more clearly than did the Allies' victory. But the German air force monographs offered no convenient tactical lessons that required only translation before they could be transcribed into American field manuals. Moreover, the Luftwaffe's wartime focus on supporting the German army limited the appeal of such studies to the USAF. The USAF was an institution perennially concerned with maintaining its own independence and, therefore, loath to seriously consider any role other than strategic bombardment.

The Karlsruhe monographs and their authors received little attention in the Air Force when compared with their Army

counterparts. As a result, the Karlsruhe project achieved relative autonomy within AU at the cost of receiving only a meager budget and a skeleton staff. Time and again, the Air Force gave the project enough support to survive but nothing more. In early 1956 Hammer participated in the annual ritual of justifying further funding for the Karlsruhe project. “[The] entire cost of the project, January 1953 to July 1957, will be little more than it costs the Air Force to buy one third of one single-seat fighter aircraft (F-100),” he wrote to Simpson. The cost of one additional year, which Hammer incorrectly thought would be enough to finish the last drafts, would be less than that “being spent to train three raw recruits (two of whom will return to civilian life as soon as possible) to enter a job in the Air Force.” Both men knew that, as Hammer put it, “such types of justification are neither relevant nor necessary,” and thanks to more persuasive arguments, the project survived another 13 years.<sup>1</sup> Kennedy, several years behind schedule in 1958, noted that the Air Force was “going to have to be willing to spend some money” if it wanted to exploit the studies and documents collection.<sup>2</sup>

The Air Force initiated the project on the premise that it would be a bargain, and that is what it was, although many officials might not have thought so in the late 1960s. The Army originally estimated the project would require \$40,000 and last three or four years, but it exhausted these funds within months. In fact, project costs eventually totaled approximately \$520,000, a drastic expansion given the initial expectation of an inexpensive and quick payoff but a relatively modest expenditure when spread over 17 years.<sup>3</sup> This represented about one-twelfth the cost of a B-52D, of which SAC had over 600 in the early 1960s. For a comparatively low cost, the Karlsruhe project provided Western airmen and historians the first detailed glimpses of the Red Air Force in combat and brought huge quantities of Luftwaffe documents to the United States.

While strong accounts of the Soviet-German ground war emerged during the 1960s, Plocher’s monographs remained the best survey of that air war for the entire Cold War. Fortunately for the Air Force, the monographs did not contribute to an inferiority complex akin to the Army’s, but the Karlsruhe monographs should have called into question the service’s myopic focus on strategic nuclear bombing. Had AU fully funded

## CONCLUSION

the project, more studies could have been edited, but more inconvenient questions also may have arisen threatening the existing order in the Air Force.

This study has juxtaposed two different approaches to official military history writing: lessons learned, as epitomized by the Army's program, and what might be called history for its own sake, toward which the Air Force program often tended. Ironically, it was a third "school" that was the proximate cause of the Karlsruhe project's termination in 1969. When Simpson, its champion, was no longer able to work because of his illness, Maurer assumed his duties. Concerned primarily with vital, laborious unit lineage and honors work, Maurer ended the long-running project so that he could reassign its one employee to his pet project. The departure of Simpson was especially poor timing for the Karlsruhe project because that year the Hoopes committee recommended and the Air Force chief of staff directed the reorganization of the service's history program. These actions aimed to create a long-term program in the Office of Air Force History in Washington that emphasized the publication of analytical historical books, monographs, and studies.<sup>4</sup> Ironically, the demise of the Karlsruhe project coincided with the reform of the service's historical program along similar lines, with an emphasis on scholarly research.

The American military's German history programs illustrate the tension between historical scholarship and military policy. Disenchanted with its planned role as a garrison force that would retreat under the Air Force's nuclear umbrella and then have the unenviable task of "liberating" what was left of European civilization, the Army began advocating expensive armored forces on the basis of its German report series. The Navy, also concerned with present war plans and searching for its role, quickly dropped any semblance of traditional historical research and requested studies on the efficacy of blockading the Baltic Sea and landing Marines in the Warsaw Pact's rear echelon in the event of war.

The Air Force's dominance during the early Cold War obviated any such policy use for its German monographs, even when straightforward examples presented themselves, such as the Luftwaffe's failure to launch a strategic campaign against Soviet industry. Former Luftwaffe generals considered that

failure one of the greatest blunders of the war, and the USAF could have seized it as (an arguably invalid) justification for its continued focus on strategic bombing. While the Karlsruhe project responded to the present needs of the Air Force by prioritizing Soviet topics, supporting policy was of secondary concern. In the case of the American postwar military history programs, sound scholarship was both the luxury of the dominant service and the product of its neglect.

#### **Notes**

1. Wendell A. Hammer to Albert F. Simpson, letter, Karlsruhe Collection, AFHRA.
2. Edwin P. Kennedy to Joseph A. Angell, letter, Karlsruhe Collection, AFHRA.
3. This includes the salaries of Hammer and the editor. Adjusted for inflation, the Karlsruhe project cost the Air Force approximately \$4 million between 1952 and 1969.
4. Higham, *Official Military Historical Offices*.



## Appendix A

### **Comparison of American and German General Officer Ranks**

The different but seemingly similar names of the general officer ranks of the United States and Germany during World War II are a potential source of confusion. Only German air officer ranks are detailed because of the focus of this work, including *General der Flieger* (general of the flyers) and *General der Flakartillerie* (general of the anti-aircraft artillery).<sup>\*</sup> As the Karlsruhe monographs themselves used the original German ranks, this study does as well, but Wehrmacht (i.e., World War II German military) ranks are italicized at first usage for clarity.

As a result of one of the many North Atlantic Treaty Organization standardization agreements, the West German armed forces or *Bundeswehr* added the rank of *Brigadegeneral* (one-star general) to make rank comparison between allies more straightforward. In the text, West German officers are simply described in American rank (i.e., a *Bundesluftwaffe* two-star, *Generalleutnant* is referred to as lieutenant general).

**Table 1. Comparison of American and German general officer ranks**

<b>American Army/Air Force</b>	<b>German Air Force (1935–1945)</b>	<b>West German Air Force</b>
Five-star General of the Air Force	<i>Generalfeldmarschall</i>	n/a
General (Gen)	<i>Generaloberst</i>	General
Lieutenant General (Lt Gen)	<i>General der Flieger</i>	Generalleutnant
Major General (Maj Gen)	<i>Generalleutnant</i>	Generalmajor
Brigadier General (Brig Gen)	<i>Generalmajor</i>	Brigadegeneral

<sup>\*</sup>Alaric Searle, *Wehrmacht Generals, West German Society, and the Debate on Rearmament, 1949–1959* (Westport, CT: Praeger, 2003), xvii–xviii.



## Appendix B

### **Published Karlsruhe Monographs**

**Table 2. Published Karlsruhe monographs in order of completion**

<b>Title</b>	<b>Author</b>	<b>Terminal rank</b>	<b>Series code</b>	<b>Date published</b>	<b>Number of pages (including appendices)</b>
<i>The GAF General Staff</i>	Andreas Nielsen	<i>Generalleutnant</i>	173	1959 (June)	200 (265)
<i>Historical Turning Points in the GAF War Effort</i>	Richard Suchenwirth	n/a, PhD	189	1959 (June)	126 (143)
<i>Russian Air Force in the Eyes of German Commanders</i>	Walter Schwabedissen	<i>Generalleutnant</i>	175	1960 (June)	390 (434)
<i>GAF Airlift Operations</i>	Fritz Morzik	<i>Generalmajor</i>	167	1961 (June)	389 (416)
<i>Airpower and Russian Partisan Warfare</i>	Karl Drum	<i>General der Flieger</i>	177	1962 (March)	44 (63)
<i>GAF Operations in Support of the Army</i>	Paul Deichmann	<i>General der Flieger</i>	163	1962 (June)	172 (210)
<i>Russian Reactions to German Airpower</i>	Klaus Uebe	<i>Generalleutnant</i>	176	1964 (July)	104 (146)
<i>The GAF vs. Russia, 1941</i>	Hermann Plocher	<i>Generalleutnant</i>	153	1965 (July)	253 (335)
<i>The GAF vs. Russia, 1942</i>	Hermann Plocher	<i>Generalleutnant</i>	154	1966 (June)	356 (470)
<i>The GAF vs. Russia, 1943</i>	Hermann Plocher	<i>Generalleutnant</i>	155	1967 (June)	281 (368)
<i>Development of the GAF</i>	Richard Suchenwirth	n/a, PhD	160	1968 (June)	195 (259)
<i>Command and Leadership in the GAF</i>	Richard Suchenwirth	n/a, PhD	174	1969 (July)	291 (351)

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The above studies were published commercially (New York, NY: Arno Press, 1968, 1969).



## Appendix C

# Unpublished Karlsruhe Monographs

**Table 3. Unpublished monographs in order of USAF series numbering**

Title	Author	Terminal rank	Series code	Year when work stopped*	Number of pages*
"The GAF in the Spanish Civil War"	Karl Drum	<i>General der Flieger</i>	150	1957	366
"The GAF in the Polish Campaign of 1939"	Wilhelm Speidel	<i>General der Flieger</i>	151	1956	508
"The GAF in France and the Low Countries, 1939–1940"	Wilhelm Speidel	<i>General der Flieger</i>	152	1958	580
"Operation Sea Lion and the Role of the Luftwaffe in the Planned Invasion of England"	Karl Klee	Captain <i>(Kriegsmarine)</i>	157	1955	385
"The GAF vs. the Allies in the West, The Air War in the West"	Josef Schmid Walter Grabmann	<i>Generalleutnant Generalmajor</i>	158	1954	217
"The GAF vs. the Allies in the West, The German Air Defense"	Josef Schmid	<i>Generalleutnant</i>	159	1954	84
"The German Air Service vs. the Allies in the Mediterranean"	Helmuth Felmy	<i>Generalleutnant</i>	161	1955	270
"The Battle of Crete"	Werner Pissin	Major	162	1956	289
"GAF Air Defense Operations"	Walter Grabmann	<i>Generalmajor</i>	164	1956	249
"Air-Sea Rescue Service of the Luftwaffe in World War II"	Carl Hess	Lieutenant Colonel	168	1955	361

\*Dates given indicate the year in which the German draft was completed. Final existing drafts of most monographs are accessible at [http://afhra.maxwell.af.mil/numbered\\_studies/studies4.asp](http://afhra.maxwell.af.mil/numbered_studies/studies4.asp). It should be noted that most of the unpublished monographs would have required very extensive editing if they were ever to be published. so approximate page counts are included primarily to illustrate the relative weight assigned to each subject.

## APPENDIX C

<b>Title</b>	<b>Author</b>	<b>Terminal rank</b>	<b>Series code</b>	<b>Year when work stopped*</b>	<b>Number of pages*</b>
"Technical Training within the German Luftwaffe"	Werner Kreipe Rudolf Koester Karl Gundelach	<i>Gen der Flieger</i> Colonel Captain, Dr.	169	1955	746
"Procurement in the GAF"	Walter Hertel	<i>Generalingenieur</i>	170	1955	722
"Collection and Evaluation of Intelligence for the GAF High Command"	Andreas Nielsen	<i>Generalleutnant</i>	171	1955	225
"Medical and Health Services in the GAF"	Schroeder Rose	<i>Generaloberst</i> Dr.	172	1955	180
"Problems of Fighting a Three-Front Air War"	Walter Schwabedissen	<i>Generalleutnant</i>	178	1956	181
"Problems in the Conduct of a Day and Night Defensive Air War"	Josef Kammhuber	<i>General der Flieger</i>	179	1953	469
"Problems of Long-Range All-Weather Intruder Aircraft"	Josef Kammhuber	<i>General der Flieger</i>	180	1954	129
"Fighter-Bomber Operations in Situations of Air Inferiority"	Josef Kammhuber	<i>General der Flieger</i>	182	1956	361
"Anglo-American Techniques of Strategic Warfare in the Air"	Andreas Nielsen Walter Grabmann	<i>Generalleutnant</i> <i>Generalmajor</i>	183	1957	406
"Impact of Allied Air Attacks on German Divisions and Other Army Forces in Zones of Combat"	Wolfgang Pickert	<i>General der Flakartillerie</i>	184	1958	137
"The Effect of the Allied Air Attacks on the Ground Echelon of the Luftwaffe in Western Europe in 1944"	Karl Gundelach	Captain	185	1956	131
"The System of Target Selection Applied by the GAF in World War II"	Paul Deichmann	<i>General der Flieger</i>	186	1956	666

## Appendix D

### Illustrations

All photos were taken at a formal dinner in Karlsruhe, West Germany, on 10 June 1957. The ceremony marked the conclusion of four years of AU sponsorship of the GAF monograph project and the completion of the major portion of the studies, although work continued in Karlsruhe on a more limited scale for another year. Nearly all surviving German key contributors were present, as were members of the air attaché's office and the US Army Europe Historical Division. In commemoration of four years of German-American cooperation, each German contributor received a personal letter from the AU commander.



Photo courtesy of the Air Force Historical Research Agency (AFHRA)

**1. The heart of the Karlsruhe project:** *Left:* Maj Gen Hermann Plocher, then deputy chief of staff of the *Bundesluftwaffe* and former assistant project control officer. Plocher authored three monographs that remain the standard narrative opera-

tional histories of the Luftwaffe's air war against the Soviet Union. *Center*: General der Flieger Paul Deichmann, retired, who served as control officer until the close of the Karlsruhe office, encouraged other Luftwaffe veterans to participate and personally wrote several monographs. *Right*: USAF project officer Col Wendell Hammer was instrumental in improving relations among American, West German, and British military and historical establishments and was awarded the Legion of Merit.



Photo courtesy of AFHRA

**2. Lt Gen Josef Kamhuber (left) receiving a specially bound monograph from Dr. Albert Simpson.** This was “a token of friendship between the USAF and the GAF and symbol of the several years of cooperative historical activity.\* Kamhuber was instrumental in establishing Germany’s air defense network during World War II and authored three unpublished Karlsruhe monographs on related subjects. He left the Karlsruhe project to become the first *Inspekteur der Bundesluft-*

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\*Report of temporary duty of Dr. Albert Simpson and Joseph A. Angell, Karlsruhe Collection, AFHRA.

*waffe*, or chief of staff, of the West German air force. In this post he lobbied unsuccessfully to establish officer education, nontechnical research, and historical programs along the lines of the US Air Force. Simpson, the longtime chief of the Air Force Historical Division and architect of the Karlsruhe project, was its champion through the mid-1960s, but his worsening health spelled the end of the project in 1969.



Photo courtesy of AFHRA

**3. General-American Cooperation.** *left to right:* General Kammhuber; Maj Gen Herbert Thatcher, then-vice commander of US Air Forces in Europe and later, chief of the Military Assistance Advisory Group in Germany; and Dr. Simpson.



## Appendix E

### **Selected Monographs**

#### **Published Monographs**

Of the authors assembled for the monograph project, Richard Suchenwirth was the sole professional historian. Every other author ended the war as a general officer, with the majority filling midlevel staff rather than command positions. The more theoretical character of Suchenwirth's study, *Historical Turning Points in the GAF War Effort*, reflects his academic training. He saw great value in studying the Luftwaffe's demise, equating it to testing a material to failure to determine its properties.

While victory might have obscured some shortcomings of Allied air forces, the total collapse of the German air arm laid bare its strength and weaknesses. Suchenwirth systematically covers the command structure of the Nazi government, the conflicting personalities at the Luftwaffe's highest levels, shortcomings in its prewar organization and planning, and critical battles and wartime decisions. He considers the German faith in dive bombing, the failure to develop a heavy bomber, and the lack of a sustained strategic air assault on the Soviet Union central to the war's outcome.

Suchenwirth's is a solid study that has stood the test of time remarkably well. Although subsequent histories have improved our understanding of the Luftwaffe's collapse, Suchenwirth highlights almost every factor that later historians have investigated in greater depth. Differences between this study and later ones are primarily matters of emphasis and additional evidence. Suchenwirth's conclusion is largely the same as Williamson Murray's in *Strategy for Defeat*, although the latter is able to provide much more corroborating statistics—factors far in the past such as misplaced production priorities and an inadequate training establishment were the seeds that bore the fruit of the German air force's defeat.

Andreas Nielsen's study, *The GAF General Staff*, provides a useful perspective on that organization in its formative years. Originally an Army officer, the author joined the staff as a cap-

tain when it first formed in 1936. For the historian interested in the power structures of the German military establishment, particularly the Luftwaffe, this study provides a primer on the typical career path of a general staff officer and the divisions of power between different offices, staffs, and party officials. Nielsen discusses the leadership abilities and personalities of each Luftwaffe general staff chief and explains their key decisions and working relationships with Erhard Milch, Hermann Göring, and Hitler. He attempts to address why the service has been termed the “national socialist Luftwaffe,” but the few observations Nielsen makes about Hans Jeschonneck’s longtime faith in Hitler and the animosity between Göring and Heinrich Himmler are unsatisfying.

In a more enlightening section of the study, Nielsen lays out the frustrating experience of his general staff colleagues, who attempted to provide accurate intelligence to higher authorities but were often rebuffed. Here, the value of employing ex-German air force officers as authors shows through because of the firsthand nature of the reporting. In a conclusion that echoes that of most senior Wehrmacht officers, Nielsen rails against Hitler and Göring’s interference in military affairs, maintaining that a unified and independent armed forces general staff is the only viable approach to planning and prosecuting a prolonged modern war. While some blame falls on Jeschonneck, Nielsen finds that it is Hitler and Göring who are primarily at fault because they changed the general staffs of each service into mere instruments for the execution of orders, far different from the powerful planning body the great general staff had once been.

Klaus Uebe’s *Russian Reactions to German Airpower in World War II* is the most intriguing of the studies reviewed here because of its outstanding level of detail and the USAF Historical Division’s evident belief that the study was especially timely and important for American officers in the 1960s. This study is primarily a list of the Soviet countermeasures taken to disguise their assets or deceive German aerial reconnaissance. It is certainly not an exhaustive catalogue of Soviet camouflage and deception efforts, but the examples of Soviet ingenuity are extensive, nonetheless. From painting the Kremlin to look like a row of houses to constructing dummy tanks out of dirt, Soviet tactics ran the gamut. Soviet troops made

use of decoy German air-ground liaison signals when possible, constructed fake houses that could conceal aircraft and armor, and constructed bridges of ice and twigs before rivers were completely frozen solid.

Uebe also discusses how Soviet fighter tactics and ground support procedures began to mirror those of the Germans after mid-1942. While he conveys the frustration and respect for Soviet deception measures surely felt by German personnel, he is also contemptuous of the average Soviet pilot, whom he describes as jittery and blindly obedient. His attempts to draw conclusions about the centralized, inflexible Soviet command structure rely more on stereotypes than actual evidence. Uebe shows that the Russian hatred for Germans was a key factor in steeling Soviet resistance, but he blames this hatred chiefly on Soviet propaganda and ignores Nazi atrocities. Uebe's study illustrates the crude but effective Soviet countermeasures, but it also hints at the disdain with which certain German commanders viewed the fighting ability of their victorious adversary.

Hermann Plocher's sprawling three-volume study covers the first three years of the Soviet-German air war. The author intended to extend the studies through 1945 but was recalled to become the *Bundesluftwaffe's* deputy chief of staff in 1957 before he could complete his work. Because the Karlsruhe project was by that time far behind schedule, the Historical Division settled for an epilogue that addressed the last two years of the war. The other Soviet monographs partially fill the gap. As incomplete as they are, for decades Plocher's monographs remained the only satisfactory survey of air operations in that theater, an astounding state of affairs when one considers the size and duration of the air effort there. While restricted access to Russian sources surely contributed to this lack of scholarship, the limited character of the German and Soviet air forces, which primarily supported the ground forces, may have also had an effect.

Plocher traces army operations to provide perspective, with the two later studies following events on the ground in greater detail. The Luftwaffe had a freer hand in the first months of the war and ranged across the Soviet Union, decimating the Red Air Force. By October 1941, the worsening fortunes of the German army brought its sister service into a ground support role as the

army slogged on. At this point, Plocher argues, Germany failed to take advantage of its best chance of success. It should have halted its ground offensive against Moscow, which was sapping Luftwaffe strength, brought in the two remaining bomber wings stationed in France, and launched a strategic air campaign against the sources of Russian power. As the war wore on, the Luftwaffe increasingly became a firefighting force, forced to come to the aid of one beleaguered, understrength division after another. Tied to the army and spread thin from the Arctic to the Black Sea, the Luftwaffe became a tactical air force.

Plocher only partially addresses the question of whether the Luftwaffe truly had the means to mount an effective strategic bombing campaign against Soviet factories relocated to the east by arguing that the Luftwaffe should have been accorded priority in funding and resources in the 1930s. What is unclear is whether a redistribution of German resources would have staved off or hastened German defeat. After all, the army often urgently needed the help of tactical air support just to hold the line.

How long would it have taken for German bombing of industrial and transportation centers to have a decisive effect on Soviet frontline strength? Germany probably could not have redistributed its resources to support a strategic bombing campaign while maintaining adequate air defenses and ground support forces, especially given the technical limitations of its bombers and the resilience of industrialized economies. Still, as operational-level studies, these volumes are successful and highly detailed. Plocher explores every section of the front in each volume, including the crucial German antishipping campaign in the Arctic, and naturally emphasizes the places where airpower had the greatest effect. He bases his account of the ground war on the memoirs of commanders like Erich von Manstein, and as a result, he tends to blame Hitler for most every mistake on the ground. Overall, Plocher's studies are dated but remain useful resources for those seeking an account of the operational air war from the German perspective. Even many recent studies of the Soviet-German war largely overlook air operations, so Plocher's work will continue to retain its value for some time to come.

### Unpublished Monographs

Karlsruhe project officer *General der Flieger* Paul Deichmann and *Generalingenieur* E. A. Marquard's "Luftwaffe Methods in the Selection of Offensive Weapons" essentially comprises technical reports on German aircraft armament. The first volume, "The Offensive Weapons of the Luftwaffe and Their Methods of Employment," comprises roughly one-third of the monograph but is the more accessible. Deichmann reused much of the material on ground-attack armament in his published monograph *GAF Operations in Support of the Army*, which is a mix of technical discussions and selected operational histories.

Deichmann describes prewar and wartime operational problems, such as the need for weapons that could disperse the tightly packed American bomber boxes, prompting the Luftwaffe to rearm its aircraft—in this case with mortars, rockets, and even tow cables. Importantly, he frames weapons procurement as a technological, political, supply, and timing challenge. Putting the right bomb on target required having a responsive weapons development team (if the bomb type was not already in inventory) and getting munitions to the right unit at the right time. He blames Germany's political leaders for not informing its military "with which country or coalition of countries potential military conflicts might occur," which forestalled the development of appropriate weapon systems.

Marquard, a former Luftwaffe ministry branch chief in charge of developing bombs and release items, authored the second volume, "The Selection of Bombs and Fuses for Air Attacks." This 175-page compilation of various Luftwaffe manuals and tables is heavy on statistics and light on analysis but may be useful to researchers of military technology. Unfortunately, one of the most interesting elements of this monograph—Deichmann's discussion of the effects of national policy on weapons development during the 1930s—is all too brief and one-sided, for it neglects the effect emerging air weapons had on European interwar diplomacy. As an epilogue, Deichmann included a brief list of lessons learned from which current weapons procurement bureaucrats could benefit.

Roughly one quarter of the Karlsruhe monographs are operational histories covering the air war in various theaters. Tasked

with studying the German air defenses pitted against the Western Allies, *Generalleutnant* Josef Schmid and *Generalmajor* Walter Grabmann compiled approximately 2,500 pages of research that comprise studies 158, 159, and 164. Schmid's "The Air War in the West," divided into five volumes spread across two monographs, is a day-by-day chronicle of German air operations complete with enemy attack routes, times, and estimated losses. Owing to holes in the documentary record, the account picks up in September 1943 and is uneven in the amount of information provided. The author focuses heavily on the units he commanded during the period. During the pivotal months of the battle for air supremacy in the spring of 1944, he commanded I Fighter Command and later all air units supporting the Western German army as what remained of the Luftwaffe redeployed to meet the Western Allies then on the continent.

The fifth volume describes the command structure of the Reich's air defenses from early 1943 through the demise of the Luftwaffe, and, as before, Schmid presents only raw data. His aforementioned long illness and death in 1956 dealt the project a heavy blow. Grabmann, the former commander of Fighter Division 3 who had already taken an increasing role in the preparation of the former's monographs, continued reconstructing the "German Air Defense," with greater success.

Grabmann's work complements and is based on Schmid's, providing welcome observations on engagements that Schmid simply listed. Grabmann presents the history of German air defense theory and organization during the interwar years and takes the story to the German surrender, presenting less detail during the period already covered by his predecessor. In the final two chapters, he describes the wartime evolution of air defense methods and the implications for the future. What Grabmann's monograph sometimes lacks in uniformity of coverage it makes up for by providing proper context and straightforward analysis in addition to detail. As such, the account, as well as other Karlsruhe monographs, was a prime source for historians Richard Muller and Donald Caldwell in the writing of *The Luftwaffe over Germany: Defense of the Reich*, now the standard work on the subject (Schmid's and Suchenwirth's works figure less prominently).

A brief discussion of Col K. G. Jacob's "The German Passive Air Services" yields more insights about the Karlsruhe unpublished monographs than it does about the Third Reich's system of civil air defense. At some 760 pages, Jacob's is one of the longest monographs written for the project and is therefore one of the most detailed. Jacob chronicles civil defense in Germany from World War I through the capitulation in 1945, focusing primarily on its organization and the difficulties it encountered. He concludes that "with inadequate means the system was called upon to fulfill impossible missions," which somehow seems like an understatement.

Regrettably, there is little reflection on the relationship between the totalitarian character of the Nazi state and the efficacy of particular civil defense measures imposed. Still, it is an excellent resource for the specialist because of its nearly comprehensive treatment of the subject and meticulous citations, which usually refer to German-language accounts or documents in the Karlsruhe collection. As such, it is especially useful for researchers in the United States not proficient in German. Even though it would not have required heavy editing to make the work at least navigable, it is little wonder that the Air Force Historical Division chose to publish other studies. It does not deal with the Soviet Union, contains little high-level analysis (e.g., Suchenwirth's studies), and primarily concerns civil rather than military affairs. It is logical that the USAF, interested in the effects of its persistent and costly air attacks, requested the study but is no surprise that it proved uninteresting to military professionals in the nuclear era.



## **List of Abbreviations and Terms**

AAF	Army Air Forces
ACSC	Air Command and Staff College
AFHRA	Air Force Historical Research Agency
AU	Air University
AWC	Air War College
<i>Bundesluftwaffe/marine</i>	West German air force/navy
<i>Bundeswehr</i>	West German armed forces
CASF	Composite Air Strike Force
CSAF	chief of staff of the Air Force
FMSB	Foreign Military Studies Branch
FY	fiscal year
GAF	German air force
HD	Historical Division
ICBM	intercontinental ballistic missile
Luftwaffe	German air force during the Nazi regime
NATO	North Atlantic Treaty Organization
NHT	Naval Historical Team (Bremerhaven)
RAF	Royal Air Force
ROTC	Reserve Officer Training Corps
RSI	Research Studies Institute, Air University
SAC	Strategic Air Command
SS	<i>Schutzstaffel</i> (paramilitary Nazi organization)
TAC	Tactical Air Command
USAF	United States Air Force
USAFE	United States Air Forces in Europe
USAREUR	United States Army Europe

LIST OF ABBREVIATIONS AND TERMS

USSBS	United States Strategic Bombing Survey
Wehrmacht	German armed forces during the Nazi era

## ***Dramatis Personae***

### **American**

- Angell, Joseph W., Jr. assistant chief, USAF Historical Division, Karlsruhe Phase (exact dates of employment unknown)
- Fletcher, Harry R. editor, GAF monograph project, 1963–69
- Hammer, Wendell A. project officer, GAF monograph project, 1953–57
- Kennedy, Edwin P. editor, GAF monograph project, 1955–61
- Maurer, Maurer assistant chief, USAF Historical Division, Maxwell phase
- Momyer, William W. deputy commandant for evaluation, Air War College, 1950–53  
deputy commander for air operations and commander of Seventh Air Force in Vietnam, 1966–68  
commander, Tactical Air Command, 1968–73
- Nye, Wilbur S. chief, USAREUR Historical Division
- Simpson, Albert F. chief, USAF Historical Division, 1951–69

### **German**

- Deichmann, Paul control officer, GAF monograph project, 1952–58
- Kammhuber, Josef chief of staff, *Bundesluftwaffe*, 1956–62  
contributor to GAF monograph project, 1953–56
- Plocher, Hermann deputy chief of staff, *Bundesluftwaffe*, 1957–58  
asst. control officer, GAF monograph project, 1953–57
- Suchenwirth, Richard German language editor and contributor, GAF monograph project, 1953–58



## **Bibliography**

- Air Force Manual 1-8. *Strategic Air Operations*, 1 May 1954. In *The Limits of Air Power: The American Bombing of North Vietnam*, Mark Clodfelter, 27, 30, 31. Lincoln, NE: University of Nebraska Press, 2006.
- Army Pamphlet 20-269. *Small Unit Actions during the German Campaign in Russia*, 1955.
- Bernd, Wegner. "Erschriebene Siege: Franz Halder, die 'Historical Division' und die Rekonstruktion des Zweiten Weltkrieges im Geiste des deutschen Generalstabes." In *Politischer Wandel, organisierte Gewalt und nationale Sicherheit*, edited by Klaus Jürgen Müller, Ernst Willi Hansen, and Gerhard Schreiber, 287–302. Munich: Oldenbourg, 1995.
- Bishop, Chris, ed. *The Encyclopedia of 20th Century Air Warfare*. New York: Barnes and Noble Books, 2001.
- Boog, Horst. "Higher Command and Leadership in the German Luftwaffe, 1935–1945." In *Air Power and Warfare: The Proceedings of the 8th Military History Symposium, USAF Academy, 18–20 October 1978*, Washington, DC: Office of Air Force History, 1979.
- Bolger, Daniel. "Maneuver Warfare Reconsidered." In *Maneuver Warfare: An Anthology*, edited by Richard Hooker, Jr., 19–41. Novato, CA: Presidio, 1993.
- Borowski, Harry R. *A Hollow Threat: Strategic Air Power and Containment Before Korea*. Westport, CT: Greenwood Press, 1982.
- Brodie, Bernard. "Douhet in Perspective." Lecture. Air War College, Maxwell AFB, AL, 6 November 1953.
- Brown, John Sloan. "Colonel Trevor N. Depuy and the Mythos of Wehrmacht Superiority: A Reconsideration." *Military Affairs* 50, no. 1 (January 1986): 16–20.
- Bruenner, William. "Professional Military Education in the Luftwaffe." *Air University Review*, March–April 1969, 76–82.
- Cassidy, Robert M. "Prophets or Praetorians? The Uptonian Paradox and the Powell Corollary." *Parameters* 33, no. 3 (Autumn 2003): 130–43.

## BIBLIOGRAPHY

- Christensen, Charles. *A History of the Development of Technical Intelligence in the Air Force, 1917–1947, Operation LUSTY*. Lewiston, NY: Edwin Mellen Press, 2002.
- Clodfelter, Mark. *The Limits of Air Power: The American Bombing of North Vietnam*. Lincoln, NE: University of Nebraska Press, 2006.
- Cooling, B. Franklin, ed. *Case Studies in the Development of Close Air Support*. Washington, DC: Office of Air Force History, 1989.
- Corbett, Karen L. "Marine Corps Amphibious Doctrine—The Gallipoli Connection." Research paper, Quantico, VA: US Marine Corps Command and Staff College, 1990.
- Corum, James. "Building a New Luftwaffe: The United States Air Force and Bundeswehr Planning for Rearmament, 1950–1960." *Journal of Strategic Studies* 27, no. 1 (March 2004): 89–113.
- . "Starting from Scratch: Establishing the Bundesluftwaffe as a Modern Air Force, 1955–1960." *Air Power History* 50, no. 2 (Summer 2003): 17–29.
- . *The Luftwaffe: Creating the Operational Air War, 1918–1940*. Lawrence, KS: University Press of Kansas, 1997.
- Deichmann, Paul. *Der Chef im Hintergrund: Ein Leben als Soldat von der preussischen Armee bis zur Bundeswehr*. Hamburg, Germany: Stalling, 1979.
- . *German Air Force Operations in Support of the Army*. New York: Arno Press, 1968.
- Diehl, James M. *The Thanks of the Fatherland: German Veterans after the Second World War*. Chapel Hill, NC: University of North Carolina (UNC) Press, 1993.
- Detwiler, Donald. "New Light on the Darkest Chapter of German Military History: A Review of Wolfram Wette's *The Wehrmacht: History, Myth, Reality*." *H-Net Reviews in the Humanities and Social Sciences*, February 2007. <http://www.h-net.org/reviews/showpdf.php?id=12899> (accessed 15 August 2009).
- . *World War II German Military Studies*. New York: Garland Publishing, 1979.
- Finletter, Thomas. *Power and Policy: US Foreign Policy and Military Power in the Hydrogen Age*. New York: Harcourt, Brace and Co., 1954.

- Fletcher, Harry R. "A History of the Luftwaffe?" *Air University Review* 21, no. 1 (November–December 1969): 97–105.
- . Questionnaire written by author, 2 November 2008.
- . "The Use of Captured German and Related Records by the United States Air Force." In *Captured German and Related Records: A National Archives Conference: Papers and Proceedings of the Conference on Captured German and Related Records, November 12–13, 1968*, edited by Robert Wolfe, 73–91. Athens, OH: Ohio University Press, 1974.
- "Former Air Force Historian Dies." *Aerospace Historian* 18, no. 1 (Fall 1971): 114.
- Futrell, Frank. *Ideas, Concepts, Doctrine: Basic Thinking in the USAF, 1907–1960*. Vol. 1. Maxwell AFB, AL: Air University Press, 1989.
- . *Ideas, Concepts, Doctrine: Basic Thinking in the USAF, 1961–1984*. Vol. 2. Maxwell AFB, AL: Air University Press, 1989.
- Greiner, Christian. "Operational History (German) Section und Naval Historical Team." In *Militärgeschichte: Probleme-Thesen-Wege*, edited by Manfred Messerschmidt, 409–35. Stuttgart, Germany: Deutsche Verlags-Anstalt, 1982.
- Hardesty, Von. *Red Phoenix: The Rise of Soviet Air Power, 1941–1945*. Washington, DC: Smithsonian Institution Press, 1982.
- Hayward, Joel. "The Luftwaffe's Agility: An Assessment of Relevant Concepts and Practices." Paper presented at the biennial Air Power Conference. Hendon, UK, 20 July 2006. <http://www.airpowerstudies.co.uk/Hendon-Air-Power-Conference.pdf>.
- Headquarters, Army Forces Far East. "Introduction to the Japanese Monographs." Military History Section. <http://ibiblio.org/pha/monos/> (accessed 4 April 2009).
- Hechler, Kenneth W. "The Enemy Side of the Hill: 1945 Background on Interrogation of German Commanders." In *World War II German Military Studies*, edited by Donald Detwiler, 135–36. New York: Garland, 1979.
- Heitman, Helmut. "German Generals Helped Us to Write War Story." *Cape Argus*, 9 April 1960, 5.
- Higham, Robin. *Official Military Historical Offices and Sources*. Vol. 2, *The Western Hemisphere and Pacific Rim*. Westport, CT: Greenwood Press, 2000.

## BIBLIOGRAPHY

- Homze, Edward. *Arming the Luftwaffe: The Reich Air Ministry and German Aircraft Industry, 1919–1939*. Lincoln, NE: University of Nebraska Press, 1976.
- Kramer, Alan. *The West German Economy, 1945–1955*. Oxford, UK: Berg Publishers, 1991.
- Large, David Clay. *Germans to the Front: West German Rearmament in the Adenauer Era*. Chapel Hill, NC: UNC Press, 1996.
- MacIsaac, David. *Strategic Bombing in World War II: The Story of the United States Strategic Bombing Survey*. New York: Garland, 1976.
- Mansoor, Peter. “The GI Offensive in Europe.” Address. New York Military Affairs Symposium, New York, 25 April 2006. <http://libraryautomation.com/nymas/gioffensiveineurope.html>.
- McFarland, Stephen. “The Air Force in the Cold War, 1945–60: Birth of a New Defense Paradigm.” *Airpower Journal* 10, no. 3 (Fall 1996): 4–15.
- McMullen, John. “The United States Strategic Bombing Survey and Air Force Doctrine.” Master’s thesis, USAF School of Advanced Airpower Studies, 2001.
- Megargee, Geoffrey. *Inside Hitler’s High Command*. Lawrence, KS: University Press of Kansas, 2000.
- Miller, David. *Tanks of the World: From World War I to the Present Day*. Osceola, WI: MBI Publishing, 2001.
- Millett, Allan R. “American Military History: Clio and Mars as ‘Pards’.” In *Military History and the Military Profession*, edited by David Charters, Marc Milner, and J. Brent Wilson, 3–21. Westport, CT: Praeger, 1992.
- Muller, Richard. “The German Air Force and the Campaign against the Soviet Union, 1941–1945.” PhD diss., Ohio State University, 1990.
- Muller, Richard, and Donald Caldwell. *The Luftwaffe over Germany: Defense of the Reich*. St. Paul, MN: MBI Publishing Co., 2007.
- Murray, Williamson. *Strategy for Defeat: The Luftwaffe, 1939–1945*. Maxwell AFB, AL: Air University Press, 1983.
- Ofcansky, Thomas P. “The History of the United States Air Force History Program.” In *Public History: An Introduction*, edited by Barbara Howe and Emory Kemp, 310–23. Malabar, FL: Krieger, 1986.

- Overy, Richard. *Why the Allies Won*. New York: W. W. Norton & Co., 1995.
- Peifer, Douglas C. *The Three German Navies: Dissolution, Transition, and New Beginnings, 1945–1960*. Gainesville, FL: University Press of Florida, 2002.
- Samuel, Wolfgang W. E. *American Raiders: The Race to Capture the Luftwaffe's Secrets*. Jackson, MS: University Press of Mississippi, 2004.
- Searle, Alaric. *Wehrmacht Generals, West German Society, and the Debate on Rearmament, 1949–1959*. Westport, CT: Praeger, 2003.
- Showalter, Dennis. "A Dubious Heritage: The Military Legacy of the Russo-German War." *Air University Review* 36, no. 3 (March–April 1985): 4–23.
- . "Fighting the Russians: An Ultimate Test?" *Air University Review* 35, no. 1 (November–December 1983): 102–05.
- Snyder, David R. "Arming the 'Bundesmarine': The United States and the Build Up of the German Federal Navy, 1950–1960." *Journal of Military History* 66, no. 2 (April 2002): 477–500.
- Soutor, Kevin. "To Stem the Red Tide: The German Report Series and Its Effect on American Defense Doctrine, 1948–1954." *Journal of Military History* 57, no. 4 (October 1993): 653–88.
- Spector, Ronald. "An Improbable Success Story: Official Military Histories in the Twentieth Century." *Public Historian* 12, no. 1 (Winter 1990): 25–30.
- Suchenwirth, Richard. *Command and Leadership in the German Air Force*. New York: Arno Press, 1970.
- . *Development of the German Air Force*. New York: Arno Press, 1968.
- . *Historical Turning Points in the German Air Force War Effort*. New York: Arno Press, 1969.
- Trest, Warren A. "View from the Gallery: Laying to Rest the Admiral's Revolt of 1949." In Stephen McFarland, "The Air Force in the Cold War, 1945–60: Birth of a New Defense Paradigm." *Airpower Journal* X, no. 3 (Fall 1996): 4–15.
- United States Air Force Historical Research Agency (AFHRA). *Correspondence of Col. Wendell Hammer*. K113.161-4 (1954–57). Maxwell AFB, AL: AFHRA, 28 June 1962.
- . *General Survey of Karlsruhe Project*. K113.161-1 (1945–62). Maxwell AFB, AL: AFHRA, 28 June 1962.

## BIBLIOGRAPHY

- . *List of Films, Air Document Center, von R Project*. 519.0611-1 (July 1945). Maxwell AFB, AL: AFHRA, 28 June 1962.
- . *Karlsruhe Project Papers*. K113.161-2 (1953–71). Maxwell AFB, AL: AFHRA, 28 June 1962.
- . *Part of Karlsruhe Collection (Correspondence)*. K113.161-3 v. 1 (1952–62). Maxwell AFB, AL: AFHRA 28 June 1962.
- . *Part of Karlsruhe Collection (Correspondence)*. K113.161-3 v. 2 (1963–69). Maxwell AFB, AL: AFHRA, 28 June 1962.
- . *Karlsruhe Project Papers, Correspondence of Dr. Simpson*. K113.161-5 (1952–53). Maxwell AFB AL: AFHRA, 28 June 1962.
- . *Part of Karlsruhe Collection, incl. Handbook in Writing*. K113.161-6 (1955–62). Maxwell AFB, AL: AFHRA, 28 June 1962.
- Vick, Alan. *Snakes in the Eagle's Nest: A History of Ground Attacks on Air Bases*. Santa Monica, CA: RAND, 1995.
- Von Lingen, Kerstin. *Kesselring's Last Battle: War Crimes Trials and Cold War Politics, 1945–1960*. Translated by Alexandra Klemm. Lawrence, KS: University Press of Kansas, 2009.
- "The von Rohden Collection." *Library of Congress Quarterly Journal*, August 1949.
- Wolfe, Robert, ed. *Captured German and Related Records: A National Archives Conference*. Athens, OH: Ohio University Press, 1974.
- Wood, James. "Captive Historians, Captivated Audience: The German Military History Program, 1945–1961." *Journal of Military History* 69, no. 1 (January 2005): 123–47.
- Worden, John. *Rise of the Fighter Generals: The Problem of Air Force Leadership*. Maxwell AFB, AL: Air University Press, 1997.
- Ziemke, Caroline. "In the Shadow of the Giant: USAF Tactical Air Command in the Era of Strategic Bombing." PhD diss., Ohio State University, 1989.

## ***Index***

- AAF. See Army Air Forces  
Abteilung 8, 4, 6  
ACSC. See Air Command and Staff College  
Adenauer, Konrad, 8, 48-49, 63  
Air Command and Staff College, 53, 57  
Air Force, 2-3, 6, 12-14, 17-26, 28-29, 31-38, 43-44, 46-53, 55-63, 67-69, 71-82, 85-92, 95-99  
Air Ministry, 17, 29  
Air University, 17, 19, 21-25, 31, 37, 39-40, 53, 55-57, 61-62, 65, 75-79, 92, 95, 97  
Air War College, 21-22, 25, 40, 53-54, 57, 77-78  
Allied, 2, 10, 23, 25, 36, 44-45, 61, 73, 84-85  
Allies, 4, 6, 9, 12, 44-45, 52, 55, 71, 73, 80, 96  
AM. See Air Ministry.  
Angell, Joseph, 19, 29, 37, 39-41, 54, 56, 64-65, 93-94, 99  
Army, 1, 3, 6, 8-14, 17-25, 29, 32-39, 45-46, 48-49, 51-52, 54, 57-58, 61-62, 67-68, 70, 73-79, 81-86, 88-89, 92, 95-98  
Army Air Forces, 1, 3, 25, 37  
AU. See Air University.  
AWC. See Air War College.  
Bremerhaven, 6-7, 46  
British Air Ministry, 17  
Bundesluftwaffe, 31, 43-44, 50-51, 53-63, 95-96  
Bundesmarine, 6-8  
Bundeswehr, 49, 56, 58, 60, 84  
Cate, James Lea, 1-2, 25, 37  
Cold War, 12, 47-48, 72, 82, 86-89, 95, 97-98  
Corum, James, 49-50, 61, 64-65, 82, 92-93  
Craven, Frank, 1-2, 25, 37  
Deichmann, Paul, 23-26, 28-32, 34-37, 39-41, 47, 49, 51, 53, 55-61, 63-65, 88, 94-95  
Doerstling, Egon, 54  
eastern front, 10-11, 21, 23, 70, 78, 82, 85-86, 88-89  
economic miracle, 20, 44  
Fletcher, Harry, 14, 36-38, 41, 55, 81, 93  
Foreign Military Studies Branch, 9, 19  
Futrell, Frank, 78, 91  
GAF. See German air force.  
GAF monograph project, 6, 9, 14, 19-20, 37-38, 43, 46, 63, 95  
Galland, Adolf, 4, 80  
German air force, 6, 18, 23, 25, 28-29, 31-32, 34, 36, 38, 43, 49-51, 53, 55-56, 61-62, 76, 96  
German Military History Program, 8, 10, 13-14, 18, 49, 61, 67  
Halder, Franz, 10-12, 23, 36, 62, 75, 84  
Hammer, Wendell, 24-37, 40-41, 43-44, 47, 49-60, 64-65, 76-81, 93, 95, 97, 99  
HD. See Historical Division.  
Hechler, Kenneth, 8  
Heitman, Helmut, 9, 15, 35

## INDEX

- Historical Division, 8-9, 11, 14, 17-19, 21-26, 29, 31, 33-38, 47, 56-57, 59-63, 67, 69, 76-82, 91
- Hitler, Adolf, 8-9, 11, 83-84
- Hitschhold, Hubertus, 4
- ICBM. See intercontinental ballistic missile
- infantry, 1, 10-11, 24, 81, 85
- intercontinental ballistic missile, 69
- Kammhuber, Josef, 31, 53, 55-60, 79
- Karlsruhe, 10, 17-19, 21-25, 27-31, 33-37, 39, 43-44, 46, 49, 51-54, 56-63, 67, 69, 75-81, 90-92, 95-99
- Kennedy, Edwin, 34, 36, 39-41, 57, 59-60, 64-65, 93, 95, 97, 99
- Kesselring, Albert, 47, 50, 64, 80, 93
- Korea, 48, 73-74, 89, 91
- Kriegsmarine, 6-8, 46
- Kriesche, Otto, 4
- Luftwaffe, 4-7, 17-18, 21-22, 24-25, 28, 31-32, 36, 39, 43-44, 47, 49-52, 58-62, 67, 70-71, 76-77, 79, 81-82, 84-90, 92, 95-98
- Maurer, Maurer, 37-38, 79, 98
- Momyer, William, 21-23, 78, 91-92, 94
- Naval Historical Team, 6-8, 13, 46, 50, 61
- Navy, 1, 3, 6-8, 21, 46, 50, 52, 69, 72, 74-75, 79, 96, 98
- Nazi, 10, 27, 49, 86
- NHT. See Naval Historical Team.
- nuclear, 10, 12-13, 63, 68-70, 72-75, 81, 86-87, 89, 91, 97-98
- Nye, Wilbur, 19-20, 23, 32-34, 40-41, 46, 52, 54-55, 62, 64, 76-77, 93
- Panitzki, Werner, 28-29
- Peifer, Douglas, 6-7, 14, 63-64
- Plocher, Hermann, 27, 32, 34, 36, 41, 50, 55-57, 59, 97
- POW. See prisoners of war
- prisoners of war, 6, 9
- Project "R", 4
- rearmament, 3, 8, 13, 39, 43, 48-50, 54, 61, 73, 95-96
- Red Army, 9, 11-13, 70, 82, 84
- Research Studies Institute, 21, 35, 40, 57, 67, 75
- Reserve Officer Training Corps, 51, 62
- ROTC. See Reserve Officer Training Corps
- RSI. See Research Studies Institute
- Russia, 5, 21, 32, 34, 83
- Russian, 11, 21-22, 81, 87
- SAC. See Strategic Air Command.
- Schmid, Josef, 54
- Simpson, Albert, 29, 37-38, 40-41, 52-53, 55, 61-62, 64-65, 67, 76, 79, 88, 93-94, 97-99
- Soutor, Kevin, 11, 12-13, 15, 65, 70, 85, 92-94, 127
- Soviet, 3, 7, 10-11, 13, 18, 21-23, 39, 43-44, 49, 55, 61, 69, 72-73, 75, 77, 79, 82, 85-89, 95-96, 98-99
- Spector, Ronald, 1-2

- Speidel, Wilhelm, 30, 57
- SS, 84-85
- “St. Helena” solution, 45
- Starfighter, 63, 96
- Stewart, Earle, 33
- Stimson, Henry, 2
- Strategic Air Command, 68, 74-75, 89, 97
- Suchenwirth, Richard, 26-27, 31, 38, 40-41, 49, 54, 79, 84, 94
- TAC. See Tactical Air Command.
- Tactical Air Command, 52, 74-75
- technological change, 68, 70, 72, 88, 90
- United States Strategic Bombing Survey, 2-3, 25
- USAFE. See US Air Forces in Europe.
- US Air Forces in Europe, 24, 34, 50, 55
- USAREUR. See US Army Europe.
- US Army Europe, 17-19, 33, 39-41, 60, 62
- USSBS. See United States Strategic Bombing Survey.
- US Strategic Air Forces in Europe, 4-5
- Vietnam, 86-91, 96
- von Rohden project, 3-4, 6, 13, 17, 25, 95
- war crimes, 6-7, 9
- Wehrmacht, 8, 13, 44, 83-86, 90
- World War II, 1-2, 4, 9, 11, 13, 18, 20, 24-25, 34, 36-37, 43-44, 49-50, 61, 67-70, 73, 81-83, 86-88, 90-91



# No Sense in Dwelling on the Past?

The Fate of the US Air Force's German  
Air Force Monograph Project, 1952–69

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