FIGHTING FOR AIR: COLD WAR REORGANIZATION
AND THE U.S. AIR FORCE SECURITY SERVICE, 1945-1952

A thesis submitted
To Kent State University in partial
Fulfillment of the requirements for the
Degree of Master of Arts

by

Philip Clayton Shackelford

May, 2016
© Copyright
All rights reserved
# Table of Contents

- TABLE OF CONTENTS ................................................................. iii
- LIST OF FIGURES ................................................................. iv
- ACKNOWLEDGEMENTS ............................................................. v

## CHAPTERS

I. Introduction ................................................................. 1

II. Chapter 1: Post-World War II Reorganization and the Emergence of the USAFSS .......... 8

III. Chapter 2: The Construction of an Intelligence Agency .................................. 32

IV. Chapter 3: Getting It Done: The USAFSS and Its Global Mission ......................... 53

V. Conclusion ................................................................. 87

## BIBLIOGRAPHY ................................................................. 92
List of Figures

1.1 – General Henry “Hap” Arnold.................................................................23
1.2 – General Hoyt S. Vandenberg.................................................................30
2.1 – Lieutenant General Richard P. Klocko..................................................35
2.2 – Organization of the Air Force Intelligence System.................................37
2.3 – Organization of the Air Force Directorate of Intelligence.........................38
2.4 – Directorate of Intelligence Budget Deficiencies for the FY 1949...............39
2.5 – Directorate of Intelligence Breakdown of Proposed Budget for FY 1950....40
2.6 – Airmen training at Brooks Air Force Base, 1949....................................47
3.1 – Operators of the 15th RSM in Korea, ca. 1951........................................61
3.2 – Supply and Communications Center for the 15th RSM, Flight B, December 1953.........63
3.4 – 6948th Security Squadron, Brooks Air Force Base, Texas......................79
3.5 – 6912th RSM, Detachment 3, and 6910th RSM, Schoenfeld, Germany........80
3.6 – EC-47 Skytrain, 1968.............................................................................82
3.7 – Interior view of the EC-47 platform, 6990th Security Squadron, 1968.........83
Acknowledgements

This thesis is dedicated to Airman First Class Thomas W. Shackelford Jr., and the Silent Warriors of the U.S. Air Force Security Service. The personnel of the Security Service served in silence and with a singular dedication to mission, playing an important role in providing for the national security of the United States. Theirs is a story that needs to be told.

Thank you for your service.

I would like to thank my advisor in this project, Dr. Mary Ann Heiss, for her direction and advice. Her guidance has made me a better writer and historian, and her support propelled me throughout the process. I would also like to thank the other members of my committee – Dr. Clarence Wunderlin and Dr. Kevin Adams – for their valuable advice and support. Both have been generous with research suggestions, writing advice, and other assistance, and I appreciate it very much. In addition, I would like to take this opportunity to thank our department chair, Dr. Kenneth Bindas, and our graduate program coordinator, Dr. Timothy Scarnecchia, for their support, assistance, and advice throughout my time as a graduate student in this program. I must also thank Kay Dennis and Carla Weber, who have ALL the answers! To all of my fellow students in Bowman 205 – thank you for a great time and good luck!

Finally I would like to thank my family – Phil, Paula, and Joe – for their never-ending love and support. Your encouragement, prayers, advice, and confidence have gotten me to this point – I love and thank y’all so much!

Let’s do this.
Introduction

Over seventy years ago, the end of World War II ushered in a period of transformation that changed the course of American history. Since that time, the U.S. government and American society at large have existed as part of a national security state, characterized by the construction of a preponderance of American power\(^1\) worldwide to protect America against its enemies and preserve its way of life. For the majority of those seven decades the United States was locked in an intense struggle with the Soviet Union, the world’s second superpower until its collapse in 1991. In that struggle as well as every conflict since then, the defining characteristic of America’s national security apparatus has been a foundation of fear, obsessed with preventing surprise attack. As a result, the United States has existed as a nation in a permanent state of emergency.\(^2\) At the heart of this national security system, responsible for providing the essential information needed to keep America safe, is the U.S. intelligence community. American intelligence agencies have not always been as large or as powerful as currently understood, however. Instead, the intelligence community has come of age alongside the national security establishment, tracing its roots back to the transformative years of World War II.\(^3\) Although military intelligence organizations were responsible for some of the most important and strategic

---

intelligence victories of the war, many U.S. intelligence groups were subject to the same
crippling demobilization programs endured by regular military forces.\textsuperscript{4}

The U.S. Air Force Security Service (USAFSS), was an anomaly. Created at a time when
the U.S. military was experiencing a wholesale reorganization, the USAFSS was a small but
powerful intelligence organization created to give the infant Air Force competitive footing in the
post-World War II intelligence community. It was authorized along with the U.S. Air Force in
the National Security Act of 1947 and administratively organized as a major command directly
responsible to the Air Force Chief of Staff, a hierarchical status not shared by the intelligence
structures of the Army or the Navy.\textsuperscript{5} The USAFSS was given the dual mission of providing for
the communications security of the U.S. Air Force and collecting communications intelligence
(COMINT), largely encrypted Morse intercepts, in regards to the air forces of the Soviet Union.
Soon, the organization had established itself as one of the preeminent COMINT agencies in the
U.S. intelligence community.

In establishing a theoretical and contextual framework for the study of the USAFSS, this
thesis engages a body of literature that is fragmented among a number of different scholarly
disciplines. Perhaps most obviously, the USAFSS was an intelligence agency, and thus subject to
the observations of authors that have explored the history and growth of modern American

\textsuperscript{4} Thomas R. Johnson, \textit{American Cryptology during the Cold War, 1945-1989 Book I: The Struggle for

\textsuperscript{5} Congressional Research Service (CRS) Report for Congress, “Intelligence Community Leadership:
Security Archive (DNSA) database provided by George Washington University. A number of records for this
project were sourced from the DNSA database, which is subscription only access. If interested in reading these
records an institution possessing a DNSA subscription must be located. Records for this project were accessed
through the DNSA subscription at the Oberlin College Mudd Library, in Oberlin, Ohio. Contact Jennifer Starkey at
jstarkey@oberlin.edu. Other documents were sourced through the Declassified Documents Reference Service
(DDRS) database available at Kent State University, which can be accessed on campus or with the Kent State VPN
at http://galenet.galegroup.com/servlet/DDRS;jsessionid=F9CC031C8131EC8BA005E38E4BE6C65?locID=kent828
03
intelligence gathering, such as Matthew Aid, James Bamford, David Kahn, Jeffrey Richelson, Michael Warner, and Cees Wiebes. Unfortunately, coverage of the USAFSS is only superficial in this historiography – a condition this thesis will attempt to remedy. In addition, as a member of the Cold War intelligence community developed by the United States after World War II to help guard against future surprise attacks, the USAFSS is both a product and an agent of the national security state that emerged during that time. Michael Hogan, Melvyn Leffler, Andrew Preston, Douglas Stuart, Michael Warner, and Linda Weiss have all written about the growth of the national security state and its transformative effect on the postwar United States. The identity of the USAFSS as a member of the national security apparatus is not of primary emphasis for the purposes of this study, however. More important is the identity of the USAFSS as an organization aggressively striving to safeguard its own interests.6

Organizational theorists and students of bureaucracy have constructed their own collection of concepts, theories, and models to describe and understand the actions and peculiarities of bureaucratic organizations. Several of these apply to the USAFSS. The USAFSS is an example of an organization whose past organizational experience significantly influenced how the organization both defined its mission and carried on operations after achieving a greater

---

degree of autonomy. It also exemplifies the organizational drive for increased autonomy as a way of reducing executive responsibility for organizational maintenance, specifically by “minimizing the number of external stakeholders and bureaucratic rivals and maximizing the opportunity for agency operators to develop a cohesive sense of mission.” Convincing executive authority that certain services are needed is essential for the survival of bureaucratic organizations and instrumental in arguing for increased autonomy. The Army Air Forces (AAF) consistently pressed for increased intelligence autonomy throughout World War II, and debates continued after Air Force independence and through the evolution of the USAFSS. Unfortunately for bureaucracy, however, complete autonomy is impossible to achieve, perhaps especially in a military setting. Accordingly, this thesis will explore ways in which the USAFSS attempted to enhance its autonomous status and isolate itself from external influence, to considerable success.

In particular, this thesis will explore the early history of the USAFSS and examine the functions that the Air Force expected the organization to fulfill. As an intelligence organization focused primarily on gathering COMINT relating to the Soviet Union, the USAFSS was the result of several years’ careful planning and was established in the midst of intense debate regarding the future organization of the U.S. military COMINT community. For much of this debate the Air Force was opposed to the unification of military intelligence efforts, changing its vote only after being assured of control over its own COMINT agency. Several years of past

---


experience had shaped this decision, leading the Air Force to exercise all the influence it could muster, including the outlay of political capital, in order to preserve its autonomy and that of its subordinate structures. Therefore, this study will ask what motivated the Air Force to construct a COMINT organization, how it envisioned this organization taking shape, what functions it was expected to provide, and whether or not the USAFSS was successful in achieving those goals during the early Cold War.9

The first chapter of this project will focus on the establishment of the USAFSS itself and evaluate why the Air Force was motivated to create its own COMINT organization in the midst of postwar intelligence reorganization debates. Understanding these developments requires discussion of the postwar military unification struggles, the value that the American government and military had come to place on COMINT, and the perspective of the newly formed U.S. Air Force. Specifically, the first chapter will examine arguments both for and against military unification after World War II, the rationale used by proponents of a separate Air Force to justify air autonomy, and the increasing importance of COMINT in the early Cold War environment – for the U.S. government at large and the Air Force in particular. Following these themes will illustrate that the Air Force felt an independent COMINT capability would enhance its effectiveness as a member of the military establishment and modern fighting force, and, frustrated by persistent attempts by the Army and the Navy to keep the Air Force dependent upon them in matters of intelligence, was anxious to construct an effective COMINT agency that would eliminate the need for external participation.10

9 Johnson, American Cryptology, 11, 23-26. DNSA.

Subsequent chapters will then focus on the more practical application of these concepts, with the second chapter examining how the Air Force envisioned the USAFSS taking shape, how it should be organized, and how the organization would operate logistically and administratively. After achieving independence and securing the freedom to develop COMINT capabilities, the Air Force set about creating an organization that would provide quality information and effectively serve Air Force interests in the intelligence community. The second chapter follows the construction of the USAFSS in terms of two different areas – organization of the command and matters affecting USAFSS personnel – specifically training and security protocols. Accordingly, the second chapter will explore attempts by the USAFSS to resist external influence through both physical and administrative means, as well as training regimens and security procedures.

The third chapter will seek to understand the functions that the USAFSS was designed and expected to provide. Specifically, it will explore the various functions and responsibilities assigned to the USAFSS and examine how the organization went about fulfilling those responsibilities through its operations and programs in particular. These include the acquisition, staffing, and operation of ground stations or fixed signal intercept sites, airborne intercept collection flights, and photoreconnaissance efforts – as well as measures taken to protect the security of Air Force communications themselves. A discussion of technology and the importance of facilitating continued development will be included in order to illustrate how the USAFSS changed and developed to continue successful pursuit of its mission. A conclusion will then ask if the USAFSS was a success based upon the stated objectives of the organization, by evaluating whether or not the command performed its responsibilities effectively throughout the early Cold War.
This study will be supported by a variety of primary sources. Declassified government documents, generated by both executive organizations and the military services, will illustrate bureaucratic decisions and the rationales that supported them. Command histories and historical studies commissioned by organizations such as the National Security Agency and State Department will also be used, along with contemporary correspondence, official memoranda, and oral history materials. Specifically, the first chapter utilizes testimony from congressional hearings to explore the arguments surrounding military unification and military documents to illustrate the effects of this debate in practice. The first chapter also relies on official military records and committee reports to explore the development of the American intelligence community after World War II, and why the Air Force was so interested in securing its own COMINT capability. In examining the organizational history of the USAFSS in particular, the second chapter relies on official military documents, but also uses a number of compelling recollections obtained from respondents to oral history interviews in order to develop a first-hand glimpse into the training and security procedures of the command itself. The third chapter will turn to official historical studies and other government and military materials in order to construct a more complete understanding of the agency’s worldwide operations. Taken together these sources will demonstrate the complex evolution of the USAFSS, its persistent efforts to avoid external control, and its importance to the Air Force at large.
Chapter 1: Post-World War II Reorganization and the Emergence of the USAFSS

Changes made during the period immediately following the end of World War II affected not only the United States military establishment but also American society in general, reshaping the nation in unprecedented ways and defining the parameters along which the Cold War period would develop. The emergence of America’s new defense establishment, however, both in terms of a restructured military and the foundations of what became the modern U.S. intelligence community, remains a very significant example of these changes. In the time span of a single year, the defense structure and foreign policy framework that formed the basis of American activities for the next four decades was established.\textsuperscript{11} Nor was it any too soon. During the following year of 1948 the United States was tested by the Berlin Blockade – an aggressive attempt on the part of the Soviet Union to protest Western influence on Berlin – and a successful Soviet atomic bomb test soon after. These events and the outbreak of hostilities in Korea in June 1950 ushered in a new period of Cold War hostilities.\textsuperscript{12}

American government and military officials had been able to see this conflict coming, and believed that in order to successfully meet postwar challenges a new defense and intelligence establishment was needed. The process of constructing a new organization began while World

\textsuperscript{11} The foreign policy of Containment, as articulated in George F. Kennan’s “Long Telegram” and tested by the Truman Doctrine and Marshall Plan; and the National Security Act of 1947, which legislated the foundation and basic structure for what would become the modern U.S. defense and intelligence apparatus well into the post-Cold War era. For the National Security Act see http://legisworks.org/congress/80/publaw-253.pdf

War II was still being fought, and as military unification debates continued after the war, the topic of maintaining communications intelligence (COMINT) efforts also became a prioritized discussion. Both ultimately gave rise to the U.S. Air Force and the USAFSS as military and government officials argued for air autonomy, prompting developments that played important roles in various Cold War struggles to come. This chapter will explore how both the Air Force and USAFSS evolved, the beliefs and motivations that inspired their development, and why the Air Force was motivated to create its own independent COMINT organization at a time when efficiency and coordination were near-universal priorities.

Military Unification and Air Force Independence

Although preparations for an independent Air Force communications intelligence organization had begun as early as 1945, it wasn’t until 1947 that the U.S. Air Force was actually established as part of a unified Department of Defense, by the National Security Act of 1947. As World War II came to an end it was clear that the American military establishment would be restructured to some degree, and service unification was a major topic. Whether this impetus was the result of inter-service rivalry or the introduction of atomic weapons and the prominent place of air power in nuclear warfare, military unification was the subject of significant discussion in the postwar period. Indeed, discussion was taking place and proposals were being generated before the war even came to an end, as military and congressional leaders began considering how the American postwar military should be organized. Many favored the creation of a

---


14 “Proposal to Establish a Single Department of Armed Forces,” Hearing before the Select Committee on Postwar Military Policy, House of Representatives, 78th Congress, Second Session, Pursuant to H. Res. 465, A Resolution to Establish A Select Committee on Postwar Military Policy, Part I, 24 April 1944. All congressional
consolidated defense establishment with three independent, co-equal military services.

Unification of the armed forces into a single structure would not be easy, however. Just as the creation of a separate air force was AAF leaders’ primary objective in unification, the U.S. Navy was diametrically opposed to the establishment of a new service and the combination of the existing services into a unified department.\footnote{Walter J. Boyne, Beyond the Wild Blue: A History of the U.S. Air Force (New York: St. Martin’s Griffin, 1997), 32.} Several congressional committee members, as well, failed to understand arguments for a separate air service when both the Army and the Navy already possessed air arms. Advocacy for a separate Air Force was a key element in these debates, often focused on the valuable service provided by the Army Air Forces (AAF) during World War II and arguing that the advent of nuclear weapons indicated a coming dominance of air power.

Inasmuch as unification was a military problem, Congress was very much involved as well. In 1944 a select committee established to study postwar military policy heard testimony from many military leaders covering the various aspects, considerations for and against, and organizational proposals for military unification.\footnote{House Resolution 465, 78\textsuperscript{th} Congress, 2\textsuperscript{nd} Session, 28 March 1944; Proposal to Establish a Single Department of Armed Forces, 24 April 1944; Report of Proceedings: Hearing held before the Select Committee on Post-War Military Policy, 26 April 1944.} The witness testimony and subsequent questions in the initial discussions revealed a great deal of confusion regarding how a unified defense establishment would be organized. Given that both the Army and Navy possessed air elements, some politicians had a hard time understanding why a third service was necessary and were also confused by the prospect of a single defense structure headed by a civilian chief.\footnote{Report of Proceedings: Hearing held before the Select Committee on Post-War Military Policy, Part I, 26 April 1944.}
Nevertheless, the members of Congress that made up committees investigating the matter relied on testimony and personal views from witnesses such as Robert A. Lovett, serving as Assistant Secretary of War for Air at the time, who illustrated how military unification would eliminate duplication and increase efficiency between the services, and used the opportunity afforded him to advocate a separate air service.\textsuperscript{18}

Arguments for a separate Air Force that were revealed through these statements predominantly focused on the value of air power as part of an effective military establishment. Lovett argued that air power was an “indispensable member of a multiphilibious combat team,” and believed that a unified department of armed forces presented the best opportunity for progress in regards to air power. President Harry Truman as well, in a message to Congress on unification the following year, observed that “air power has been developed to a point where its responsibilities are equal to those of land and sea power, and its contribution to our strategic planning is great,” advocating parity for air power along with the other military services. Throughout these early discussions it quickly became clear that both the Army and Army Air Forces strongly favored military unification, but advocated a further division of function within a unified defense department. Their preferred arrangement would consist of ground forces, sea forces, and air forces united as separate departments within a centralized defense structure. The Navy, on the other hand, strongly opposed the prospect of military unification on the grounds that the presence of another service would obstruct the ease of access to the President that the

\textsuperscript{18} Statement by Robert A. Lovett, Assistant Secretary of War for Air, Before the Select Committee on Post-War Military Policy, House of Representatives, 26 April 1944, 3-7.
Secretary of the Navy had traditionally enjoyed, and that this new air arm would be in competition for missions and resources.19

Several of the Navy’s concerns were legitimate. In reporting to the House Select Committee on Post-War Military Policy, Navy witnesses agreed with the general value of a military reorganization study but did not think that the assumption of a single defense department should be the starting point of such a study. Time after time these witnesses voiced concerns that a unified department would simply be too large for a single secretary to manage. In their opinion the present structure was functioning successfully, as evidenced by the progress of the war, and a decentralized organization could be more easily managed than a massive, consolidated defense organization. While opposing the creation of a separate air arm, several naval officers nonetheless made the case for naval aviation and the importance of maintaining that capability as a function of the Navy. Ultimately, naval testimony went so far as to question the extent of the alleged duplication that had congressional investigators concerned, and stressed that some duplication could in fact be a good thing – citing inter-service rivalry as a friendly competition that had improved the progress of research and development efforts, specifically in terms of aeronautics.20

---

19 Ibid.; “Message from The President of the United States Requesting Unification of the Armed Forces of the United States,” 19 December 1945; Report of Proceedings: Hearing held before the Select Committee on Post-War Military Policy, Parts II and III, 26 April 1944; Boyne, Beyond the Wild Blue, 32; see also Hearings before the Committee on Naval Affairs, United States Senate, 79th Congress, 2nd Session on Senate Bill 2044, “A Bill to Promote the Common Defense by Unifying the Departments and Agencies of the Government Relating to the Common Defense,” Statement of Hon. W. John Kenney, Assistant Secretary of the Navy, 2 June 1946, 223-228.

20 Statement of James Forrestal, Under Secretary of the Navy, Before the Select Committee on Post-War Military Policy, 28 April 1944; Statement of Vice Admiral R. S. Edwards, Chief of Staff to the Commander in Chief, U.S. Fleet, Before the Select Committee on Post-War Military Policy, 28 April 1944; Statement of Vice Admiral F. J. Horne, Vice Chief of Naval Operations, Before the Select Committee on Post-War Military Policy, 10 May 1944; Statement of Ralph A. Bard, Assistant Secretary of the Navy, Before the Select Committee on Post-War Military Policy, 11 May 1944; Statement of Artemus L. Gates, Assistant Secretary of the Navy for Air, Before the Select Committee on Post-War Military Policy, 15 May 1944.
An exception to this general line of testimony was the statement of Josephus Daniels, who had served as Secretary of the Navy in the Wilson administration and was a long-time supporter of a unified defense structure. Invited to testify before the Select Committee, he blamed Pearl Harbor on a lack of cooperation between the Army and the Navy and stressed that “squabbles” between the two services “prolong wars” and demonstrate the “necessity of combination.” Daniels also spoke of the importance of air power, saying that the lesson of Pearl Harbor was that “wars of our day are no longer waged by separate units,” and that “air is as much – perhaps more – as essential weapon as the long-range gun on the land or the powerful dreadnaught on the sea. [Pearl Harbor] has taught that all three are one and inseparable.”

Daniels’ argument paralleled that of other military leaders, who felt that the ground, sea, and air forces should all form elements of a coordinated defense team. Nevertheless, throughout the following months the Navy continued to oppose any proposal of a unified department of national defense, establishing itself in a now traditional position opposite the Army and Army Air Forces.  

The question of military unification was not settled during these initial debates. In its first report the House Select Committee on Post-War Military Policy postponed the question of unification until World War II came to a close, which had been the recommendation of numerous witnesses. In its final report, the committee indicated the delay, and since the Senate Military

---

Affairs Committee engaged the matter directly after the end of hostilities, there was no need to revisit consolidation and the committee itself could be disbanded. Indeed, just over a month after the war ended, the Senate began investigating the prospect of defense unification, hearing testimony for and against. Near the end of the year an analytical digest was compiled, outlining the various arguments as included in the testimony and quoting from the testimony itself. Despite an overwhelming majority of discussion topics presented in opposition to unification (thirty-seven against to eleven in favor), the testimony of proponents of unification was covered first in the digest, and the basic proposal for defense reorganization as presented by these individuals closely resembles the Department of Defense in existence today.22

Discussion of unification continued throughout the following year, as did press coverage of the debate.23 Just as congressional committee members and military officers struggled to work out the details of unification’s many elements, so too did various reporters as they conveyed news of the debate to the American public. Prominent opinions and positions of key individuals were printed in the news for public evaluation, and based on several pieces that appeared in the


New York Times throughout the time that the unification debates were ongoing, it appeared as if the general line of reporting lay in favor of military unification.24 Ultimately the U.S. Navy remained as the only true opponent to unification, and with the passage of the National Security Act in 1947, a unified Department of Defense was created.25

Specifically covered and legislated by the National Security Act was a separate Department of the Air Force, which had also been greatly anticipated by military officials and the public and advocated by many throughout the unification debates. Air independence, however, had long been an objective of Army officers serving in the AAF and its previous iterations. Interest in and momentum for increased air autonomy had begun almost at the beginning of military aviation, as military personnel began noticing the value of aviation for uses beyond simple reconnaissance, particularly during the First World War. Functions such as pursuit, fighting, strategic bombardment, and the importance of air superiority were recognized and examined by aviators of the time, and as these capabilities were discussed, so too was the appropriate place for air power in overall military organization and war doctrine. Organization was considered in relation to doctrine because organization was key to the “control and purposes of any military component.” The search for an appropriate air doctrine and agitation for additional autonomy continued throughout the interwar years, with General William Mitchell, General Henry “Hap” Arnold, General Carl “Tooey” Spaatz, the Air Corps Tactical School, the

---


25 National Security Act of 1947, Sections 201-204.
Army Air Corps, General Headquarters (GHQ) Air Force, and Army Air Forces (AAF) as key individuals and organizational achievements.\textsuperscript{26}

Army Regulations 95-5 (AR 95-5) established the Army Air Forces (AAF) on 20 June 1941, in the first significant organizational step toward increased autonomy since the creation of the GHQ Air Force six years previously. It was under this structure that American military aviation entered World War II, proving itself through significant and invaluable accomplishments on the battlefield, from North Africa to Germany to Japan, and using a variety of tactical and strategic techniques. With the war under way AAF officers did not lose sight of long-term objectives of autonomy, and used the success of tactical and strategic air power during the war to demonstrate the importance of developing American air capabilities. These successes also encouraged several powerful supporters of air power from among the U.S. Army, including General George C. Marshall and General Dwight D. Eisenhower, who were both in favor of a unified defense establishment and an independent air arm within that establishment, to be co-equal with the Army and Navy. Instrumental in this support was the relationship between Eisenhower and General Carl “Tooey” Spaatz, commander of the Strategic Air Forces in Europe.

Eisenhower informed his subordinates that he expected their support of postwar military reorganization efforts and of an independent air arm.\(^{27}\)

AAF planning for postwar reorganization had begun during the war as well. In 1943 the Air Staff Operational Plans Division prepared a secret study to determine the minimum air power capabilities that the country should have at the end of the war in Europe, which ultimately set forward the number and type of aircraft that American forces should possess going into the postwar period, recommended that aircraft production continue at current rates, and recommended the facilitation of postwar international commerce through a “large air force.” Later discussions also supported the idea of a separate air service and examined the minimum strength that a postwar air arm would require – details that were continually debated as the AAF moved steadily toward independence. Arguments for air independence advanced during this period focused on the value of air power in the American military, illustrated by Eisenhower with the concept of a “three-legged stool” where each leg represented a separate military service, land, sea, and air. Military officials also believed that air power would play an important role in American national security, and given the “awesome power” wielded by the AAF during World War II, nuclear weapons had also “ushered in an era that would be dominated by air power.”\(^{28}\)

---


\(^{28}\) General O. A. Anderson, Assistant Chief of the Air Staff, Operational Plans, “A Study to Determine the Minimum Air Power the United States should have at the Conclusion of the War in Europe,” April 1943; War Department, The Adjutant General’s Office, AG 322, “Establishment of Air Defense, Strategic Air and Tactical Air Commands; Redesignation of the Headquarters, Continental Air Forces and Certain Other Army Air Forces Units; Activation, Inactivation and Assignment of Certain Army Air Forces Units,” 21 March 1946; Memorandum for President, Board of Officers on Organization of the War Department (Lt. Gen. W. H. Simpson), Chiefs of War Department General and Special Staff Divisions, Commanding General, Army Ground Forces, Commanding General, Army Service Forces, and Chiefs of all Administrative and Technical Services, “Statement of Approved Policies to Effect Increased Autonomy of the Army Air Forces within the War Department Structure,” 4 April 1946; Report to Chief of Staff, U. S. Army on Army and Air Force Organizational Matters under Unification, 14 March
Thus the U.S. Air Force grew from a tiny reconnaissance element of the Army into a full-fledged military department of the American defense establishment. The predictions of General William Mitchell, who had passionately advocated for air autonomy during the 1920s and was ultimately court-martialed for his inflammatory indictment of those in opposition, were accordingly borne out by reality. Moreover, a unified defense establishment, which Army and air officials had long supported, now existed. As the American military, government, scientific research, industry, and even the university system were all being transformed and brought together by postwar reorganization and development, the “national security state” was being constructed. The Department of Defense was a key step in the emergence of this national security state. Yet even though economy and the elimination of undue duplication had become a mantra in the post-World War II government and military, the Air Force was still committed to creating its own communications intelligence capability. Now that the battle for independence had been won, the struggle for communications intelligence could continue in earnest.

Postwar Communications Intelligence and the Emergence of the USAFSS

Although the terms are often used interchangeably, the difference between signals intelligence (SIGINT) and communications intelligence (COMINT) can perhaps be best explained as the method or source of intelligence versus the kind of intelligence gathered. Specifically, SIGINT describes the process by which information is intercepted from electronic signals, communications or otherwise, that are transmitted across time and space by their original


creators but then intercepted and sufficiently decrypted for government or military purposes. COMINT describes the kind of information gathered by this process, most often consisting of secret or sensitive communications between foreign actors. Although SIGINT methods have been used for military purposes since they were technologically available, the use of SIGINT and COMINT dramatically increased and produced successful results during World War II. In hindsight, NSA historian Thomas R. Johnson observes that it is possible to view World War II as a “SIGINT war,” and that it is now hard to imagine how the Allies could have fought the war without information provided by SIGINT efforts. Throughout the war the Allies were able to demonstrate the value of SIGINT through many compelling intelligence victories. By the time the war had ended, SIGINT was recognized as a crucial source of information, and military officials lamented the effect that postwar demobilization had on service COMINT organizations.30

SIGINT was also important for another reason, as Western governments soon realized. During the Cold War, the closed society of the Soviet Union made it extremely difficult for Western governments to successfully infiltrate Soviet organizations. By contrast, Soviet spies were easily placed within Western organizations, as evidenced by the numerous espionage trials throughout the Cold War. COMINT gave the United States and its allies an effective alternative to the less successful human intelligence (HUMINT), and while government agencies such as the

FBI and CIA continued to run HUMINT operations, SIGINT, COMINT, and derivative forms of these intelligence types such as electronic intelligence (ELINT) and photographic intelligence (PHOTINT) proved more useful for Western intelligence organizations. In addition, the transition to technological intelligence gathering was a process that had already begun during World War II, as the Allies began to realize just how effective COMINT was in securing victory on and off the battlefield.\(^{31}\) Together these details provide insight into the importance both American military and government officials placed on maintaining SIGINT efforts as World War II drew to a close.

As demobilization efforts began, each military service and various government departments began expressing interest in providing for the continuation of SIGINT efforts into the postwar period. A defining characteristic of this discussion, however, was widespread debate regarding the organization of American COMINT efforts. It was as if two unification or reorganization debates were taking place simultaneously – one focused on the armed services of the United States as a whole, and the other more exclusively concentrated on constructing a COMINT community that each participant could support. When pointing out the value of COMINT information and offering hopes for COMINT efforts to continue after the war, many military and government officials also took the opportunity to propose and discuss potential organizational structures, collaborative programs, and the value of coordination.\(^{32}\)

---


\(^{32}\) Memo for the Chief of Staff, U.S. Army, from Assistant Chief of Staff, G-2 Intelligence Division, 16 June 1945; Chief of Naval Operations to Commander in Chief, U.S. Navy Pacific Fleet, “Recommendations Concerning the Post-War Organization of COMINT Activities,” 1 August 1945; Officer in Charge of the U.S. Navy Pacific Fleet Radio Unit, to Chief of Naval Operations, via Commander in Chief, Pacific Fleet, 3 August 1945; “Proposed Reorganization of the Signal Intelligence Service,” Signal Security Agency, U.S. Army, 16 August 1945; Secretary
widespread interest led to the appointment of various committees to explore options for military COMINT structures to coordinate and function in a semi-unified organization, and this process continued until the establishment of the National Security Agency (NSA) in 1952.

In terms of organization and condition, the American COMINT structure that emerged from World War II was highly decentralized and running on a skeleton crew. Intelligence officials knew that in order to effectively provide for postwar intelligence needs, more personnel and therefore greater funding would be required. Thus, debates regarding the postwar organization and coordination of intelligence activities arose from the need to cut costs while still providing reliable information necessary for protecting American national security. The Army and Navy had tried to cooperate during the war on COMINT activities, and despite initial difficulties working together, eventually created the Army-Navy Communications Intelligence Coordinating Committee (ANCICC) to help improve cooperation between the services – or at least prevent the need for intervention of supervisory offices when not required. At the very least this trend led to the formal establishment of the Army-Navy Communications Intelligence Board (ANCIB), which would continue to focus on COMINT coordination after World War II came to an end.33

33 Johnson, American Cryptology, 4-8; Memorandum For Chief of Staff, “Army-Navy Communication Intelligence Board – Establishment Of,” from Joseph R. Redman, Rear Admiral, USN Director of Naval Communications, 27 January 1945; Memorandum for the Secretary of State, Secretary of War, and Secretary of the Navy, [Postwar COMINT Collaboration], President Harry S. Truman, 12 September 1945; Memorandum for Admiral King, “Signal Intelligence,” 25 September 1945; Memorandum for General Marshall, “Signal Intelligence (Communication Intelligence),” 2 October 1945. DNSA.
Both services ultimately recognized the value in creating an organization that would be directed jointly and comprised of both Army and Navy personnel – an organization that would coordinate service COMINT efforts and eliminate undue duplication. The challenge remained finding a satisfactory arrangement and division of responsibilities and authority that each service would be able to support, given their respective interests and priorities. The ANCIB was directed to explore the potential for such an organization, while debates regarding the possible unification of the armed services continued simultaneously. Even as this discussion began, however, the possibility of an Air Force COMINT element was already being considered. The ANCIB understood the potential of a separate air interest in COMINT as part of anticipated objections by the U.S. Army to a formalized organization under the Joint Chiefs of Staff. The ANCIB felt that the Army Air Forces (AAF), which was already a member of the Joint Intelligence Committee, might insist on separate representation on the ANCIB if the board was formally constituted under the Joint Chiefs.\(^\text{34}\) In addition, the Army Air Forces, in anticipation of postwar independence, had been preparing to launch an independent COMINT effort as well.

The relationship between the AAF and intelligence was complex. Reconnaissance and military aviation had always been connected since the very beginning, but as the AAF had grown into its present status as a combat force, the command realized the importance of possessing its own intelligence element to eliminate the need for dependence on other military intelligence organizations. Accomplishing this goal wasn’t easy, however, and the AAF wasn’t always able to rely on its own intelligence production capability. Frequently, and especially during the early

\(^\text{34}\) Memorandum for Navy Members of ANCIB, “Coordination of Army-Navy Communication Intelligence Activities,” C. W. Nimitz, 4 January 1946. DNSA; Memorandum For Chief of Staff, “Army-Navy Communication Intelligence Board – Establishment Of,” from Joseph R. Redman, Rear Admiral, USN Director of Naval Communications, 27 January 1945. DNSA.
years of the war, AAF personnel had to use information that was initially gathered and analyzed by the Army’s G-2 Intelligence Division. This meant that the AAF often had to subsist on mere summaries of intelligence information that was gathered elsewhere and filtered down the chain. The Army’s G-2 Division was not the only producer of information that would eventually be used by the AAF. In Europe the Eighth Air Force found it more practical to build on British intelligence efforts rather than starting over, and in the Pacific Theater, intelligence matters were controlled by the U.S. Navy. AAF officials were adamant that the air service needed to control its own intelligence process, from beginning to end, but even after setting up their own organization, A-2, AAF intelligence officials had to cope with a lack of trust from no less than the AAF commander, General Henry “Hap” Arnold. 35

This lack of trust indicated that Arnold doubted the ability of the AAF to operate as an independent military service, despite the fact that Arnold remained one of the primary agitators for air autonomy. It may also have prevented A-2 from competing effectively with other military intelligence organizations, leaving it at a disadvantage. Competition did exist, frequently between A-2 and its Army cousin, G-2. Army intelligence officials complained that an air intelligence organization created unnecessary duplication and fought stubborn bureaucratic struggles to minimize the need for an air intelligence effort and resist continual attempts by A-2

to siphon increased autonomy. Brigadier General Sherman Miles, commander of G-2, argued that the intelligence efforts of the A-2 were in violation of Army regulations. Brigadier General Martin Scanlon, summoned from Europe by Arnold to supervise A-2, studied the relevant regulations and announced that although the Military Intelligence Division was responsible for “general intelligence duties and supervision of intelligence,” nothing prevented a division like A-2 from carrying out intelligence work under its supervision. Eventually G-2 did allow A-2 to take on additional responsibility, but this cooperation was always carried out informally, which prevented A-2 from achieving any recognition as a distinct and co-equal service. So long as G-2 was officially responsible for intelligence operations, A-2 was allowed to shoulder much of the work.36

The AAF remained a peripheral participant in the Allied military intelligence community. AAF commander General Arnold was consistently left out of important Allied intelligence communication networks. Particularly significant was the fact that Arnold did not receive any official notification regarding the Allied ULTRA program. ULTRA, described as the “Allies’ most valuable World War II secret,” was the code name for information provided by a highly successful SIGINT effort spearheaded by the British, where encrypted communications sent via German Enigma machines were deciphered and used to inform Allied military operations. After Pearl Harbor the British became nervous about sharing ULTRA information – as well as information about the effort itself – with the American military. As few people as possible were informed of the intelligence effort – and the small circle did not include AAF staff back in Washington. Arnold eventually discovered ULTRA, but through independent sources, not official channels. In the Pacific Theater the U.S. Navy was also occasionally “reluctant” to share

36 Ibid., 7-8, 39-46.
intelligence with the AAF, but overall relations between the Navy and the AAF were more amicable than those between the A-2 and its Army counterpart.37

The constant struggle to be taken seriously, receive equitable treatment, and secure responsibility for its own intelligence requirements almost certainly influenced the persistent efforts of the AAF to develop an independent COMINT capability following World War II. Even though the Army Security Agency (ASA) continued to provide for the COMINT needs of the fledgling Air Force for a time, the Air Force was determined to develop its own organization, encouraged by General Hoyt S. Vandenberg, now Vice Chief of Staff of the Air Force. Vandenberg, brought in by Eisenhower to head G-2 in January 1946, had “been in close contact” with intelligence matters throughout the war and was particularly impressed with COMINT. The amount of control exerted by the British over Allied COMINT efforts bothered him, however, and in February 1945, Vandenberg sent a letter to Washington expressing his belief that the AAF should have its own intelligence structure similar to the British system. At the time this wasn’t possible, but later Vandenberg played an instrumental role in the construction of an independent Air Force COMINT organization. The quick pace with which the Air Force went about developing COMINT capabilities in the immediate postwar years, however, was yet another indication just how dedicated to an independent intelligence structure air officials really were.38

The process of setting up an Air Force COMINT agency actually began with postwar reorganization efforts undertaken by the Army Security Agency (ASA) and the Army’s G-2 Military Intelligence Division. Richard P. Klocko, a colonel in the AAF and former commander

37 Ibid., 8-9; Richelson, Spies, 176-180.
of a fighter squadron in the North African theater of World War II, was shot down behind enemy lines and spent two and a half years in POW camps before being released and transferred back to the States. After only a couple of weeks of his allotted recovery period had elapsed, however, Klocko found himself transferred to the Pentagon and assigned to the General Staff of the G-2 Division, where he was given a staff job and eventually tasked with learning about Army COMINT operations. This included a detailed education in cryptology and how the COMINT process worked, which Klocko learned from a prominent civilian employee of the Army’s cryptologic effort. Soon Klocko was transferred to the ASA and became involved with reorganization initiatives, establishing ASA priorities and policies, and discussions with the Navy on COMINT coordination. As part of these duties Klocko was required to provide briefings to the Deputy Assistant Chief of Staff for Intelligence, who was an AAF colonel and knew nothing of U.S. Army cryptologic efforts. Details of the inter-service nature of Klocko’s assignment are not covered extensively in the 1975 oral history interview conducted by the Air Force Intelligence Oral History Program. Indeed, the transcript reveals only six sentences worth of Klocko’s words on the subject, three of which are focused on communicating the high degree of secrecy surrounding cooperative efforts. Klocko does, however, place a particular emphasis on another significant development – the creation of an independent U.S. Air Force.39

The United States Air Force was established under a unified Department of Defense by the National Security Act of 1947, and by legislation included in the Act, the Army Air Forces,

Air Corps, and General Headquarters Air Force were transferred from the U.S. Army to the U.S. Air Force. According to Klocko’s testimony, he was the only AAF officer who had been involved with COMINT matters and on 18 September 1947, the day after the U.S. Air Force was formally established, Klocko was transferred from the U.S. Army to the Air Force and became one of its very first officers. He reported to Major General George C. McDonald, the first Director of Air Force Intelligence, who was already familiar with what Klocko’s duties had been in Army intelligence and knew that no one in the Air Force had any COMINT experience. At this point the newly established Air Force was only a consumer of communications intelligence product, not a producer. It lacked the facilities, equipment, and personnel to begin gathering COMINT on its own. Accordingly, Klocko was immediately tasked with creating an independent COMINT organization for the Air Force, and on 20 October 1948, the U.S. Air Force Security Service was born.40

The emergence of the organization was not without bureaucratic debate, however. Within the Air Force itself, a considerable amount of discussion took place regarding the administrative place and level of the newly established USAFSS. According to Klocko’s 1975 interview, the challenge of giving COMINT production capabilities to the Air Force involved questions of establishing an effective organization that would both correspond to and counter the COMINT structures of the Army and the Navy. Klocko’s commentary makes it clear that the Air Force desired an organization comparable to both the ASA and NSG in terms of capability but one that would also be able to improve on the records and effectiveness of these agencies. The division came when trying to decide where the new organization would be established and how it would be conducted.

receive tasking. The intelligence and communications structures of the Air Force were both vying for administrative control of the agency, debating which command would be responsible for staffing the organization and therefore issuing operational orders. Ultimately, it was decided that Air Force COMINT efforts would not be subordinate to either of the larger commands, but would instead be established as a major command directly responsible to the Air Force Chief of Staff. Klocko’s role in this process was to study the situation and provide recommendations to General Charles P. Cabell, and the decision ultimately fell in favor of his proposal.41

The presence of a new player in the COMINT community complicated the ongoing discussions of the ANCIB and ANCICC, as the military services continued to explore the possibility and merits of creating a more unified military COMINT organization. The USAFSS would now be competing for the same funding, resources, and personnel as its Army and Navy counterparts, making a revised military COMINT structure all the more necessary. Competition for financial resources and a concerted movement for coordination remained primary objectives of all proposals discussed, and as many talented COMINT personnel began to leave the services and return to civilian life, the struggle for resources increased. On 19 August 1948, two months before the USAFSS was established as a major air command, Secretary of Defense James Forrestal issued terms of reference for a Committee on the Creation of a Unified Armed Forces Security Agency (CCUAFSA), which had been previously authorized by a decision of the War Council, and outlined questions that the CCUAFSA should consider. These questions included but were not limited to determining whether or not a unified military COMINT structure was

41 Tart, Freedom Through Vigilance, 37-40; “Establishment of the USAF Security Service,” 20 October 1948; Johnson, American Cryptology, 11. The organization of the USAFSS as a major air command was an unprecedented departure from the normal military intelligence establishment – the COMINT structures of both the Army and Navy were under the control of larger commands, where the USAFSS was not. This gave the new Air Force agency a “loftier” position than its other service counterparts from the very beginning. Klocko interview, 1975, 7-8.
advisable, how such a structure would be organized and what authority it would be responsible to, what changes might take place in current operational arrangements, how and to what extent the Air Force would participate in the resulting effort, and evaluating plans for the increase of COMINT activities.\footnote{Thomas L. Burns, \textit{Origins of the National Security Agency 1940-1952}, (Fort Meade: Center for Cryptologic History, National Security Agency, 1990), 57-62; Johnson, \textit{American Cryptology}, 2; James Forrestal to the Secretary of the Army, Secretary of the Navy, and Secretary of the Air Force, “Terms of Reference for the Committee on the Creation of a Unified Armed Forces Security Agency,” 19 August 1948.}

At its first meeting the CCUAFA\(\text{SA}\), chaired by Rear Admiral Earl E. Stone, Director of Naval Communications, appointed a working committee to examine the questions outlined by Secretary Forrestal, and agreed that the working committee would have sufficient opportunity to make considerable progress and prepare an update for the CCUAFA\(\text{SA}\) by the time of their second meeting. Colonel Richard Klocko was one of two Air Force representatives on the working committee. The CCUAFA\(\text{SA}\) ultimately recommended the creation of a unified armed forces security agency, as might have been expected, but the recommendation was not met with widespread approval when other government departments were given an opportunity to examine it. Despite these concerns the Armed Forces Security Agency (AFSA) was eventually established, but perhaps most notable is the unique position of the Air Force in these debates. Initially the Air Force had been in agreement with the Navy in opposition of unification of military COMINT efforts. Both services were interested in maintaining as much control over their own COMINT affairs as possible. Early in 1949, however, shortly before the AFSA was formally established, Air Force Chief of Staff Hoyt S. Vandenberg personally reversed the Air Force vote to favor unification after receiving assurances that the Air Force would be able to retain control of its own COMINT organization for use according to its own individual needs.\footnote{Minutes of the First Meeting of the Committee on the Creation of a Unified Armed Forces Security Agency (CCUAFA\(\text{SA}\)), 25 August 1948. DNSA; Tentative Minutes of the Second Meeting of the CCUAFA\(\text{SA}\), 15 September}
Left standing alone the Navy soon conceded to the push for unification, AFSA was born, and the USAFSS was allowed to operate independently and without overbearing external control.

The United States Air Force was motivated to create its own independent COMINT organization so that it did not have to rely upon the intelligence structures of other services to provide a steady supply of relevant information, but instead had the capability to perform the task itself, focusing on the kinds of information most significant to Air Force operations and organizing its intelligence gathering efforts in a way that made sense for the service. Given that COMINT was becoming a more reliable source of information than HUMINT, becoming a producer of COMINT was an important objective for the Air Force. Gathering COMINT enabled the Air Force to stay apprised of developments in the Soviet Union that were relevant to its mission, and the Air Force supported the creation of a unified military COMINT structure only after being assured that it would retain the authority to maintain and control its own COMINT agency. The emergence of the USAFSS was an event several years in the making, but once

Figure 1.2 General Hoyt S. Vandenberg. Courtesy of the U.S. Air Force.

established the USAFSS began installing itself as one of the preeminent COMINT agencies in the U.S. intelligence community.

Conclusion

The birth of a centralized Department of Defense, the emergence of the U.S. Air Force, and the creation of the USAFSS were three separate yet connected events that revealed larger trends taking place in the postwar United States. The need for a strong peacetime military, the importance of air power, and the central role of intelligence – COMINT in particular – were all developments that indicated how America’s role in the international arena was changing. With widespread economic and geopolitical interests around the globe and postwar responsibilities in areas such as Europe and Japan, the United States required a peacetime military force sufficient to meet these unprecedented demands. Also, with the attacks on Pearl Harbor and increased technological development affecting range and payload, air power had played a significant role in World War II and would also become a prominent factor in the postwar world – especially in terms of nuclear warfare and strategic bombing forces. Finally, intelligence gathering in the West had been shifting towards electronic methods and sources since before the war, and now that military and government officials had come to fully appreciate the value of such programs, SIGINT and COMINT would become increasingly important for Western governments as the Cold War began. With the freedom to act independently, the Air Force continued organizing a separate COMINT service, focused on developing the ability to serve the needs of the Air Force and eliminate dependence upon other COMINT structures.
Chapter 2: The Construction of an Intelligence Agency

From the beginning of its history, military aviation was blessed with devoted supporters, and as both technology and strategy developed, American air officials prioritized independence for themselves and their growing capabilities. They pursued it doggedly, one decade after the next, using significant wartime achievements to prove the value and necessity of an autonomous military aviation service. During World War II, American aviators applied the same attitude toward the acquisition of intelligence capability – efforts that were eventually rewarded with the creation of the USAFSS. But the mere existence of an air intelligence organization was not enough. Air Force leaders wanted as much control over their own affairs as possible, and so to minimize the potential for external influence, Air Force leadership turned to a now dogmatic concept – independence – once again. This time, however, air officials cloaked their motives in the principle of decentralization. With both of the military COMINT services headquartered in the greater Washington, D.C. area, the USAFSS set its sights on other locations in the United States, eventually building a headquarters near San Antonio, Texas. This relocation was the first of many developments that would come to characterize the organization’s fiercely independent spirit and cultivate its growing maverick reputation.

This chapter will focus on such developments in order to demonstrate that the Air Force intended for the USAFSS to serve as an autonomous intelligence gathering unit, dependent upon

---

no external entities, capable of providing advance warning of any surprise attack\(^{45}\) and keeping the Air Force supplied with the information needed to carry out its missions successfully. The USAFSS accomplished this in two ways – by constructing a unique and effective organizational structure and developing a highly qualified workforce. Accordingly, this chapter will explore how the organization of the USAFSS developed and examine the training of USAFSS personnel and security protocols. In addition to official Air Force documents, this chapter will also utilize the testimony of former USAFSS personnel obtained through oral history interviews in order to provide firsthand recollections of training and security procedures.

In terms of bureaucratic and organizational theory, the emergence of the USAFSS was initially made possible by the separation of the Air Force from the Army by the National Security Act of 1947. Anthony Downs observes that organizations can be formed through the separation of portions of already existing organizations from their parent structures, and that these separations are usually initiated by the “zealotry of a few members.” By the time the USAFSS was created this step had already been taken by the Air Force, but the USAFSS was still faced with the challenge of securing sufficient support for effective operation. Key to this process is the drive for autonomy, which ideally allows the new organization to reach what Downs terms an “initial survival threshold,” giving members of the organization the freedom to focus on performing its essential functions. Attaining sufficient levels of autonomy is not always an easy process, but Downs observes that if an organizations’ “suppliers or beneficiaries are strong and well organized in comparison with its rivals and sufferers, then it will probably quickly gain a clearly autonomous position.” This was the case with the USAFSS, supported as it

was by officials in the Air Force leadership who were very interested in securing independent COMINT support for Air Force commands.\textsuperscript{46}

Increased autonomy also gives new organizations the benefit of lowered organizational maintenance costs by “minimizing the number of external stakeholders and bureaucratic rivals.” Without the constant need to win support from external stakeholders and secure a steady stream of resources – or compete with bureaucratic rivals for a limited supply of resources – organizations have the freedom to focus on developing a “cohesive sense of mission.” These characteristics, which easily apply to government bureaucracies and organizations such as the USAFSS, help explain why the USAFSS acted as it did to persistently advocate for increased autonomy and the freedom to control its own responsibilities.\textsuperscript{47}

The Birth of a Command: Organizing a COMINT Service

Anticipation of postwar independence and a desire to control their own COMINT production prompted Army Air Forces (AAF) officials to prepare for the construction of a COMINT agency while World War II was still under way. As mentioned in the previous chapter, this involved Lieutenant Colonel Richard P. Klocko, who was transferred to the Pentagon shortly after being released from Stalag Luft III. In Klocko’s recollection, while the war in the Pacific was still ongoing, fighting in Europe had ended and the American military was beginning to demobilize, which included large numbers of both enlisted soldiers and officers. Important work still had to be carried on in Washington, however, and so the War Department General Staff compiled a list of qualifying candidates to take Pentagon positions that had recently been vacated or were needed in the postwar efforts. As Klocko recalled, “when they went down the list I had

\textsuperscript{46} Downs, \textit{Inside Bureaucracy}, 5-10.

\textsuperscript{47} Wilson, \textit{Bureaucracy}, 181-183.
all the qualifications that they were talking about, so they just issued the orders.” Despite his protests over being denied a rest period after returning from five years overseas, Klocko was unable to get the orders changed, and thus began work as a staffer in the Army’s G-2 Military Intelligence Division.48

After working in the G-2 for a year, Klocko was placed in charge of the Supplemental Research Branch and given a detailed education in cryptographic intelligence, the “real snoop-and-poop business,” in Klocko’s words. Responsibility for Klocko’s education in cryptology fell to Frank B. Rowlett, a former math teacher from Rocky Mount, Virginia who was recruited by William Friedman in 1930 to work as a cryptanalyst in the Signal Intelligence Service. Rowlett and his fellow cryptanalysts were responsible for groundbreaking achievements in the cracking of the Japanese diplomatic and military ciphers both leading up to and during World War II, and after the war Rowlett continued on with the Army Security Agency (ASA) at Arlington Hall, where Klocko went for his lessons. Klocko would ask Rowlett to explain the concepts of cryptology, and “so for hours on end, he would sit there and tell me about the cryptologic business. He had diagrams on the board and all that sort of thing, so I got a pretty good grounding in this thing.” Work with the Supplemental Research

Branch in G-2 continued for about a year, until the National Security Act was passed and a separate U.S. Air Force was born.⁴⁹

According to Klocko’s recollections, he was the first person to be transferred from the U.S. Army to the U.S. Air Force when the National Security Act was passed in 1947. Placed in charge of organizing a COMINT capability for the Air Force, Klocko was appointed chief of the Supplemental Research Branch (SRB), the Air Force counterpart to the organization Klocko had directed for the Army. The SRB was subordinate to the intelligence structure of the Air Force – which was transformed from the A-2 Division of the AAF into the Air Force Directorate of Intelligence. Klocko’s Supplemental Research Branch was organized under the Air Intelligence Requirements Division, and was the unit responsible for the collection of “special intelligence” or COMINT. Although the USAFSS was established as a major air command on 20 October 1948, details from a presentation to the Joint Chiefs of Staff in August of that year reveals air intelligence organization during this early period. Organizational charts from the presentation illustrate the relationship of the Supplemental Research Branch to the Air Force Directorate of Intelligence and the Directorate of Intelligence to the American intelligence community at large:⁵⁰


⁵⁰ Klocko interview, 1987, 58. An early USAFSS history reveals that “most of the officer personnel initially assigned to USAFSS were officer[s] who were, at the time, on detached service with the Army Security Agency for training in various phases of communications intelligence or communications security,” and that many of the officers placed in “key positions,” had this background. Therefore Klocko’s experience may not have been entirely unique, as the USAFSS apparently drew its top officer staff from a small cadre of officers who had previous experience with the ASA. “History of the United States Air Force Security Service for the period 20 October 1948 to 31 December 1949,” U.S. Air Force Security Service, 4-5. See also Klocko’s official Air Force bio as cited above. Organizational charts referred to above and included below are from the Department of the Air Force Directorate of Intelligence Presentation to JCS Committee on the Correlation of the Budget of the National Military Establishment for the FY 1950, 31 August 1948, 7 and 11. DDRS.
Figure 2.2 – Illustrates the relationship of the Air Force intelligence apparatus to the broader intelligence community. Note how information from the Supplemental Research Field Activities flows in only one direction, back to the Director of Intelligence.
Figure 2.3 – The Supplemental Research Branch operated under the Air Intelligence Requirements Division, and was responsible for operations, research, dissemination, and distribution of the information it collected.

The report notes that “pending formal transfer” of COMINT functions from the Army to the Air Force, the Air Force had been only marginally engaged with the production of COMINT information, the predominating emphasis having been preparations for assuming COMINT efforts. Air intelligence officials were confident that they would soon gain control of these activities, however. The report forecasted that “prior to 1 July 1949 it is expected that the Air Force will have assumed responsibility for the operation of fixed intercept stations” as well as “such mobile stations as are assigned to it.”

A proposed budget for the 1950 financial year (FY) revealed the emphasis that was being placed on the Supplemental Research Branch and “special intelligence,” despite an apparent attempt by the Directorate of Intelligence to downplay this cost. In a graph outlining...

---

51 Presentation to JCS Committee, 1948, 23.
Deficiencies in the FY 1949 budget, intelligence collection was the single largest amount. A similar emphasis was placed on collection in the proposed budget for FY 1950, and of these allocations, the single largest sum was dedicated to field activities in the Supplemental Research Branch. This sum amounted to $6,839,357.15, or 29.3 percent of the overall proposed budget, as seen in the figures below.

![Bar graph showing deficiencies in FY 1949](image)

**Figure 2.4** – Deficiencies in intelligence collection alone constitute around half of the overall total.
The FY 1949 deficiencies and proposed budget for FY 1950 highlight the significant emphasis that the Air Force Directorate of Intelligence was placing on COMINT. Even as planning continued and debates regarding the structure of the military COMINT effort were ongoing, the Air Force was intently focused on developing a COMINT capability on which it could depend for reliable information.

As an Air Force officer, Klocko’s responsibility remained the same as it had been in the AAF – building COMINT capability and determining how the Air Force COMINT effort should be organized. Encouraging cooperation among his fellow officers was not a easy process, however. Upon receiving responsibility for the project Klocko had also been given several high...
security clearances, which the majority of Air Force personnel did not possess. Officers not cleared to know of Klocko’s activities were not inclined to lend assistance or precious resources upon his word alone, and eventually Klocko found it necessary to ask his commanding officer, General Charles P. Cabell, for assistance. Cabell secured a letter from General Hoyt S. Vandenberg, now serving as the Air Force Chief of Staff, that introduced Colonel Klocko and directed those involved to give him their full cooperation. This helped, as Klocko noted, saying “things started opening up a little bit then. Actually, it worked out extremely well.”

Even as development continued, intense debate raged between two Air Force commands regarding the proper place of COMINT efforts within the Air Force structure. Up until this point, communications and signals intelligence activities – known as “special intelligence” within the Air Force – was the responsibility of the Supplemental Research Branch, currently organized under the Air Intelligence Requirements Division. Given that the COMINT effort involved providing for the security of official Air Force communications, however, officers in the Air Force Communications Service argued that the new capability should be placed under their purview. Disagreements between the two structures continued for some time, until Klocko proposed that the COMINT effort be organized as a major air command “not as an adjunct to either the intelligence or the communicators so that it actually will be under the Chief of Staff. The only way to solve it really was to make it separate and independent but with major interests.

---

53 Klocko interview, 1987, 59-60. At the time of the establishment of the USAFSS on 20 October 1948, only twenty-two officers were assigned to the command. They had all been attached to the Army Security Agency (ASA) for training purposes, and formed the “nucleus around which the Headquarters was later organized.” The initial USAFSS historical report is not specific as to the individuals that comprised this group of officers, but given their small number and common experience with ASA it is reasonable to conclude that Klocko was one of their number. In order to meet pending requirements the USAFSS undertook several methods to procure additional officers, including the screening of officers’ records in the office of the Adjutant General, Department of the Air Force, to ascertain which individuals possessed “any of the qualifications required by USAFSS.” By this time Klocko’s task was complete, however, and the USAFSS had been established as a major air command, soon to receive top priority for the procurement of additional personnel. “History of the United States Air Force Security Service for the period 20 October 1948 to 31 December 1949,” U.S. Air Force Security Service, 13-14.
in the operational areas between these two things.” Organizing the agency as a separate
command helped prepare for expansion and streamlined administrative considerations as well.54

Accordingly, on 20 October 1948, the USAFSS was established as a major air command
of the U.S. Air Force. The letter notifying the commanding general of the new organization
confirmed the status and responsibilities proposed by Colonel Klocko in his recommendations,
announcing “The USAF Security Service is established with headquarters at Arlington Hall,
Washington, D.C. The USAF Security Service will operate under the direct control of the Chief
of Staff, USAF, with the procedural functions and responsibilities of a major air command.”

Arlington Hall, also the headquarters of ASA, was a former junior college for girls purchased by
the Signal Intelligence Service (SIS) in 1942 during the search for a “new and larger home” than
their previous headquarters in the Munitions Building on Constitution Avenue. The USAFSS
moved into Arlington Hall in 1948 as well, and although the space in the facility was limited, a
historical overview of the USAFSS published by the Air Force described it as “adequate for the
initial period.” At this point, Colonel Klocko’s responsibilities in creating the organization were
completed, and he requested a transfer to the Air War College at Maxwell Air Force Base, where
he would ultimately spend the next five years.55

This was not the end of the line, however. Soon after securing the freedom for the Air
Force to control its own COMINT effort, after which he changed the Air Force vote regarding
the creation of the Armed Forces Security Agency (AFSA), General Vandenberg classified all

54 Ibid., 65-66; Tart, Freedom Through Vigilance, 39; “A Continuing Legacy: From USAFSS to AF ISR
Security Service, 2.

the United States Air Force Security Service for the period 20 October 1948 to 31 December 1949,” U.S. Air Force
Security Service, 2; Klocko, 1987 interview, 62-63. AFHRA; Air Force Intelligence, Surveillance, and
Reconnaissance Agency (AF ISR Agency).
Air Force COMINT units as mobile, taking advantage of a loophole in the AFSA charter. Language in the AFSA charter stipulated that “mobile collection facilities” would remain the purview of the respective services, so Vandenberg “promptly defined all Air Force collectors – from reconnaissance aircraft to stationary intercept sites – as ‘mobile collection facilities.’” Thus, Vandenberg secured the COMINT support for the Strategic Air Command (SAC) that he wanted, and the Air Force was able to control its own fixed intercept sites without concern for external influence or regulation. Vandenberg’s organizational sleight of hand is another example of persistent efforts by the Air Force to construct a COMINT organization that effectively provided for Air Force needs and accommodated its interests in the intelligence community.\(^5^6\)

Vandenberg’s actions exemplified the Air Force desire to avoid external influence, which also explains the relocation of USAFSS headquarters to Brooks Air Force Base near San Antonio, Texas, at almost the same time. According to General Klocko, the top floor of Arlington Hall where the USAFSS was first headquartered was a “musty, dusty old place that had not been used for anything except storage,” but the command began looking for a new home because:

There was too much centralization in Washington. With Washington being the number one target, having our operation and headquarters remote meant we could continue to function in the event of attack. In fact, we even thought we conceivably could be the alternate headquarters of the entire COMINT enterprise, because the Army and the Navy could be wiped out.\(^5^7\)

\(^5^6\) Meilinger, Vandenberg, 124; Johnson, 26; Brownell Committee Report, 57-58.

\(^5^7\) Air Force Intelligence Oral History Program, “An Interview with Lt. Gen. Richard P. Klocko,” by Leslie Rosenzweig, 4 February 1975, 9-10. An initial historical report compiled by the USAFSS revealed that the Army Security Agency (ASA) was very cooperative in allowing the USAFSS to situate its headquarters at Arlington Hall, but rapid growth prompted the development of physical limitations that would ultimately force a relocation. The report also points out that Arlington Hall had “never been intended as more than a temporary arrangement.” In addition, the report provides a more nuanced representation of the relocation than Klocko’s straightforward explanation, revealing that alternate locations in the D.C. area were initially considered, but that these proposals were objected to by some in the command who felt that “maximum dispersal of facilities was highly desirable in the event of an emergency. “History of the United States Air Force Security Service for the period 20 October 1948 to 31 December 1949,” U.S. Air Force Security Service, 5.
Seen in the context of other Air Force decisions regarding the USAFSS, however, it is likely that concerns over surprise attacks and “too much centralization” were articulated to justify removing USAFSS from “geographical proximity to the central control authority for COMINT – at the time the Coordinator for Joint Operations, shortly to become the Armed Forces Security Agency. Thus USAFSS hoped to be insulated from any sort of outside control, which it regarded as bald interference in its affairs.”⁵⁸ Seen in this way the USAFSS move to Texas was a continued effort to preserve autonomy from external stakeholders and limit responsibility for external commitments.

Additional negotiations took place between the Army and the Air Force regarding the transfer of personnel, equipment, and COMINT capabilities, with the Air Force taking responsibility for COMINT functions as it gained sufficient resources to do so. Although a memo from Secretary of the Army Kenneth C. Royall to Secretary of Defense James Forrestal expressed doubts as to the financial merits of such transfers, specifically in terms of creating a unified military COMINT organization, the transfers took place nonetheless and furnished the USAFSS with men and equipment to begin the COMINT mission that the Air Force had coveted for so long. Even so the ASA was responsible for providing support to the Air Force in areas such as training, the operation of fixed intercept sites already in existence, and the air attaché program, and for a short period the Air Force was again obliged to rely on an outside entity for these services. The USAFSS began procuring and training its own personnel in short order,

however, and soon was operating as an effective and independent member of the post-World War II American intelligence community.\textsuperscript{59}

**Constructing Excellence: USAFSS Training and Security Protocols**

When the USAFSS began operations in 1948, it did so with personnel that were already trained in COMINT activities – units that had been transferred from the U.S. Army to the Air Force under agreements regarding the COMINT responsibilities of the two services. These initial transfers did not provide enough personnel for the command’s planned expansions and operations, and the USAFSS soon needed to train its own recruits. A quick and easy solution was not forthcoming, however. According to the official history of this early period, the “USAFSS was faced with the problem of obtaining several hundred highly skilled specialists, trained in very limited fields, at a time when the whole Air Force was suffering an acute shortage of all kinds of personnel.” This was complicated by the nature of the USAFSS mission, which required careful consideration in the selection of personnel. While the command worked diligently to address issues of personnel procurement, training, budgeting, and the establishment of a historical program, testing programs developed by a joint service committee were instituted to help manage the influx of recruits from the peacetime draft in 1948. Basic aptitude testing provided scores in basic occupational specialty areas, which subsequently helped commands like the USAFSS identify and select recruits based on their potential ability in skills needed for work.

\textsuperscript{59} Memorandum for Mr. Forrestal, “Unified Armed Forces Security Agency,” from Kenneth C. Royall, Secretary of the Army, 24 July 1948; Memorandum for the Directors of War Department General Staff Divisions; The Chiefs of War Department Special Staff Divisions; The Chiefs of Technical and Administrative Services; The Chief of Information, “Separation of the Air Force from the U.S. Army,” By Direction of the Deputy Chief of Staff, 16 September 1947; “Transfer of Selected Communication Intelligence and Communication Security Functions,” Joint Army and Air Force Adjustment Regulations No. 1-11-54, 31 December 1948. DNSA.
in the command. In addition, to cope with personnel procurement issues, the USAFSS was given top personnel priority (Group I, Precedence I) in order to fill manpower shortages.60

Training for USAFSS assignments was intense, designed to produce quality personnel and protect the confidentiality of the program. After basic training airmen were placed in specialized training based on the needs of various commands and on the results of earlier aptitude testing. The USAFSS required candidates to go through teletype school, radio school, Morse and non-Morse training, and foreign language classes for various assignments within the command. Former USAFSS personnel interviewed for the purposes of this research referenced “many tests” during training and described the intense, compartmented training regimen that prepared candidates for assignment within the USAFSS. Given that the USAFSS was such a secretive organization with a highly classified mission, training was compartmentalized so that airmen who failed to pass through all phases of the program would not come into contact with sensitive information to carry away with them. Instead, airmen who did not pass a certain component of testing would be placed back at the beginning with the new incoming class, and failure to pass a second time would result in phasing out of the program entirely. These specific training requirements also influenced how the command initially procured personnel for assignment with the USAFSS. Working with the Air Training Command, the Technical Division, and Indoctrination Division, the USAFSS established a program that provided for the transfer of a monthly personnel quota from among the graduates of technical schools.61


61 Oral History Respondent No. 7, 25 May 2014; Respondent No. 4, 3 June 2014. The first USAFSS history points out that personnel selected through the collaboration with the Air Training Command and other divisions were “selected by classification specialists of the Indoctrination Division on the basis of test results and indicated
The USAFSS also carefully evaluated potential candidates before assigning them to duty with the command. Airmen under consideration were required to fill out detailed personal histories, undergo psychological evaluation, and successfully pass extensive background checks. The FBI was responsible for conducting most of these background checks, although in one case a respondent revealed that his background check was conducted by the Air Force Office of Special Investigations Inspector General (OSI-IG). Agents would visit the candidate’s hometown and

aptitude for training in specialties needed by the USAFSS,” and that some of these personnel were “directed to technical schools, earmarked for assignment to USAFSS upon graduation.” The USAFSS thus endeavored to secure quality personnel and protect the confidentiality of its command simultaneously. “History of the United States Air Force Security Service for the period 20 October 1948 to 31 December 1949,” U.S. Air Force Security Service, 15.
interview teachers and acquaintances to construct a more complete understanding of the
candidate’s personal history and potential for success – and discretion – in a USAFSS
assignment. Altogether these measures were used to produce a group of qualified, loyal, and
responsible candidates. One respondent recalled being informed that only half of one percent
(0.005%) of all enlisted airmen were considered for USAFSS assignments, and that the
psychological evaluations and background checks provided the final group of candidates.
Finally, in keeping with the clandestine nature of the command, candidates were not informed
that they had been assigned to the USAFSS until the final weeks of training or until arriving
overseas, and many were not aware of the command’s function until after an orientation
presentation.62

The USAFSS rewarded outstanding performance. One respondent openly observed that
airmen who scored at the top of their class in specialized training were given their choice of
overseas assignments, while another respondent, who recalled being given such a choice, simply
assumed that the USAFSS was in need of additional personnel at the installments in question.
The reality most likely lies somewhere in between these two perspectives, but in either case, at
least some airmen being assigned to the USAFSS had the power to choose an overseas post at
which to serve. In some cases, specialized training alone did not completely prepare candidates
for overseas duty, and some airmen were required to work in unrelated positions while waiting

62 Oral History Respondent 3, 2 March 2015; Respondent No. 7, 25 May 2014; Respondent No. 4, 3 June
2014; Respondent No. 1, 20 August 2015; Respondent No. 8, 24 September 2015; Respondent No. 2, 19 December
2015; Respondent No. 11, 30 January 2016. The first USAFSS history observed that “due to the unique character of
the mission of USAFSS, considerable care had to be exercised in selecting personnel to man the Command.” While
the recollections of former USAFSS personnel provide a vivid representation of daily life and training in the
command, the observations of USAFSS historical staff reveal the significant challenges the command faced, first
acquiring personnel and then assigning interim tasks while waiting for security clearances to come through.
Background investigations took time, and so “limited utilization” of uncleared personnel was “achieved by assigning
them to jobs not requiring clearance while they awaited completion of the required investigation.” Once clearances
arrived the USAFSS could assign personnel to more useful and appropriate positions within the command. “History
of the United States Air Force Security Service for the period 20 October 1948 to 31 December 1949,” U.S. Air
on additional security clearances to be finalized. A specific example of this is the case of a cryptologic (or crypto) teletype operator who, trained in teletype, required additional clearance to begin work as a cryptologic operator after arriving overseas. Crypto operators, responsible for taking information that had been gathered through daily intercepts and sending it back for distribution via encrypted teletype communications, required a higher level of security clearance than intercept operators.63

Security protocols controlled all USAFSS activities. As mentioned above, airmen were frequently unaware that they had been assigned to the USAFSS until the final weeks of specialized training or until arriving overseas – a precaution designed to prevent sensitive information regarding the command from spreading beyond a small “need to know” population. Assignment to the USAFSS required a top-secret security clearance at a minimum, and then additional code word and cryptologic clearances depending on the specific position in question. Specialized training and classified orientation imposed strict confidentiality restrictions upon USAFSS personnel, who were forbidden from discussing their responsibilities with anyone outside of training rooms or workstations. One respondent recalled that the CIA maintained a covert presence on the overseas base in order to monitor personnel and any security violations, and that in the event of an emergency, USAFSS personnel were considered elite due to the expense of their specialized training and would be evacuated ahead of women and children. So ingrained were these instructions that USAFSS personnel maintained confidentiality in their personal lives and for decades after separating from the Air Force, not even revealing

63 Oral History Respondent No. 7, 25 May 2015; Respondent No. 11, 30 January 2016. The practice of maintaining uncleared personnel in temporary positions before receiving the appropriate clearances has already been noted. Different occupational specialties existed within the USAFSS, with their own unique clearance levels, and with the development of the Air Force Career Program and USAFSS training schools it became clear that “several categories” of uncleared personnel would require additional training while awaiting their appropriate clearances. “History of the United States Air Force Security Service for the period 20 October 1948 to 31 December 1949,” U.S. Air Force Security Service, 17-18, 46-47.
information to their spouses until declassified information began appearing in popular news publications many years later.\textsuperscript{64}

These precautions were not without merit. Though they may have been no more than rumors, reports of espionage nonetheless circulated among USAFSS recruits, suggesting that the Soviet KGB maintained dossiers on USAFSS personnel, sent agents to enlist and go through specialized training alongside USAFSS candidates, and even sent “welcome” messages through encrypted transmissions when airmen arrived overseas for duty. Without specific examples it is difficult to determine whether these claims are accurate or were simply devices training officials used to impress upon newly inducted recruits the need for absolute secrecy. Regardless, such reports indicate the level of international engagement at which USAFSS personnel operated.

Airmen assigned to the USAFSS were pitted directly against the pilots and cryptographers of a foreign power. As a result, the USAFSS cloaked itself in a shroud of secrecy, obscuring the command from all except those with the “need to know,” including many within the Air Force itself. Air Force recruiters were not aware of the command, many training officials did not know what it was, and even high-ranking officers in the Strategic Air Command (SAC), a command that enjoyed the highest priority in the Air Force, could not change the orders of USAFSS personnel.

\textsuperscript{64} Oral History Respondent 3, 2 March 2015; Respondent No. 7, 25 May 2014; Respondent No. 4, 3 June 2014; Respondent No. 1, 20 August 2015; Respondent No. 11, 30 January 2016. As mentioned above, uncleared personnel were required to work in unrelated or basic positions until the arrival appropriate security clearances granted them access and assignment to specific USAFSS tasks. While there is insufficient documentation to corroborate the CIA monitoring of security at USAFSS overseas installations, the National Security Act of 1947 did in fact authorize the CIA to protect “intelligence sources and methods from unauthorized disclosure,” as part of its duties “coordinating the intelligence activities of the several Government departments and agencies in the interest of national security.” The extent of such protection and of CIA-DOD intelligence cooperation is not indicated, however. Otherwise USAFSS operational and communications security was the responsibility of the Directorate of Security, USAFSS. The Directorate’s responsibilities included cryptographic issue and control, research and development of communications security equipment, development of a cryptographic checklist for use in the inspection of USAFSS facilities, and other duties. See National Security Act of 1947, Section 102, paragraph (d) and item (d)(3); “History of the United States Air Force Security Service for the period 20 October 1948 to 31 December 1949,” U.S. Air Force Security Service, 51-57. USAFSS correspondence with the State Department in 1951 confirms the development of special evacuation plans for USAFSS personnel: “History of Project PENN, 1951-1953,” Historical Division, United States Air Force Security Service, Brooks Air Force Base, San Antonio, Texas, 52.
personnel. Early in its organizational period the USAFSS was given top priority for personnel procurement in order to ameliorate manpower shortages, and the first outline of functions directed that personnel could not be transferred to or from the USAFSS without prior approval from the Headquarters of the Air Force in each case.  

Each training decision and security protocol reflected the overall impetus within the Air Force and the USAFSS to construct and maintain an elite, independent, and effective COMINT agency. USAFSS personnel took pride in the organization’s composition as a primarily enlisted command, staffed as it was by a tight-knit group of highly trained, discreet, and dedicated enlisted recruits. The sensitive nature of the USAFSS mission required that extreme care be taken in the selection and training of USAFSS personnel, and the security measures put in place were designed to protect the confidentiality and effectiveness of the organization. Ultimately, the training and security standards used by the USAFSS were only two elements of the overall command, but they were perhaps two of the most important, presiding as they did over the airmen who would actually be responsible for the day-to-day operation of a technologically adept and secretive intelligence agency.

**Conclusion**

Securing an independent COMINT capability for the Air Force had been accomplished through a long and complex journey. Once equipped with the authority to develop and manage its own COMINT agency, however, the Air Force set about making sure that the agency’s

---


organization reflected the priorities of the Air Force and could fulfill its COMINT responsibilities successfully. Even though air officials were obliged to rely on outside support for a short period of time following the separation of the Air Force from the Army, they used this time to develop an effective organizational structure, isolate their new capability from external control, recruit and train a highly skilled enlisted force, and meet the challenges of Cold War intelligence gathering head on. The following chapter will explore the functions that the USAFSS was expected to provide for the Air Force and evaluate the details of USAFSS operations in order to ultimately determine if long-held hopes for an effective Air Force COMINT agency were in fact realized.
Chapter 3: Getting It Done: The USAFSS and its Global Mission

Previous chapters have illustrated the emergence of the U.S. Air Force Security Service (USAFSS) as a unique, secretive, and highly specialized communications intelligence (COMINT) organization, established after World War II by the newly independent U.S. Air Force. Having dealt with continual attempts by its counterparts to sideline air intelligence efforts during the war, the Air Force was intent on creating a COMINT structure that would provide valuable information and serve Air Force needs effectively without having to answer to an external authority. Air officials prepared for this by planning the organization in the waning years of World War II, while still a part of the U.S. Army. After the war ended and after the National Security Act granted independence to the Air Force, intelligence officials continued the process by establishing a unique and effective organizational structure for their COMINT service and laying the groundwork for excellence by requiring intense training and security protocols. These initial developments are explored in the first two chapters of this study. The current chapter will examine the functions that the USAFSS was designed to perform as a result of these arrangements, and will evaluate how the organization went about fulfilling those responsibilities through an examination of the agency’s worldwide missions.67

---

Overall this study seeks to understand why the U.S. Air Force was so motivated to create its own COMINT capability following World War II. As an intelligence organization focused primarily on gathering COMINT relating to the Soviet Union, the USAFSS was the result of several years’ careful planning and was established in the midst of intense debate regarding the future organization of the U.S. military COMINT community. For much of this debate the Air Force was opposed to the unification of military intelligence efforts, changing its vote only after being assured of control over its own COMINT agency. Several years of past experience had shaped this decision, leading the Air Force to exercise all the influence it could muster – including the outlay of political capital – in order to preserve its autonomy and that of its subordinate structures. Accordingly, this study asks what motivated the Air Force to construct a COMINT organization, how it envisioned this organization taking shape, what functions it was expected to provide, and whether or not the USAFSS was successful in achieving those goals during the early Cold War.

This chapter in particular focuses on the latter element of that question – examining the expectations placed on the USAFSS by the Air Force and exploring the different ways in which the agency mobilized to meet those expectations. Earlier chapters have explored the long and complex history that led to the creation of the USAFSS, and have established how Air officials went about creating what they intended to be an elite and successful COMINT unit by setting up a unique organizational structure and requiring intense training and security protocols. These investigations provide support for the overall argument that the Air Force was eager to establish its own COMINT capability in response to a long history of resistance and competition that Air intelligence efforts had faced during World War II. This current chapter will add confirmation of

this argument by examining the specific responsibilities of the USAFSS and exploring various ways in which the organization mobilized to perform these responsibilities. In addition, persistent efforts by the USAFSS to manage its own missions and limit external influence over its affairs support the conclusion that the Air Force hoped to avoid bureaucratic entanglements by creating an elite COMINT capability that could provide effectively for Air Force needs without relying upon non-Air Force efforts.

Connections between the USAFSS and organizational theory have been explored. The USAFSS is an example of an organization whose past organizational experience significantly influenced how the organization both defined its mission and carried on operations after achieving a greater degree of autonomy. It also exemplifies the organizational drive for increased autonomy as a way of reducing executive responsibility for organizational maintenance. Bureaucratic negotiation is important as well, however. When the National Security Agency (NSA) replaced the Armed Forces Security Agency (AFSA) in 1952 as the coordinating body for military COMINT efforts, the USAFSS was obliged to renegotiate its authority over its own activities. Thus, building on the foundation of organization theory established earlier, this chapter explores negotiation as a specific aspect of organizational behavior.68

This chapter will rely on a combination of official Air Force and Executive Branch documents and historical studies commissioned by certain of the organizations involved in order to present a clear understanding of both the services that the USAFSS was designed to provide, and the specific ways the organization mobilized to fulfill those duties. Select first hand recollections are again used to highlight specific operational details. This analysis will include a focus on documents outlining the mission and responsibilities of the organization that are

missing key words and phrases due to redaction and declassification review processes, and using other documents for corroboration, attempt to explain the information obscured. In addition, this chapter will also examine the different methods and respective military installations that the USAFSS used to carry out its mission, including a discussion of technological innovation and the concept of mobility, identified by the founder of the organization as one of the agency’s most important contributions to the intelligence field.

Fighting for Control: The USAFSS Mission

The primary mission of the USAFSS was COMINT – as confirmed by a variety of sources. The Directorate of Intelligence report to the Joint Chiefs of Staff committee regarding the budget deficiencies for FY 1949 and a proposed budget for FY 1950 clearly identified COMINT as the primary responsibility of the Supplemental Resources Branch (SRB). Colonel Richard P. Klocko had been in charge of the SRB’s U.S. Army counterpart, and when the National Security Act created a separate U.S. Air Force, Klocko was transferred and given the task of establishing an effective COMINT organization for the newly independent Air Force. Klocko did so, ultimately suggesting the plan that positioned the USAFSS as a major air command, not responsible to the Directorate of Intelligence or to the Air Force Communications Service, but directly responsible to the Air Force Chief of Staff. Klocko reflected that his time with the Army COMINT was likely preparation for his assignment in the Air Force, saying “I think . . . that I was put in charge of this Special Research Branch in G-2 with the idea that ultimately there was going to be a separate Air Force and that I was in there for this year so that I
could go and be the focal point for this activity in the Air Staff and in the Air Force.” So he was, and the USAFSS was established as a major command on 20 October 1948.69

Interestingly enough, several consecutive documents outlining the functions of the USAFSS do not mention COMINT, only allowing the COMSEC responsibilities of the command to show through. These documents are heavily punctuated with suggestive redactions, however, as illustrated by this excerpt from the first outline of USAFSS functions:

6. The USAF Security Service will be responsible for the following communication security activities:
   a. The operational command and direction of all communication security units and personnel assigned to the USAF Security Service.

   d. The preparation and coordination of military characteristics and operational requirements and coordination of the research and development of communication security equipment.

   e. The preparation, production, and publication of key lists and related items for use with Air Force cryptographic systems

   f. The storage, distribution, and accounting for all cryptographic systems and equipment held by the Air Force. Existing facilities and procedures will be used where feasible.

   g. The preparation of operating and maintenance instructions for cryptographic equipment and related systems developed and used exclusively by the Air Force; collaboration in the preparation of operating and maintenance instructions for jointly developed and used cryptographic systems and equipment. Security classification of the aforementioned equipment and related systems will be a responsibility of the agency developing the equipment.

   h. The cryptographic and transmission security of Air Force communications.

   i. The establishment of requirements for personnel for the USAF Security Service and other communication security units and the assignment and promotion of such personnel within the Air Force units engaged in this activity, in accordance with established Air Force policies.

j. The organization and training of all units and provision for the specialized training of all individuals engaged in Air Force security activities.

k. The determination of doctrines and techniques and the preparation of training literature and field manuals.


m. The budgeting for Air Force cryptographic equipment in coordination with the Budget Section, Directorate of Communications, and for the necessary expenditures in the discharge of the communication security activities.

7. Although control of the USAF Security Service will be exercised by the Deputy Chief of Staff, Operations the Director of Communications will continue to exercise staff supervision at the Headquarters USAF level over all matters pertaining to cryptography and communications security in coordination with the Director of Intelligence.

Following almost every single redaction, with the primary exception of the missing content of points (b) and (c) and redaction in paragraph seven, the obscured text is followed by the words “communication security.” Therefore, inserting the words “communication intelligence” or “COMINT” into the redacted areas dovetails with the surrounding content, and based on the text in paragraph seven – highlighting the close collaboration between the Air Force Communications Service, the USAFSS, and the Director of Intelligence – the responsibilities of the USAFSS for COMINT emerges as a reasonable conclusion.

This initial document was superseded by another outline of functions in 1952, which was replaced by yet another version in 1958. Only the 1958 document clearly identifies COMINT as a primary mission of the USAFSS, succinctly stating that the “mission of USAFSS is to collect, process, and disseminate COMINT, ELINT, and RADINT, as directed; to provide COMSEC and ELSEC services to the Air Force; and to operate and administer the AFSSO [Air Force Special Security Office] system.” Specifically, these activities involved:

70 Department of the Air Force AFOIR-SR 322, “Functions of the USAF Security Service,” to Commanding Generals, Major Air Commands in ZI and Overseas, 20 October 1948. DNSA.
9. RESPONSIBILITY FOR COMINT MISSION. The Commander, USAFSS, is responsible to the:

a. Director, National Security Agency (NSA) for:
   (1) Intercepting foreign communications, as directed.
   (2) Producing and reporting COMINT, as directed.
   (3) Providing COMINT support to designated Air Force commanders, as authorized.
   (4) Performing such COMINT research and development tasks, as directed.

b. Chief of Staff, USAF, for:
   (1) Disseminating COMINT within the Air Force in accordance with policies established by the Assistant Chief of Staff, Intelligence, Headquarters USAF.
   (2) Collecting COMINT produced by other COMIN agencies and disseminating this COMINT to authorized recipients specified by the Assistant Chief of Staff, Intelligence, Headquarters USAF.
   (3) Maintaining and supporting a quick reaction capability laboratory necessary to design, fabricate, and shop-test equipments required to meet operational requirements. These equipments generally involve the application of known techniques and components.  

The document went on to outline the missions of the USAFSS with regards to electronic intelligence (ELINT), radar intelligence (RADINT), communications security (COMSEC), and electronic security (ELSEC). This serves as an indication of how far the technical capabilities and thus the responsibilities of the organization had developed since its initial establishment. The early focus on the collection of COMINT and COMSEC had expanded to include two other types of intelligence and another security responsibility. Intelligence, however, remained the primary focus of the USAFSS.  

One major difference obvious in the 1958 document was that by this time the USAFSS had become responsible to the NSA for portions of its mission. The NSA had been created to replace the dysfunctional Armed Forces Security Agency (AFSA) in 1952 and exert a stronger

---


72 See also Department of the Air Force, HQS USAF, Washington 25, D.C., to Commanding General, Strategic Air Command, Offut AFB, Omaha, Neb., “(Confidential) Communications Intelligence Support,” 28 November 1950. DNSA.
level of control over the activities of the individual military COMINT elements. As indicated in the 1958 document:

7. ORGANIZATION. USAFSS is established as a major air command and organized to operate within the procedural functions, authorities, and responsibilities of a major air command, except as indicated herein. All COMINT collection and production resources of USAFSS are under the operational and technical control of the Director, NSA. The Director, NSA, exercises such administrative control over USAFSS COMINT activities as he considers necessary for effectively performing his mission. All other resources of USAFSS are under the operational control of the Commander, USAFSS, who is responsible to the Chief of Staff, USAF. To carry out its mission and functions, USAFSS is provided a headquarters and such units, establishments, facilities, and personnel as considered necessary by the Commander, USAFSS, and approved by the Chief of Staff, USAF, and the Director, NSA (when applicable).73

Under AFSA the USAFSS had been able to avoid significant joint responsibilities, moving away from the D.C. area where the majority of military COMINT efforts were physically located and allocating only a small contingent of personnel to the efforts at AFSA, whereas the Army and the Navy were both required to donate around eighty percent of their D.C. area billets to AFSA. As a coordinating agency, however, AFSA was not successful – as illustrated by COMINT efforts during the Korean War.74

Korea was the first real-world test of both the USAFSS and an independent Air Force, at least in terms of actual combat operations. While Air Force fighters and bombers were able to mobilize to great success during the war – maintaining complete air superiority over Korea and preventing defeat of the UN forces more than once – the USAFSS debut was a more turbulent affair. Due to previous transfers of COMINT units from the U.S. Army, the 1st Radio Squadron Mobile (RSM) was already in Tokyo in 1950, and was directed to establish a COMINT mission in Korea. The 1st RSM encountered a jurisdictional conflict with the COMINT efforts of the 5th Air Force, however, which was already operating in the area and did not cooperate with the

74 Johnson, American Cryptology, 26-30.
USAFSS attempt to set up an additional COMINT operation. Nevertheless, despite these initial
difficulties the USAFSS was soon able to establish an effective tactical COMINT enterprise,
intercepting voice transmissions from Chinese, Korean, and Russian sources.\textsuperscript{75}

![Image of operators in a control room](image)

Figure 3.1 – Operators of the 15\textsuperscript{th} RSM in Korea, ca. 1951. Courtesy of the U.S. Air Force
Intelligence, Surveillance, and Reconnaissance Agency.

Specifically, the primary responsibility of RSMs in the USAFSS at the time was to
collocate with and support the Tactical Air Control Center (TACC), so that “direct tactical
warning” could be provided as efficiently as possible. While initially the USAFSS had relied
primarily on information gathered from Soviet intercepts, soon these sources began to disappear,

\textsuperscript{75} Johnson, 46-50; “A Continuing Legacy: From USAFSS to AF ISR 1948-2012,” U.S. Air Force
Intelligence, Surveillance, and Reconnaissance Agency, 5-6; Boyne, Beyond the Wild Blue, 51-94.
using very high frequency (VHF) transmissions instead of the low-level voice communications the USAFSS was intercepting previously. In addition, the Chinese began to redirect their aircraft traffic efforts, making it impossible for the USAFSS to disguise transmissions to TACC as radar plots as it had been doing. Support to TACC had to continue, however, so USAFSS operators improvised, creating a model for tactical COMINT warning operations at Cho-Do Island that would be used later on in Vietnam. By positioning a USAFSS linguist near the TACC controller and giving him a direct line to an intercept unit in the field, the USAFSS was able to provide enhanced support to Air Force operations in Korea, enabling fighter pilots to engage and defeat a greater number of opponents, even when the enemy planes did not appear on radar.\(^76\)

While episodes such as this illustrate the overall success of USAFSS operations during the Korean War, and while AFSA also made valuable COMINT contributions to the war effort, Korea at large was not regarded as a successful demonstration of COMINT coordination. The war took place during a period of upheaval in the COMINT community, and the pressures of an active war “highlighted the fissures in the structure,” which in turn “made prosecution of the war more difficult. AFSA wrestled with the SCAs [service cryptologic agencies] over control of intercept positions and targets throughout its existence, and many of those battles were related to the war effort.” These problems led Walter Bedell “Beetle” Smith, Director of the CIA, to request an official evaluation of the military COMINT structure. President Truman accordingly authorized the “Brownell Committee” to study the condition of American COMINT efforts, and the recommendations of that committee ultimately gave rise to the NSA as the replacement for AFSA in 1952.\(^77\)

\(^76\) Johnson, 51-54.

\(^77\) Ibid., 33-54.
The replacement of AFSA by the NSA forced the USAFSS to renegotiate its authority over its own missions and responsibilities. Whereas the USAFSS had been relatively free of external obligations under AFSA control, the NSA was created to impose tighter restrictions over the COMINT activities of the individual military services, thus threatening the autonomy that Air Force officials had worked so hard to establish. In 1952 President Truman revised National Security Council Intelligence Directive No. 9 (NSCID 9), giving the Director of the NSA (DIRNSA) control over all military COMINT activities, in accordance with the recommendations of the Brownell Committee. The Secretary of Defense then directed the
secretaries if the Army, Navy, and Air Force – as well as the Joint Chiefs of Staff and DIRNSA – to appoint representatives to a working committee that would develop directives for effective implementation of the NSCID 9 revisions. Accordingly, the USAFSS was requested to compose a draft of recommendations for the “unified collection, production, and control of U.S. COMINT” in keeping with Air Force objectives, thus beginning a dialogue between the NSA and the USAFSS that continued for the following two years, as the USAFSS negotiated persistently for recognition of responsibilities and control over its own missions considered central to Air Force operations.  

Anthony Downs describes the scenario faced by the USAFSS in terms of organizational theory, observing that while few organizations “ever achieve such perfect autonomy that they are immune from threats to their survival,” they can reach a point where size and age that allows organizations to perform useful services and develop “routinized relationships” with major clients. Downs refers to this concept as an organization’s “initial survival threshold,” but points out that sometimes organizational opponents will try to suppress or incorporate core activities into their own organization, and block the smaller organization from “establishing a strong external power base.” In these cases Downs observes that smaller organizations may be obliged to fight “strongly” in order to “avoid being disbanded or swallowed” by larger opponents. Negotiation with various “constituencies” is a vital part of this process, as outlined by James Wilson, who observes that the principal task of executives is to negotiate with “various internal and external constituencies to reduce stress and uncertainty, enhance organizational health, and cope with a few critical problems,” or put simpler, to curry favor and placate critics.  

---


In large part the USAFSS was successful in its negotiations with the NSA. Between October 1952 and September 1954 a number of proposals, rejections, recommendations, and negotiations were sent back and forth between the two agencies, frequently resulting in concessions by the NSA in favor of recommendations and requests made by the USAFSS. These agreements focused on a wide variety of different aspects, from COMINT analysis to close field support requirements, and matters in between. Of particular significance was the establishment of a third-echelon processing capability within the USAFSS, which the NSA opposed but could not force the USAFSS to abandon. The USAFSS created its third-echelon processing unit – the Air Force Special Communications Center (AFSCC) in 1953, first designated as the 6901st Special Communications Center, to analyze and process intercepted COMINT material for consumption by Air Force commands. The AFSCC was established during a concerted decentralization effort at the NSA – ironic given the earlier impetus of the USAFSS to move away from Washington while the other military COMINT structures remained in the area. The USAFSS took advantage of the opportunity this reversal provided to establish the AFSCC, and despite adamant opposition by the NSA, became a “virtual third echelon competitor to NSA.”

The USAFSS seemed to have a peculiar power to achieve its own objectives in negotiations with the NSA. The substantial freedom of the USAFSS to govern its own affairs was obtained partially through negotiations and partially by ignoring NSA authority, with relative impunity. Relations between the NSA and the USAFSS were the notable exception in the otherwise “unrestrained” control the NSA exercised over the other military COMINT agencies after 1952. General Klocko attributed this dynamic to the fact that in his opinion, neither the Army nor the Navy pressed the NSA for the freedom to maintain their analytical or processing capabilities. Since the entire “air problem” was covered by the USAFSS at its

80 “Special Study of AFSS-NSA Relations;” Johnson, 78-83.
headquarters, Klocko concluded that it “gave us dynamism, and an ability to talk with them [NSA] on a level that the other services did not enjoy. For all intent and purposes, we were a thorn in their side because we could argue knowledgeably with them.” The degree to which Klocko’s observations are representative of the actual relationship between the NSA and the USAFSS is difficult to determine, but the USAFSS was designated as the secondary operations center for COMINT activities in the event that the NSA was incapacitated. Such developments indicate that the persistent USAFSS efforts to retain autonomy did in fact achieve results that were acceptable to Air Force leadership.  

Accordingly, upon its establishment as a major air command the USAFSS was given the responsibilities of providing for the COMINT and COMSEC needs of the U.S. Air Force. Direct authority over these responsibilities was a privilege the USAFSS found it necessary to protect throughout the initial years of its operation, through a combination of persistent negotiation and outright defiance of NSA authority. First under the control of AFSA and then the NSA, the USAFSS fought tirelessly to construct a successful COMINT agency and maintain control over the collection and production of intelligence for Air Force commands. Actually fulfilling these responsibilities would prove another matter entirely, but as the USAFSS mobilized to collect COMINT information regarding the Soviet Union and other communist powers, the organization would eventually construct a worldwide empire of COMINT installations and develop significant technological capabilities to perform its mission as effectively as possible.

81 Klocko, 1975 interview, 13-14. As a counterpoint to Klocko’s position, observations made by Major General Gordon A. Blake during his tenure as USAFSS commander reveal his opinion that USAFSS operations could be improved by developing a closer working relationship with the NSA, as opposed to the widespread mistrust of the agency prevalent in the ranks of the USAFSS. Nevertheless, Blake’s memo does confirm that the USAFSS often mistrusted the NSA due to its authority to relieve the command of certain responsibilities the USAFSS would have preferred to maintain independently. General Gordon A. Blake to General Thomas D. White, Air Force Chief of Staff, 3 August 1959. DNSA. Director of NSA to Distribution, “Communications Planning for the NSA Alternate Headquarters,” 27 December 1960. DDRS.
Ground Stations: Building an Intelligence Empire

As the need for reliable information about the Soviet Union increased during the early days of the Cold War, American COMINT efforts were faced with the need to locate COMINT collection assets where signals emanating from Russia and other important targets around the world could be easily intercepted. Following World War II the U.S. military already possessed or had access to a few such sites, but demobilization after the war had forced American intelligence operators to abandon several of these overseas installations. After the 1st, 2nd, and 8th RSMs were transferred from the Army to the Air Force in early 1949, the USAFSS was equipped with COMINT assets in Germany and Japan, and soon took steps to add additional units as well. Soon the USAFSS had constructed a network of listening posts around the world, situated on American military bases or bases leased to the American military from the host country. Known as ground stations, these installations would form the basis of a widespread COMINT empire throughout the Cold War.82

The first overseas assets of the USAFSS were the RSMs previously operated by the U.S. Army – the 1st RSM in Tokyo, Japan, and the 2nd RSM in Herzogenaurach, Germany. Both were holdovers from SIGINT operations during World War II and were transferred from the Army to the Air Force on 28 January 1949. Neither were operating at significant levels at the time of their transfer, though the 1st RSM would soon become involved in the Korean War, providing COMINT support for the Air Force and UN forces. The 2nd RSM soon relocated to Darmstadt, Germany, and in 1950 became the first USAFSS unit to develop voice intercept capability. The American military had used voice intercept to some degree in the waning years of World War II

82 “Transfer of 1st, 2nd, and 8th Radio Squadrons, Mobile, and 136th Radio Security Detachment from the Department of the Army to the Department of the Air Force,” Departments of the Army and the Air Force to Chief of Staff, U.S. Air Force Directorate of Intelligence, GSUSA, 28 January 1949; Richelson, American Espionage, 73-76. DNSA.
but had not begun training Russian linguists until the late 1940s. With the new focus on the Soviet Union Russian voice intercept capability became a priority, and in early 1950, three USAFSS airmen graduated from the U.S. Army’s Russian Liaison Agent and Interpreter’s School in Oberammergau, Germany, to become the first Russian linguists in the command. The 2nd RSM, Detachment D in particular, eventually became one of the most important USAFSS intercept installations, conducting “dozens of COMINT, ELINT, and RADINT” operations together with “associated analysis.”

Soon it became clear that the USAFSS needed additional ground stations in order to carry out its mission effectively. In 1951 the commanding general of the USAFSS brought this to the attention of his superiors at a commanders’ conference, stating that the USAFSS was facing “difficulties in locating and securing sites throughout the world required for deployment of our units in order that they may accomplish their mission.” The Air Staff responded by explaining the complex and time-consuming process necessary for securing access to foreign sites, specifically:

The time lag in procuring rights for USAF units in foreign sovereign territories is caused by the detail involved in developing requirements, coordinating these requirements with the Departments of the Army and Navy and their submission to the Department of State with the request to negotiate with the appropriate foreign governments for rights to survey and/or establish facilities. These are all time consuming in a high degree. This is particularly true in connection with the USAF Security Service requirements because of the high security classification involved. Discussions with foreign governments proceed only as fast as the foreign government desires and this is frequently very slow. Because of these necessarily slow procedures which must be followed in matters of this type, no accurate date can be forecast for conclusion of any negotiations.

While this explanation did not promise anything to the USAFSS, its comments regarding the difficulties faced by the USAFSS in particular do serve to indicate the sensitive nature of

---


84 Deficiency Stated by CG, USAF Security Service, 5 December 1951. DNSA.
USAFFS international operations. The highly clandestine nature of the USAFSS mission caused the acquisition of foreign facilities to be particularly challenging – but the Air Staff went on to recommend a list of action items that would assist the USAFSS in these efforts, revealing that the Air Force took the requests of the command quite seriously. Specifically:

The office of the Assistant for Air Bases, DCS/O, has taken positive action to satisfy every request received from USAFSS to date. This action includes:

1) Request thru channels to Department of State to secure permission for site surveys in Iran, Greece, Italy, Denmark, Turkey, and China. No results from this action to date.

2) Directive to CINUSAFE to negotiate with British Air Ministry for site for 37 RSM. This has resulted in tentative offer for one site at Kirknewton, Scotland. CINUSAFE has been directed to proceed towards immediate conclusion of agreement to secure this site.

3) Directive to CINUSAFE to negotiate with British Air Ministry to secure permission for site surveys on Cyprus and Malta. This has resulted in the Air Ministry denying permission to survey on Malta. Local authorities on Cyprus have been asked by Air Ministry to clear our survey team. No answer to this request has been received to date.

4) It has been suggested that USAF Security Service contact Director of Manpower and Organization to obtain a portion of total troop spaces available in French Morocco. This approach has been made to Director of Manpower and Organization who authorized direct communication on this subject between USAFSS and CINUSAFE. Information on this matter should be obtained from Director of Manpower and Organization. \(^{85}\)

It is unclear whether or not ground sites in China, Cyprus, Denmark, or Iran ever materialized. However, within approximately four years the USAFSS was operating numerous units in Austria, Canada, Crete, England, Germany, Japan, Korea, Libya, the Philippines, Taiwan, and Turkey, in addition to units in the contiguous United States and Alaska. In subsequent years this network would expand to include installations in Greece, Guam, Pakistan, Thailand, and Vietnam. \(^{86}\)

---

85 Air Staff Comment on Deficiency Stated by CG, USAF Security Service, 5 December 1951. DNSA.

Early on the USAFSS found England to be a particularly valuable location for intercepting Soviet transmissions, and one of the first listening stations established in Britain was the USAFSS installation at the former Royal Air Force (RAF) base in Kirknewton, Scotland. Some experimentation with various antenna platforms was necessary before a satisfactory array was established, but in May 1952 the installation was able to begin operations. Conditions were harsh for the first few years, as constant construction, rain, and aging facilities plagued the initial inhabitants. Operations continued, however, with an influx of personnel in late 1953 bringing the USAFSS contingent to over four hundred airmen. Initially the unit focused on Morse intercepts, later adding voice, radar, facsimile, and intercepts from Soviet domestic news feeds as well. Operating under the purview of USAFSS units at Chicksands, England, the Kirknewton installation soon became responsible for military, commercial, and diplomatic intercepts relevant to the Air Force mission and NSA interests.87

In keeping with the clandestine nature of the USAFSS, security at these ground stations was tight. COMINT activities were conducted in a communications compound, or comm center, which included space for a number of radio intercept workstations and a cryptologic operations room. The comm center was the most heavily guarded and compartmentalized facility on base, and often constituted the primary function of the base at large, all other units serving in only a support capacity for base maintenance, supply, etc. Occasionally USAFSS operations would be provided a cover mission to obscure the actual activities of the installation. RAF Kirknewton, for example, was a purported communications relay station – but possessed only receiving antennae, no transmission equipment. Surrounded by a high fence with barbed wire, the comm center was guarded twenty-four-seven by an armed guard, who was responsible for inspecting the special

Comm center passes of USAFSS personnel as they arrived for shifts. Only personnel with a pass were allowed access to the comm center, and further clearance was needed in order to access the operations room inside. This security structure followed a precedent set by a model intercept training facility at Brooks Air Force Base in the early days of the command. Personnel working in the operations room were responsible for sending intercepts up the chain of command and appropriate distribution for further analysis and exploitation, and constituted the most sensitive COMINT activities on base. Thick, soundproof walls and a single steel door protected the operations room – hopefully strong enough to withstand an attempt at forced entry until the operators inside could destroy all classified materials and equipment.  

Extensive precautions were taken for the radio operators working in the comm center as well. Each operator was given a code that identified their intercepts so that in case of subsequent interest, the person responsible for intercepting certain information could be identified. All trash was placed in burn bags located next to the workstations, and these were burned frequently to dispose of all classified material. Operators were prohibited from discussing their work with anyone outside the comm center, even uncleared airmen working in other operations on base. Security restrictions continued to impact airmen even after separation from the Air Force, as they were told not to discuss their military experience with anyone after leaving the service, and that the specific activities of the USAFSS they participated in would remain classified for twenty years after separation. One respondent recalled having to sign a document prohibiting him from visiting the Soviet Union for twenty or twenty-five years after his separation from the Air Force.

In many cases the airmen’s response to these regulations was to avoid talking about their service at all, or as little as possible throughout their lives as civilians, and this secrecy persisted. Investigation by the news media in 1993 was one of the first major public disclosures of Air Force intelligence efforts during the Cold War.  

Another important ground station established by the USAFSS early on was the Project PENN operation in Ankara, Turkey. American military officials suspected that the Soviet Union possessed aviation and industrial capabilities in the Trans-Caucasus area, but were unable to confirm this through existing “collateral” sources or COMINT efforts – the area was essentially a blind spot for intercepts. Accordingly, USAFSS leadership identified Turkey as a potentially desirable location for this effort, and sent personnel to Ankara in 1951. While the USAFSS operation was initially staffed by a detachment of operators assigned to the 2nd RSM in Darmstadt, Germany, the first “officially acknowledged” USAFSS presence in Turkey was Detachment 1 of the 75th RSM, which arrived to replace Project PENN as the primary USAFSS identifier in Ankara in late 1952. The operation focused on Soviet targets exclusively, and within a few years had expanded to include operations in the rural village of Karamursel as well, staffed by twenty-seven officers and nearly six hundred airmen.

In the case of Project PENN the USAFSS was able to locate its initial operation in the basement of an American military facility already in operation in Ankara, which provided a convenient cover. Construction of an additional antenna at a nearby airport was necessary, but USAFSS personnel decided that this would not be too far out of the ordinary. The new antenna

---


could be explained by claiming it was needed for navigational assistance, if asked. Dialogue between the USAFSS and the State Department leading up to the establishment of Project PENN reveals many of the security considerations that concerned those involved, which included everything from uncleared personnel down to the extra cables that would be running to and from the building. In response to the State Department’s questions the USAFSS pointed out that only USAFSS personnel would be granted access to the operational area, this access would be through a single entrance, and that entrance would have the additional protection of an “inner-outer” door system, designed to prevent uncleared observers from catching a glimpse of the equipment being used inside. Moreover, since the mission of the current U.S. military tenants of the building already had a communications component, additional cables and communications equipment would not draw undue attention to the covert presence of a USAFSS unit. 91

Together these details provide an indication of just how seriously the USAFSS regarded its COMINT mission and the degree of secrecy the command employed to protect the confidentiality of their activities. Project PENN also provides confirmation of evacuation protocols for USAFSS personnel, as special arrangements were to be made for the evacuation of “those personnel who have access to sufficient information, the divulgence of which could compromise the Special Intelligence program.” USAFSS personnel were also absolved from any other responsibilities within the installation unless in the case of an emergency, base maintenance and support activities handled by other personnel. Otherwise the only concern of the USAFSS presence in Turkey was to focus on eliminating the COMINT blind spot that

---

91 “History of Project PENN,” 46-55.
existed in the Trans-Caucasus area – collecting encrypted transmissions from Soviet military and industrial activities in the area and forwarding the information to Washington.\footnote{Ibid.}

The intercept operations at USAFSS ground stations were not immune to obsolescence, however. As technological capabilities advanced throughout the early Cold War some of the first ground stations became less important, replaced by direction-finding antenna platforms that could intercept signals on an almost worldwide basis. By the mid-1960s giant AN/FLR-9 high-frequency, direction-finding antenna arrays were being constructed at several USAFSS ground stations. These antennas, made up of three individual arrays arranged around a circular reflecting screen, significantly improved the effectiveness of USAFSS ground sites and enabled the command to conduct COMINT operations in more centralized and further developed installations as opposed to the small, scattered installations of the command’s early years.\footnote{Richelson, \textit{American Espionage}, 78-79; “A Continuing Legacy,” 4.} AN/FLR-9 antennas were eventually constructed at the USAFSS facilities in Chicksands, England and Karamursel, Turkey, for example, as well as at other sites, including facilities within the United States.\footnote{Richelson, \textit{American Espionage}, 85.}

Ground stations provided the foundation for USAFSS international operations. Established on already existing American military installations or positioned in facilities leased from a host country, these fixed ground sites situated COMINT collection assets in strategically advantageous locations around the world, chosen for their suitability for intercepting encrypted Morse, voice, and other forms of transmissions emanating from the Soviet Union and other Communist Bloc countries. Even though these ground stations were composed of permanently fixed operations for the most part, the “mobile” classification that the USAFSS had previously
employed to avoid tasking by AFSA persisted. As technology developed and the COMINT mission evolved, however, the USAFSS was able to coordinate mobile intercept collection operations – through vans and portable interception equipment as well as airborne collection flights – to continue pursuit of the COMINT mission.

Mother of Invention: The USAFSS and Mobility

While ground stations would provide the framework for the global USAFSS mission, the agency’s COMINT collection capabilities would not be limited to fixed intercept operations. The technical complexities of COMINT collection meant that access to favorable intercept locations was crucial for a successful intercept mission. Specific geographic locations were often more favorable than others, and given a complex international political climate, obtaining access to these locations and permission to develop an American military installation frequently presented time-consuming hurdles for the USAFSS to confront. These difficulties prompted the USAFSS to seek expedited channels with the State Department to negotiate privileges to survey and establish international collection sites. Once equipped with an overseas installation, however, the USAFSS developed the capability to deploy mobile interception units, either through vans and portable equipment or interception flights patrolling the periphery of targets such as the Soviet Union – giving the command the ability to move into difficult terrain and more favorable intercept locations, thus accessing a larger number of signals and continuing an effective pursuit of the COMINT mission.

One of the first ways USAFSS units deployed mobile intercept capabilities was through the use of vans and portable equipment. Emphasis was placed on developing this capability early on in the life of the command. Mobile capability was deployed in Korea and mobile COMSEC
monitoring units were under development as early as 1949.\footnote{Johnson, \textit{American Cryptology}, 42; Tart, \textit{Freedom Through Vigilance, Volume I}, 109; “History of the United States Air Force Security Service for the period 20 October 1948 to 31 December 1949,” U.S. Air Force Security Service, 53.} Richard Klocko recalled that the early mobility efforts of the USAFSS demonstrated the value of research and development, and that the effectiveness of mobile intercept collection was revealed during the Cuban Missile Crisis and in Vietnam leading up to the outbreak of hostilities. USAFSS involvement in the Cuban Missile Crisis began with an operational call from the Pentagon command post – the only time that Klocko received such a notification. Placed on alert, Klocko and the USAFSS immediately began exploring ways to run an effective COMINT operation in support of the Air Force in the event that tensions ruptured into serious conflict:

By the time President Kennedy spoke on Monday afternoon, we were already operating down at Cudjoe Key, just outside of Key West. We got down there, activated the unit, and then I notified the Air Staff that we were in the Key West area. The Naval Security Group (NSG) had a small unit at Key West to watch ships so I let them know that we would appreciate any assistance they could give our team. For the first time we stepped into Navy territory . . . and it became a jurisdictional dispute. I decided to look around Cudjoe Key, which was about twelve miles north of Key West. I found an Air Force radar installation, which was not being used. It was part of the missile range setup from Eglin AFB, a down range missile radar spotting site, which had never gone completely operations. It had the facilities, it was Air Force territory and we needed more space because we had expanded even in the short period of time (about a week or ten days) since our first arrival. Using our very fine vans, we moved the whole outfit, kit and caboodle, up to Cudjoe Key, and we were able to run a really good operation there. This was another example of how we could get in and operate in a very short time.\footnote{Klocko, 1975 interview, 23-24; “A Continuing Legacy: USAFSS to AF ISR Agency, 1948-2010,” U.S. Air Force Intelligence, Surveillance, and Reconnaissance Agency,14 and 16.}

In a period of less than two weeks the USAFSS had mobilized an intercept unit to support the response to the Cuban Missile Crisis, in a space that was not previously equipped with COMINT capabilities.

Up until the mid-1950s, COMINT collection in Southeast Asia had been relatively simple compared with the collection of Soviet intercepts, and of a commensurate low priority. However,
as the Chinese began to develop improved communications technologies and the U.S. recognized the considerable potential for Chinese geopolitical interests in Southeast Asia, greater emphasis was placed on the development of sufficient COMINT operations in the area. Special units known as COMINT Contingency Units (CCUs) and later Emergency Reaction Units (ERUs) had been developed after the Cuban Missile Crisis – designed to hold small contingents of USAFSS personnel on standby for deployment in the event of a serious crisis. During the late 1950s and early 1960s a number of these units were deployed to Vietnam to support future Air Force operations, as American military officials realized the increasing potential for conflict in the area. Klocko’s involvement came in 1963, when he was directed by the commanding general of the Pacific Air Forces (PACAF) to investigate the possibility of establishing a USAFSS operation in South Vietnam. This Klocko did, ultimately deciding to locate a unit near Da Nang, South Vietnam. In both Cuba and Vietnam the USAFSS demonstrated the value of mobile intercept capabilities in responding to specific COMINT needs. After the Cuban Missile Crisis the development of CCUs or ERUs gave the command a more organized response capability, and this would be used in future situations to considerable success.97

Figure 3.4 – 6948 SS, Brooks Air Force Base. Courtesy of the Air Force Intelligence, Surveillance, and Reconnaissance Agency.
Airborne collection was another technique the USAFSS used to intercept encrypted Soviet Morse and voice transmissions. With regards to the Soviet Union, COMINT and SIGINT already provided a more effective option than human intelligence (HUMINT) which was difficult to obtain, often unreliable, and harder to confirm given the larger number of potential variables that could affect the validity of information collected through HUMINT operations. Authenticity was easier to establish with COMINT, and airborne collection gave the USAFSS the ability to intercept communications, radar, and telemetry signals “well beyond the range of ground-based intercept sites.” Both photographic reconnaissance and airborne intercept
operations had been carried out by the Allies during World War II, but both would be improved by the American military during the early years of the Cold War. These flights were termed “FERRET” missions by the AAF – a moniker that was continually used to describe aerial reconnaissance and airborne COMINT intercept missions flown by the USAFSS and the Strategic Air Command (SAC) during the Cold War.98

Developing an effective aerial communications intelligence reconnaissance platform (ACRP) was a challenge initially faced by the USAFSS that ultimately became a contribution the command made to the field of airborne intelligence gathering. The USAFSS initially hoped to use C-47 aircraft for a platform but soon decided on the RB-50 – but was then faced with a lack of aircraft and began using RB-29s as an interim. Between late 1952 and early 1953 the USAFSS flew airborne collection flights in Europe using RB-29s to demonstrate the value of airborne intercept collection – the crew of RB-29 290 intercepting a number of signals identifying Soviet and East European satellite targets that had not been previously recognized. The airborne operations staff at the USAFSS headquarters would use the success of these flights to sell the concept of an RB-50 reconnaissance fleet to the Headquarters, U.S. Air Force and the NSA. As part of this effort USAFSS personnel developed an ACRP for the RB-50 and contracted the TEMCO Aircraft Corporation to modify one RB-50 for COMINT missions in 1955. Later this contract was amended to include the modification of ten RB-50s in all, five to be used in European missions and five for missions in Asia.99

Waiting for a platform to be established on board the RB-29s was not acceptable to American military officials already operating in theater during the Korean War, however. Even


99 Johnson, 142; Tart and Keefe, Price of Vigilance, 228-236.
though USAFSS operations in Korea ultimately bolstered the effort to create long-range capabilities on board the RB-29, more pressing needs for airborne intercept support prompted USAFSS personnel in Korea to initiate an in-theater program known as Project BLUE SKY, designed to place COMINT equipment into whatever platform was immediately available. This turned out to be the C-47, which USAFSS technicians modified to include collection equipment and antennas. USAFSS use of the C-47 platform continued after the war into the 1960s.\(^{100}\)

---

100 Johnson, 140. See also “To Establish a Requirement for Airborne Communications Intercept Aircraft for Combat Commands,” Director of Intelligence, 27 April 1951. DNSA.
Airborne interception flights presented greater dangers than ground-based operations, however. Skirting close to the Soviet periphery and even crossing into Soviet airspace on occasion made USAFSS intercept flights prime targets for Soviet defense mechanisms, which by the early 1950s had developed to considerable capability, based partially on equipment obtained through the American lend-lease program. On 15 March 1993 the *U.S. News and World Report* devoted an entire cover story and supporting articles to what it termed “America’s Top-Secret Spy War,” which had claimed the lives of more than one hundred and thirty American airmen.
during the 1950s and 60s. The “special report” argued that while Francis Gary Powers and the shoot down of his U-2 spy plane over the Soviet Union in 1960 was emblematic of the dangers of Cold War espionage, that incident was really only the “tip of a vast iceberg.” Following a March 4 broadcast by ABC News which also explored American Cold War spying, *U.S. News* asserted that “newly declassified documents and details never before disclosed by U.S. and former Soviet authorities cast important new light on the high-risk American espionage effort,” the full extent of which had “never been acknowledged by the United States.” As the case of Francis Gary Powers illustrates, airborne intelligence operations presented American military officials with a particularly difficult challenge. Once a mission had been shot down, the United States was placed in the position of having to negotiate for information about its plane and crew, which could force an official admission of American espionage efforts, when those efforts were otherwise closely guarded military secrets.101

The increased danger nonetheless prompted the USAFSS to develop and contribute additional technological capability, this time in the form of advisory warning systems for aircraft flying intercept and reconnaissance missions. Initial attempts to develop a warning capability were tenuous at best, not frequently used and caught up in bureaucratic inertia regarding COMINT classifications. Still, the number of incidents forced additional dialogue, and after the shoot down of an RC-130 by the Soviet Union on 2 September 1958 and the diplomatic difficulties that followed, it was clear that something had to be done. Accordingly the USAFSS authorized an additional Morse intercept position on board its collection flights and implemented, along with the Strategic Air Command (SAC) a limited advisory warning program applying to the reconnaissance aircraft of the two commands. Soon this program expanded into a

national program, part of a Joint Chiefs plan called WHITE WOLF, that applied to all American reconnaissance flights flying missions in peripheral areas. The warning systems utilized “super-sites” that had been constructed during the 1950s, and overall the number of shoot downs decreased, although the diplomatic import of the incidents increased. Nevertheless, the USAFSS played an important role in the development of both aerial communications intelligence reconnaissance platforms (ACRPs) for airborne collection flights as well as advisory warning systems to protect those missions from attack.\textsuperscript{102}

**Conclusion**

Despite the inclusion of communications security (COMSEC) as part of the USAFSS mission, the primary mission of the organization as articulated and demonstrated by early developments was the collection of COMINT information regarding the Soviet Union and other communist nations. The USAFSS deployed a wide variety of operations in order to fulfill its COMINT responsibilities. Ground stations situated in strategic locations around the world enabled USAFSS personnel to intercept encrypted communication signals and other types of transmissions emanating from the Soviet Union and Communist Bloc countries. Occasionally, however, ground sites were not able to intercept certain important signals, and mobile units were then deployed to fill the collection gap. Whether through the use of vans and portable collection equipment or airborne intercept operations, the USAFSS relied on mobile COMINT capabilities to collect information not as easily accessible from ground-based collection sites. USAFSS deployment of mobile COMINT collection operations demonstrated the persistent effort to stay abreast of the constantly evolving Cold War COMINT mission, as well as the willingness of the command to develop technological solutions to problems faced in the field. Overall, USAFSS

\textsuperscript{102} Johnson, 139-148.
operations throughout the early Cold War period demonstrated persistent efforts to fulfill the organization’s COMINT responsibilities. Occasionally the USAFSS was obliged to negotiate for the freedom to control its own missions – as was the case after the National Security Agency (NSA) replaced the Armed Forces Security Agency (AFSA) in 1952. Nevertheless, these negotiations revealed the continual efforts of the USAFSS to conduct its missions in support of the needs and interests of the Air Force at large – the final phase of a process that had begun even before the end of World War II as air officials of the American military struggled to build their own intelligence capability and organize that capability into an effective and elite Cold War COMINT agency.
Conclusion

The U.S. Air Force Security Service (USAFSS) was a secretive, highly classified, and elite communications intelligence (COMINT) organization established by the U.S. Air Force in 1948 to provide effective COMINT support for the needs of Air Force missions and commands. Initially focused almost exclusively upon the collection of encrypted Morse intercepts, the mission and capabilities of the organization quickly expanded to include the collection of voice, radar, facsimile, telemetry, and other types of transmissions. For the first two operational years of the USAFSS, these operations were carried out under the auspices of the Armed Forces Security Agency (AFSA), but in October 1952 became subordinate to the operational and technical control of the National Security Agency (NSA). Despite these bureaucratic obligations, the USAFSS remained fiercely loyal to the needs and interests of the U.S. Air Force, and drawing upon a long history of fighting for autonomy, continually negotiated for additional control over its own affairs. This conclusion is focused on evaluating whether or not the USAFSS successfully fulfilled its responsibilities as determined by the requirements for COMINT defined by the Air Force, and follows the presentation of arguments made throughout this study regarding the motivations of the Air Force in creating a separate COMINT capability, determining how that capability should be organized, and what functions the organization would provide. Those arguments are reiterated briefly below.

First, the USAFSS developed as a result of several years’ past experience and emerged alongside concurrent developments taking place in the post-World War II U.S. military and
intelligence community. During World War II the Army Air Forces (AAF) were constantly put in the position of having to rely upon other military intelligence efforts – notably those of the U.S. Army’s G-2 Military Intelligence Division – for intelligence support required for AAF operations. Determined to mitigate this situation, the AAF advocated for increased intelligence autonomy during the war and looked forward to the postwar period for the possibility of gaining independence and thus the freedom to operate with an even greater degree of autonomy. Military unification debates that began during the war and continued through the months and years that followed provided just such an opportunity, as the United States military and American Congress considered the various merits and potential drawbacks of creating a unified or consolidated Department of Defense, with three independent yet co-equal military services organized within it. At the same time, World War II had demonstrated an ongoing shift from traditional human intelligence (HUMINT) methods to COMINT as the most viable source of information in the postwar world, particularly with regards to the Soviet Union. These circumstances and developments created a favorable environment for the emergence of an independent Air Force COMINT capability.¹⁰³

Second, the Air Force took steps to organize the USAFSS in such a way that would enable the agency to provide sufficient COMINT information to the Air Force so that the Air Force would no longer be forced into dependency on other COMINT agencies. Even before World War II had come to an end Colonel Richard P. Klocko, a former pursuit squadron commander, had been transferred to the Pentagon to begin work in the Army’s G-2 division, first as a general staffer and then with increasing intelligence and policy responsibilities, until in 1947

---

Klocko was working in and to reorganize the Army’s COMINT organization – the Army Security Agency (ASA). While in the ASA the National Security Act of 1947 was passed and created a Department of Defense and an independent U.S. Air Force, and the very next day Klocko found himself transferred from the Army to the Air Force with orders to create for the Air Force what he had been involved with in the Army – an intelligence agency devoted to the collection and production of COMINT information in support of Air Force missions and commands. After a controversy regarding the administrative control of the new COMINT organization, Klocko proposed that the agency be organized as a major air command, responsible to the Air Force Chief of Staff. Thus the USAFSS was created on 20 October 1948, the ultimately point of arrival for a process that had been several years in the making.

Finally, while the USAFSS was given the dual mission of providing for the COMINT as well as the communications security (COMSEC) needs of the Air Force, its primary mission was intelligence gathering, and the organization employed a variety of different techniques to fulfill its responsibilities effectively. Soon after acquiring sufficient personnel and equipment to be considered operational the USAFSS began negotiating for additional space overseas to construct or situate ground-based intercept stations. The command requested expedited channels to conduct these negotiations through the State Department, and soon began building an international network of ground stations strategically located to intercept encrypted transmissions of the Soviet Union and other communist nations. Ground stations did not always provide the level of versatility required for successful COMINT operations, however, so the USAFSS developed the capability to deploy mobile collection units in vans and in airborne platforms, using portable collection equipment and antennas. These efforts were developed alongside and in response to technological changes affecting the COMINT mission, with which the USAFSS was
determined to keep up in order to effectively provide for the intelligence needs of the Air Force. Even the dangers presented by such efforts – airborne COMINT collection in particular – prompted the USAFSS to develop additional technological capabilities in order to protect its airborne missions and prevent hostile forces from shooting down USAFSS planes and personnel. \(104\)

Accordingly, this study has demonstrated that Air Force efforts to gain control over its own communications intelligence matters were successful. From the early attempts to secure additional autonomy during World War II, the late war and postwar preparations made by Klocko, and the subsequent organizational negotiations that ultimately created the USAFSS, the Air Force established an organization exclusively responsible for the collection and production of COMINT in accordance with the needs and interests of the Air Force and its subordinate commands. Measures taken by the USAFSS in the organizational phase to acquire and train an elite enlisted force, as well as to organize the agency strategically in relation to other Air Force commands and services, provided a strong foundation upon which to build an effective COMINT agency. Then, with the definition of primary responsibilities and the development of a variety of techniques to fulfill those responsibilities, the USAFSS was able to establish an effective modus operandi for keeping the various commands of the Air Force supplied with reliable intelligence information. This momentum continued throughout the early years of the command’s operation, and even after the NSA replaced AFSA as the coordinating body for the military service COMINT agencies, the USAFSS was able to negotiate effectively for continued autonomy and control over its own affairs. Combined these characteristics and accomplishments represent a

\[104\] Johnson, 139-149; Tart and Keefe, 229-236; Department of the Air Force AFOIR-SR 322, “Functions of the USAF Security Service,” to Commanding Generals, Major Air Commands in ZI and Overseas, 20 October 1948; Department of the Air Force, HQS USAF, Washington 25, D.C., to Commanding General, Strategic Air Command, Offut AFB, Omaha, Neb., “(Confidential) Communications Intelligence Support,” 28 November 1950.
successful achievement of Air Force objectives for the USAFSS, enabling the Air Force to perform effectively during early Cold War conflicts, such as the Korean War, and beyond.
Bibliography

Primary Source Materials

Abbreviations

Congressional Hearings Digital Collection Historical Archive, Parts A and B, 1824-2003, Kent State University Databases (CHDCHA)

Digital National Security Archive database provided by George Washington University (DNSA)

Declassified Documents Reference Service, Kent State University Databases (DDRS)

GovernmentAttic.org (GA)

New York Times Historical, Kent State University Databases (NYTH)

The New York Times 1851-2011, Oberlin College Library Databases (TNYT)

United States Air Force (USAF)

U.S. Air Force Historical Research Agency (AFHRA)

Congressional Sources – Accessed through CHDCHA unless otherwise noted


DNSA.


Final Report of the House Select Committee on Post-War Military
Policy,” 10 December 1945.


Hearings before the Committee on Naval Affairs, United States Senate, 79th Congress, 2nd Session on Senate Bill 2044, “A Bill to Promote the Common Defense by Unifying the Departments and Agencies of the Government Relating to the Common Defense,”

Statement of Hon. W. John Kenney, Assistant Secretary of the Navy, 2 June 1946.

House Resolution 465, 78th Congress, 2nd Session, 28 March 1944.

“Message from The President of the United States Requesting Unification of the Armed Forces of the United States,” 19 December 1945.

National Security Act of 1947. LegisWorks.org

Proposal to Establish a Single Department of Armed Forces, 24 April 1944.

“Proposal to Establish a Single Department of Armed Forces,” Hearing before the Select Committee on Postwar Military Policy, House of Representatives, 78th Congress, Second Session, Pursuant to H. Res. 465, A Resolution to Establish A Select Committee on Postwar Military Policy, Part I, 24 April 1944.

Report of Proceedings: Hearing held before the Select Committee on Post-War Military Policy, 26 April 1944.

Report of Proceedings: Hearing held before the Select Committee on Post-war Military Policy, Part I, 26 April 1944.

Report of Proceedings: Hearing held before the Select Committee on Post-War Military Policy, Parts II and III, 26 April 1944.
Statement of Artemus L. Gates, Assistant Secretary of the Navy for Air, Before the Select Committee on Post-War Military Policy, 15 May 1944.


Statement of Vice Admiral F. J. Horne, Vice Chief of Naval Operations, Before the Select Committee on Post-War Military Policy, 10 May 1944.

Statement of General Haywood S. Hansell before the House Select Committee on Post-War Military Policy, 26 April 1944.

Statement of James Forrestal, Under Secretary of the Navy, Before the Select Committee on Post-War Military Policy, 28 April 1944.

Statement of Hon. Josephus Daniels, Secretary of the Navy in the Wilson Administration, In Support of One Department of National Defense, Before the Select Committee on Post-War Military Policy, 17 May 1944.

Statement of Ralph A. Bard, Assistant Secretary of the Navy, Before the Select Committee on Post-War Military Policy, 11 May 1944.

Statement by Robert A. Lovett, Assistant Secretary of War for Air, Before the Select Committee on Post-War Military Policy, House of Representatives, 26 April 1944.

Statement of Vice Admiral R. S. Edwards, Chief of Staff to the Commander in Chief, U.S. Fleet, Before the Select Committee on Post-War Military Policy, 28 April 1944.

Unification of the Armed Services: Analytical Digest of Testimony before the Senate Military Affairs Committee, 17 October to 17 December 1945.

“Unification of the War and Navy Departments and Postwar Organization for National

“Unification of the War and Navy Departments and Postwar Organization for National Security,” Report to Hon. James Forrestal, Secretary of the Navy, 22 October 1945, Printed for the use of the Committee on Naval Affairs, United States Senate.

**Government and Military Sources**


“Future Status of U.S. Naval Communications Intelligence activities,” 23 January 1946. DNSA.


“Information to Newcomers to this Detachment,” First Sergeant Erickson, Detachment D, 2nd


“To Establish a Requirement for Airborne Communications Intercept Aircraft for Combat Commands,” Director of Intelligence, 27 April 1951. DNSA.

“Transfer of 1st, 2nd, and 8th Radio Squadrons, Mobile, and 136th Radio Security Detachment from the Department of the Army to the Department of the Air Force,” Departments of the Army and the Air Force to Chief of Staff, U.S. Air Force Directorate of Intelligence, GSUSA, 28 January 1949. DNSA.

“Transfer of Selected Communication Intelligence and Communication Security Functions,” Joint Army and Air Force Adjustment Regulations No. 1-11-54, 31 December 1948. DNSA.


Air Staff Comment on Deficiency Stated by CG, USAF Security Service, 5 December 1951. DNSA.

Army Chief of Staff to Admiral King, U.S. Navy, 18 August 1945. DNSA.

Army Regulations 95-5, “Army Air Forces General Provisions,” By Order of the Secretary of


Chief of Naval Operations to Commander in Chief, U.S. Navy Pacific Fleet, “Recommendations Concerning the Post-War Organization of COMINT Activities, 1 August 1945. DNSA.

Deficiency Stated by CG, USAF Security Service, 5 December 1951. DNSA.


Department of the Air Force Directorate of Intelligence Presentation to JCS Committee on the Correlation of the Budget of the National Military Establishment for the FY 1950, 31 August 1948. DDRS.

Department of the Air Force, HQS USAF, Washington 25, D.C., to Commanding General, Strategic Air Command, Offut AFB, Omaha, Neb., “(Confidential) Communications Intelligence Support,” 28 November 1950. DNSA.

Director of NSA to Distribution, “Communications Planning for the NSA Alternate Headquarters,” 27 December 1960. DDRS.

Estimate of Post War Intercept Targets, ANCICC Subcommittee on Intercept, Revised 14 November 1945. DNSA.

Fred Crawford, “The United States Air Force Security Service and RAF Kirknewton” (presented

General Gordon A. Blake to General Thomas D. White, Air Force Chief of Staff, 3 August 1959. DNSA.


Interview of Lt. General Richard P. Klocko by Dr. James C. Hasdorff, 29-30 October 1987, United States Air Force Oral History Program. AFHRA.

J. N. Wenger to G. C. Manson, USN, 20 February 1946. DNSA.

James Forrestal to the Secretary of the Army, Secretary of the Navy, and Secretary of the Air Force, “Terms of Reference for the Committee on the Creation of a Unified Armed Forces Security Agency,” 19 August 1948. DNSA.

Letter to J. N. Wenger, USN, 13 August 1945. DNSA.

Memoranda from the Navy, State, and War Departments, 1945-1949. DNSA.


Minutes of the First Meeting of the Committee on the Creation of a Unified Armed Forces Security Agency (CCUAFA), 25 August 1948. DNSA.
Officer in Charge of the U.S. Navy Pacific Fleet Radio Unit, to Chief of Naval Operations, via Commander in Chief, Pacific Fleet, 3 August 1945. DNSA.


Photographs courtesy of the Air Force Intelligence, Surveillance, and Reconnaissance Agency, and USAF.

Report of the Joint Chiefs of Staff Special Committee for Reorganization of National Defense, Enclosure “B,” Section I, Subsection 109, April 1945. DRRS.

Report to Chief of Staff, U. S. Army on Army and Air Force Organizational Matters under Unification, 14 March 1947. DRRS.


Tentative Minutes of the Second Meeting of the CCUAFSA, 15 September 1948. DNSA.

Tentative Minutes of the Third Meeting of the CCUAFSA, 12 October 1948. DNSA.


War Department, The Adjutant General’s Office, AG 322, “Establishment of Air Defense, Strategic Air and Tactical Air Commands; Redesignation of the Headquarters, Continental Air Forces and Certain Other Army Air Forces Units; Activation, Inactivation and Assignment of Certain Army Air Forces Units,” 21 March 1946. From

Wenger to Roeder, USN, 27 December 1945. DNSA.

Press Sources

*The New York Times*

“Doolittle Urges Separate Air Arm,” 17 March 1946. TNYT.

“Doolittle Urges Unified Air Force,” 24 July 1946. TNYT.

“Forrestal Advocates Merger,” 19 March 1947. TNYT.

“Senate Gets Bill to Merge Forces,” 10 April 1946. TNYT.

“Separate Air Force Is Urged,” 20 March 1946. TNYT.

“Spaatz Advocates Air Arm For Peace,” 2 June 1946. TNYT.

“Text of President’s Message to Congress Asking Unification of the Army and Navy,” 20 December 1945. TNYT.

“The Case For Unification,” 20 November 1945. NYTH.


“The Unification Hearings,” 2 May 1946. NYTH.


“Truman to Settle Clashes Of Services on Unification,” 5 June 1946. NYTH.

“Unification Directive,” 11 June 1946. NYTH.

“Urges Navy Rule Armed Services: Gates Says It Should Absorb Army Ground and Air Forces if Merger Comes,” 16 May 1944. TNYT.
Hanson W. Baldwin, “Military Budget Caution: Cuts Are Expected But The Need to Protect Research and Sound Defense Is Stressed,” 9 March 1947. NYTH.

Sidney Shalett, “Army, Navy Seek To End Duplication,” 12 January 1946. TNYT.


*U.S. News and World Report*


**Published Primary Sources**


Force History and Museums Program, 1997).

Secondary Source Material

Aid, Matthew Aid and Cees Wiebes, eds. Secrets of Signals Intelligence during the Cold War and Beyond (Portland: Frank Cass, 2001).


Leffler, Melvyn P. “National Security,” in Explaining the History of American Foreign

103


Unger, David C. *The Emergency State: America’s Pursuit of Absolute Security At All Costs*
