Fulcrum of Power

Essays on the United States Air Force and National Security

Herman S. Wolk

Air Force History and Museums Program
2003

Report Documentation Page

Form Approved
OMB No. 0704-0188

Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

1. REPORT DATE	2. REPORT TYPE	3. DATES COVERED
2003		**00-00-2003 to 00-00-2003**

4. TITLE AND SUBTITLE	5a. CONTRACT NUMBER
Fulcrum of Power. Essays on the United States Air Force and National Security	5b. GRANT NUMBER
	5c. PROGRAM ELEMENT NUMBER
6. AUTHOR(S)	5d. PROJECT NUMBER
	5e. TASK NUMBER
	5f. WORK UNIT NUMBER
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) **Air Force Historical Studies Office,AF/HO,1190 Air Force Pentagon,Washington,DC,20330-1190**	8. PERFORMING ORGANIZATION REPORT NUMBER
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)	10. SPONSOR/MONITOR'S ACRONYM(S)
	11. SPONSOR/MONITOR'S REPORT NUMBER(S)

12. DISTRIBUTION/AVAILABILITY STATEMENT
Approved for public release; distribution unlimited

13. SUPPLEMENTARY NOTES

14. ABSTRACT
see report

15. SUBJECT TERMS

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT	b. ABSTRACT	c. THIS PAGE			
unclassified	**unclassified**	**unclassified**		**304**	

All photographs reproduced in this book are the property of the United States Air Force, with the following execptions: the photo on page 15 appears courtesy of Mrs. Darlene Gerhardt; the Franklin D. Roosevelt Library supplied the photograph appearing on page 27; the images on pages 229 and 231 are used courtesy of the United States Department of Energy; and the photograph on page 294 appears courtesy of the Historical Division of the JCS.

Library of Congress Cataloging-in-Publication Data

Wolk, Herman S., 1931–
Fulcrum of power : essays on the United States Air Force and national security / Herman S. Wolk.
p. cm.
Includes bibliographical references.
1. United States. Air Force — History. 2. Aeronautics, Military — United States — History. 3. Air power — United States. I Title.

UG633.W6396 2003
358.4'00973 — dc21

2003005563

Preface

Having been an Air Force historian for almost forty-five years, I have been in a unique position to observe the role of the United States Air Force (USAF) in national security affairs. Even with this vantage point, one hesitates to put together a collection of essays on the Air Force and national security, as this presupposes the reader's interest not only in the subject but with a collection of essays published at intervals over a long period of time. This is to say that one trusts that the dated nature of essays is outweighed by insights provided to the reader in the context of important periods in the nation's military history.

Such are the pitfalls of the genre, and yet the essayist plunges ahead, trusting that the collection will illuminate the impact of air power technology and strategy upon national security affairs and diplomacy. I have included essays on Generals James H. Doolittle and George C. Kenney in order to add some spice to the collection and, moreover, to insert the careers of two great airmen whose long suit was character.

I have attempted to arrange these essays chronologically, but a certain amount of repetition is nonetheless inherent in the collection. For this, I beg the reader's patience.

Although more years ago than I care to remember I had suggested a collection to the late John F. Loosbrock, editor-in-chief of *Air Force Magazine;* Richard P. Hallion, the Air Force Historian, brought up the idea at the dawn of the millenium, and for his enthusiasm and support I am deeply grateful.

I owe a great debt to John Loosbrock, mentor and friend, always on hand with welcome guidance and keen insight. Richard M. Skinner, for many years managing editor of *Air Force Magazine,* was a constant source of inspiration and wise counsel. John Frisbee, former editor-in-chief of *Air Force Magazine,* friend and history devotee, edited with a sharp eye.

Many thanks are due John T. Correll who for nearly twenty years had been editor-in-chief of *Air Force Magazine* and whose insightful repartee was always a delightful source of information.

Thanks also to Robert Dudney, the present editor-in-chief of *Air Force Magazine,* and to Suzann Chapman, the managing editor, for their support.

A special thank-you is due Colonel Carol Sikes, Commander, Air Force History Support Office, for her support in our daily early morning chats and for her unfailing sense of humor.

I want to thank my colleagues in the Office of Air Force History who — over several decades — were most generous with their insights into the history of the Air Force.

Richard Wolf, production guru in the Air Force History Support Office, was, as usual, indispensable with his advice and wise counsel on the many editorial and production problems. Jack Neufeld, Chief, Production and Special Projects Division in the Air Force History Support Office, lent strong support and advice to the project. A special thank-you is due David Chenoweth for his superb knowledge of the Air Force photo collection. LaShawn Moten, with the help of Karen Nicholson, scanned these essays, persevering with grace and humor in a tedious task.

Barbara Wittig, as always with a keen eye, rescued the author from numerous traps and edited this collection with patience, humor, discernment, and exceptional skill.

I would be derelict if I failed to mention the help I received in the 1970s from Generals Ira Eaker and Curtis LeMay and Maj. Gen. Haywood "Possum" Hansell, Jr. All were most generous with their time, and their keen insights into Air Force history were greatly appreciated by a mere rookie. I should also mention the kindness of Stuart Symington, the first Secretary of the Air Force, who on several occasions took time from his law practice to answer questions and discuss Air Force history.

This collection would not have been possible without my wife, Sandra Goldman Wolk, who provided such wonderful support during the decades when these essays were written in the confines of my study. This one is for her.

HSW
March 2003

Preface iii
Introduction 1

World War II

The First Air Staff *7*
Doolittle: Renaissance Man of Aviation *17*
Prelude to War *27*
The Overlord Air Controversy *39*
The Genius of George C. Kenney *51*
General Arnold, the Atomic Bomb, and the Surrender of Japan *63*

The Postwar World

The Quiet Victory *77*
The Strategic World of 1946 *91*
Planning and Organizing the Air Force *103*
Arnold, Eisenhower, and Norstad: The Fight for Air Independence *117*
Men Who Made the Air Force *129*
When the Color Line Ended *143*

Roles and Missions

The Defense Unification Battle, 1947–50 *153*
The Battle of the B–36 *167*
The Quiet Coup of 1949 *179*

The Korean War

Truman's War *191*
The First Five Years of the First 50 *203*

The Cold War

The Blueprint for Cold War Defense *217*
The New Look in Retrospect *225*
Scientists, Politics, and the Bomb *235*
The Uses of History in the Nuclear Age *243*

The War in Southeast Asia

The New American Military *251*
Strategic Superiority and Vietnam *259*
The Vietnam Manipulators *267*

Reprise

The USAF in the Defense Establishment *275*
American Chieftains *291*

Introduction

In the twentieth century, the impact of flight reached into every corner of American society. However, nowhere has its impact been more dramatic than in the realm of military affairs. Over the past one hundred years, the evolution of military aviation technology has altered the way Americans have looked at national security.

The development of military aviation has had an enormous impact upon the battlefield which, in turn, has transformed international politics and the crafting of national security policy. The question of how best to protect the United States against external military threats has come to involve the projection of military power abroad. With the passage of time and accelerated advancement of military aviation technology, the organization and development of air forces have assumed greater urgency and significance. In 1934, James H. "Jimmy" Doolittle noted that "the future security of our nation is dependent upon an adequate air force…this will become increasingly important as the science of aviation advances."

Today, the United States Air Force (USAF) is the world's premier air arm. Among major nations, it is also the youngest, having been established in September 1947 in the wake of World War II. During the first half of the twentieth century, as part of the United States Army, the air arm was constantly striving for autonomy. Consequently, the question of how to organize military aviation increasingtly occupied the nation's legislators.

In 1937, Maj. Gen. Frank M. Andrews, one of this country's great airmen, and a founder of the Air Force, emphasized:

> I don't believe any balanced plan to provide the nation with an adequate, effective Air Force…can be obtained, within the limitations of the War Department budget, and without providing an organization individual to the needs of such an Air Force. Legislation to establish such an organization…will continue to appear until this turbulent and vital problem is satisfactory solved.

Fulcrum of Power

This "turbulent and vital problem" was not solved by the time the United States entered World War II. It was in the postwar era that the Army's air arm rode to independence upon its contribution to victory in World War II. The war was not only the turning point in the drive for independence, but also for the nation's conception of national security. It marked the deathbed of isolationism and ushered in an era of American global involvement. The onset of the Cold War saw the United States take the unprecedented action of building a peacetime nuclear deterrent force and a permanent national security establishment.

General Henry H. "Hap" Arnold, AAF Commander, architect of the postwar Air Force and a leader possessing rare insight — Theodore von Kármán, the eminent scientist, described Arnold as "a combination of complete logic, mingled with farsightedness and superb dedication" — foresaw the impact of air power even prior to the war. On the eve of the Japanese attack on Pearl Harbor, Arnold observed: "The development of the Air Force as a new and coordinated member of the combat team has introduced new methods of waging war…The great range of the air arm makes it possible to strike far from the battlefield, and attack the sources of enemy military power. The mobility of the Air Force makes it possible to swing the mass of that striking power from those distant objectives to any selected portion of the battlefront in a matter of hours."

After World War II, in the atomic era, the increasing importance of air power to national security was foretold by Arnold, whose own career spanned the period from the time of the Wright brothers to the atomic bomb. He had enlisted science and technology to help build the Army Air Forces in World War II, and with the end of the war, he believed that scientists and engineers would design radical new weapons. Air forces, Arnold emphasized, were always verging on obsolescence, today's aircraft becoming "the museum pieces of tomorrow."

In his final report on World War II to the Secretary of War, General Arnold emphasized that modern war is now fought "by all citizens united in a joint effort which touches every phase of national and private life. The danger zone of modern war…extends to the innermost parts of a nation. No one is immune from the ravages of war." The nation now required a modern Air Force for national security. It would not alone be sufficient, "but without it there can be no national security."

In the postwar period, with the onset of the nuclear age, President Harry S. Truman led the drive at the top levels of government to reorganize the defense establishment. Crafting of the National Security Act of 1947 coincided with the onset of the Cold War with the Soviet Union. Consequently, the Truman administration fostered the concept of strategic nuclear deterrence — the building of an in-being deterrent force during peacetime. During the 1950s successive Eisenhower administrations followed through and made the Strategic Air Command the linchpin of U.S. national security policy.

Introduction

The experience of the Korean war — fought under restrictions as the first limited war of the nuclear age — reinforced the view in the Eisenhower administration and the body politic that the nuclear deterrent was the most important part of the defense phalanx and that America had no business fighting a land war in Asia. Concomitantly, the onset of the nuclear age, marked by the enormous increase in the destructive power of weapons, worked to siphon decision-making from the Air Force and the other military services and to place more power into the hands of the Office of the Secretary of Defense (OSD). After passage of the 1949 amendments to the National Security Act, the Air Force (and the Army and Navy) no longer sat on the National Security Council, thus losing its voice in directly formulating national security policy at the highest level.

This was followed in the 1950s by two additional reorganizations that gave the Secretary of Defense even more power and authority. It is important to note however, that these changes, made in response to weakness in the nation's security organization, kept intact the structure of the 1947 National Security Act. The three service departments remained coequal, each headed by a civilian secretary, under the Department of Defense. The legislative imperative, in the late 1940s and 1950s, that strengthened the Office of the Secretary of Defense at the expense of the services, would continue in subsequent decades.

This centralization of authority was in large part a clear response to the evolution of nuclear technology and the concomitant dispute over roles and missions, which played a key role during 1945–47 in the unification struggle. In the late 1940s however, Secretary of Defense James Forrestal recognized that he operated from a position of weakness. In his 1948 report on the National Military Establishment, Forrestal called for strengthening the OSD by giving it more power. The result was the 1949 amendments which empowered the Secretary with "direction, authority, and control" over the Defense Department.

The 1949 amendments became law during one of the most bitter and public interservice feuds in American military history — the so-called "Revolt of the Admirals." At the heart of the confrontation was the struggle between the fledgling Air Force and Navy over the atomic deterrent mission during a period of budgetary cutbacks. Despite two years of experience with the National Military Establishment, the Navy had yet wholeheartedly to accept the concept of unification.

In the second half of the twentieth century, ramifications were still evident from the post–World War II roles-and-missions struggle. Additional flow of centralized civilian control to OSD occurred in 1953 under President Eisenhower. Reorganization Plan No. 6 of 1953 eliminated the Munitions Board and the Research and Development Board and created six Assistant Secretaries of Defense. This process of placing more power and authority within OSD with

the resultant diminution of the authority of the service secretaries greatly accelerated with passage of the 1958 Reorganization Act. This legislation effectively removed the service secretaries from the operational chain of command, which now ran from the President and the Secretary of Defense through the Joint Chiefs of Staff to the unified and specified commanders. As with previous reorganization, the Air Force supported the 1958 changes. General Thomas D. White, Air Force Chief of Staff, noted that the 1958 reform gave "unequivocal" authority to the Secretary of Defense. This reorganization was the most significant reform since passage of the National Security Act of 1947.

Additional organizational reform evolved in 1986 with passage of the Goldwater-Nichols Department of Defense Reorganization Act, giving more power to the Chairman of the Joint Chiefs of Staff and the unified commanders.

It is within this movement toward a centralized national security framework that the United States Air Force evolved during the second half of the twentieth century.

Part I

World War II



The new Deputy Chief of Staff for Air, Maj. Gen. Henry H. Arnold, stands at Army Chief of Staff Gen. George C. Marshall's right side, along with other members of Marshall's staff in attendance at this December 1, 1941, meeting .

The First Air Staff

With the creation of the Army Air Forces in June 1941 came the establishment of the first American Air Staff. That staff reported directly to a new AAF Chief, Maj. Gen. Henry H. Arnold. The Air Staff's creation stemmed from apprehension about general wars in Europe and Asia, events that sparked calls for an expansion of air power and reorganization of the Army air element. Particularly disturbing to Arnold and President Roosevelt was the major role the German air force played in the defeat of France in 1940. FDR declared, "Military aviation is increasing at an unprecedented and alarming rate." Consequently, he and Congress sought a huge increase in the numbers of American aircraft and pilots.

Even before the outbreak of war, Roosevelt was much concerned about America's lack of preparedness. In 1938, he sent his confidant, Harry Hopkins, on an inspection of U.S. aircraft plants. Hopkins claimed that Roosevelt "was sure we were going to get into war, and he believed that air power would win it." When shortly thereafter, an airplane crash claimed the life of Maj. Gen. Oscar Westover, Chief of the Army Air Corps, Hopkins, who had the ear of the President, suggested he appoint Arnold to that post, which Roosevelt did in September 1938.

Roosevelt believed that America's military had to gear up immediately for war. In mid-November 1938 he convened a meeting at the White House to consider responses to the events unfolding in Europe and Asia. Present were Arnold, Hopkins, Assistant Secretary of War Louis Johnson, and Brig. Gen. George C. Marshall, Chief of the Army's War Plans Division. Roosevelt directed increased aircraft production, and by August 1940 the Air Corps had completed an expansion plan, envisioning production each year of 12,000 new pilots and 54 combat-ready groups.

The First Air Staff initially appeared as "The First Air Staff" in *Air Force Magazine,* Vol. 84, No. 6, June 2001, pp. 66–70.



Having impressed General Marshall in 1938 with a cross-country tour of the nation's air assets, Maj. Gen. Frank M. Andrews, standing here on the left, became Marshall's Assistant Chief of Staff for Operations and Training.

The Eye Opener

Marshall, subsequently promoted to become Army Chief of Staff, shared Roosevelt's concern and moreover agreed with Arnold that the Air Corps required a stronger ability to plan for expansion. The Air Corps had found an invaluable ally in the struggle for a more powerful air force. In 1938, Maj. Gen. Frank M. Andrews, then Commander of General Headquarters Air Force, had taken Marshall on a nine-day tour of air bases, inspecting units and meeting senior Air Corps commanders as well as visiting the Boeing aircraft plant in Seattle. Marshall and Andrews struck a close relationship. Later, Marshall said this tour had opened his eyes to what air forces could do and what they required. He quickly determined that airmen best knew how to run the Air Corps and make it work.

On this cross-country trip, Andrews had taken the opportunity to make Marshall aware of conflicts between the few airmen and the many ground officers assigned to the General Staff. In later remarks, Marshall said he realized that "air had almost no representation on the General Staff" and most of the General Staff types "had little interest in the air, mostly antipathy, and it was quite marked." Indeed, Marshall added, "I found everyone on the Staff hostile to Air."

Marshall was greatly impressed with Andrews. In August 1939, he made the airman Assistant Chief of Staff for Operations and Training, the first airman ever to serve in this position. Subsequently, when Marshall became Army Chief of Staff, he named Andrews to positions of theater command in the Caribbean and the Middle East and as Commanding General of U.S. forces in the European theater. Tragically, in May 1943, Andrews was killed in an airplane crash in Iceland, cutting short a brilliant career of one of the nation's most distinguished airmen.

The Luftwaffe's performance in Europe in 1940 increased congressional pressure for the creation of a separate air force, but Arnold was convinced that this was not the proper time to divide the air arm from the rest of the Army. Marshall and Arnold needed a rapid, efficient expansion of the Air Corps itself

to prepare for the possibility of war. Arnold emphasized in 1940 that "right at this minute it looks to me as if it might be a serous mistake to change the existing setup when we are all using every facility available in order to take care of the present expansion of the Air Corps." Any serious organizational change now might actually impede the buildup.

Fortunately, Arnold and Marshall maintained confidence in one another, with Arnold agreeing not to press for independence. He would instead count on Marshall to provide an appropriate degree of autonomy during this period of national emergency. For his part, Marshall was determined to see that the air arm got what it required in organizational flexibility as well as in equipment. This meant that he would have to present a rationale to the War Department staff and make organizational changes that would have credibility with airmen.

The ABC Meetings

The airmen's drive to gain more freedom from the War Department had been boosted early in 1941 when representatives of Britain's armed services came to the United States for strategy discussions, which became known as the American-British Conversations (ABC–1). These ABC–1 meetings between a U.S. staff committee and the British delegation were held in the period of January–March 1941 and ranged over topics as varied as strategy, joint operations, geographic responsibilities, and command arrangements.

Air Vice Marshal John C. Slessor represented the Royal Air Force and Col. Joseph T. McNarney sat in for the Air Corps. The purpose of the conversations was to determine the best means with which the United States and Britain might defeat Germany and her allies "should the United States be compelled to resort to war."

The Anglo-American representatives agreed that in event of war both in Europe and in the Pacific, the major effort would first come in Europe. This would include a sustained air offensive against Nazi Germany. A strategic defensive would be mounted in the Far East. Arnold noted in early 1941, "We were planning for war, even though we were not in it." In response to the British request for American-produced aircraft, he emphasized to Marshall and Roosevelt that "we must first meet our own requirements," and then give our allies "only such items as they could use effectively."

These talks subsequently led to formal creation in August 1941 of the Combined Chiefs of Staff representing both British and U.S. military forces, with Arnold representing American air power. Arnold was, of course, subordinate to Marshall, the Army Chief of Staff. However, it was necessary that he be present when the Combined Chiefs formulated grand strategy. Thus the air forces' movement toward autonomy was aided by the fact that the RAF had long ago gained independence, and its opposite American number was at the



At this combined Chiefs meeting, General Arnold can be seen seated second from the left, behind Maj. Gen. Lauris Norstad. Among their British compatriots on the CCS is the Marshal of the RAF, Sir Charles Portal, seated across the table, midway on the right, pipe in hand.

table. "I often wondered," Arnold later noted, "how I came to be included at Argentia [in Newfoundland, site of the meeting that founded the CCS]. Prior to that time, Air items on a higher level had been handled by the Chief of Staff and by the General Staff. At all conferences, even though an Air representative sat in, the General Staff or the Chief of Staff did the talking."

Subsequently, Arnold learned that Hopkins had insisted on his attendance at the conference. Hopkins, for his part, continued to press for an air power buildup. "I don't know why," he exclaimed, "we are producing 600,000 automobiles for pleasure-seeking people, when we need airplanes and engines!"

Bureaucratic Behemoth

The Air Corps continued to have difficulty prompting meaningful action on air matters from the War Department General Staff. Marshall knew that officers on the General Staff failed to support the airmen properly. As a result, air actions tended to be postponed, and bottlenecks appeared. The General Staff, Marshall said, had "lost track of its purpose," becoming, in his view, "a huge,

bureaucratic, red tape–ridden operating agency." He added, "It had slowed down everything."

In the summer of 1940, Marshall asked Arnold to provide his view on reorganization. Marshall was concerned not only about air matters: he believed that the War Department had evolved into "the poorest command post in the Army." Arnold responded by proposing the appointment of three Army deputy chiefs staff, one each for ground, air, and service forces. However, the War Department staff opposed this step and remained committed to the idea that the mission of the air arm was to support the ground forces.



As a major general in October 1940, George H. Brett became Marshall's choice to become Chief of the Air Corps.

Still navigating between the War Department staff and the airmen, Marshall in October 1940 named Arnold his acting Deputy Chief of Staff for Air, responsible for coordinating all air matters, and Maj. Gen. George H. Brett as acting Chief of the Air Corps. However, the GHQ Air Force was removed from the jurisdiction of the Office of the Chief of Air Corps and assigned to General Headquarters. It was now under the direct control of the Commander, Army Field Forces.

This setback was ameliorated in December 1940 when Secretary of War Henry L. Stimson named Robert A. Lovett to be special assistant to the Secretary of War (redesignated in April 1941 as Assistant Secretary of War for Air). Lovett would make the case for air power directly to Stimson. A banker well informed on the subject of aircraft manufacturing, Lovett surveyed the industry with an eye to substantially increasing production. His main job was to improve delivery of aircraft overseas while maintaining a balance between the needs of foreign clients and the needs of the Army air arm.

Marshall wanted all air matters handled by Arnold, unencumbered by General Staff objections and delaying tactics. The Army Chief of Staff emphasized: "I want this procedure put in force without delay. The Air Corps has a tremendous procurement program tied in with new developments and now has a tremendous personnel problem…They will be turning out pilots initially at the rate of 7,000 a year. We have to operate on a simpler basis than our present system. I desire to proceed on a basis of evolution and general understanding between all."

Fulcrum of Power: Part I

In early 1941, Marshall and Lovett met with Stimson, impressing on him the need for more freedom and flexibility for Army airmen who were being asked to build up the air forces as rapidly as possible. Although Lovett favored an independent air force, he emphasized to Stimson a need for reorganization to provide tactical independence in a time of crisis.

Auxiliary No More

Stimson evidently found Lovett's case to be compelling. He stated, "Air warfare involves not merely a new auxiliary weapon for the ground troops…[I]t is becoming clear now that it involves independent action quite divorced from land and sea. The difficulty is finding just how far to go in freeing them, but it seems to be my job now to try to solve that. It is a very big one." Stimson truly believed that "the moment has now come" to develop a strong American air force.

The issue was how to give the Army Air Corps sufficient autonomy while keeping it part of the Army. Brig. Gen. Carl A. Spaatz, chief of Arnold's Plans Division, had been working on this problem even as Lovett's staff struggled with this issue. Spaatz and Lovett agreed that the solution lay in revising Army Regulation 95–5 which described the position of the Air Corps in the Army. Lovett and Spaatz briefed Arnold, who in turn took the idea to Marshall. Stimson meanwhile was bearing down on the problem, emphasizing that staff work required decentralization "to permit Air Force autonomy in the degree needed." The Air Corps should be "as modern as the instrument it uses."



Brig. Gen. Carl A. Spaatz was instrumental in defining the functions and organization of the Air Corps that led to the establishment of the Army Air Forces.

This confluence of thought proved decisive because Stimson was under heavy pressure from Congress to grant more freedom to the Air Corps. In May 1941, Marshall stepped in and informed Stimson that a revision of Army Regulation 95–5 was ready for implementation. "It thus gave me something with which to meet the threat of an independent Air Corps created by [congressional] legislation," said Stimson.

A leading proponent of independence was Hugh J. Knerr, who served as Andrews's chief of staff at GHQ Air Force in the late 1930s. Knerr subsequently had been relieved and ostracized for beating the independence theme, and in late 1938 had left the Air Corps. On the outside, he continued to agitate for independence.

Another proponent was Andrews, who in early 1941 was Commanding General, Panama Canal Air Force. He maintained that the Army's air arm could not be properly developed "under an organization which considers it an adjunct of surface forces, even with a man as broadminded and farseeing as Marshall at the head of the Army." He added, "No matter how progressive Marshall may be himself, the rank and file of the Army has not changed materially."

Andrews, who did not always see eye-to-eye with Arnold, nonetheless considered him "a good politician" and had confidence that Arnold could handle this issue.

Taking the Step

Having gotten a green light from Stimson, Marshall on June 20, 1941, made effective the revised Army Regulation 95–5 which redefined the organization and functions of the Air Corps and officially established the Army Air Forces. It gave Arnold the title of Chief, AAF (he continued to be Deputy Chief of Staff for Air) responsible to the Army Chief of Staff and the Secretary of War. Under 95–5, Arnold had the authority to coordinate the Office of the Chief of the Air Corps (Maj. Gen. George Brett) and the Air Force Combat Command (Lt. Gen. Delos C. Emmons), redesignated from the GHQ Air Force and which previously had reported directly to Marshall. Combat Command would develop air doctrine and plans for operational training; the Chief of the Air Corps would supervise research and development, supply, and maintenance.

Most important was the fact that the revised regulation provided Arnold with an Air Staff to formulate policy and plans. As one historian noted, the Air Staff, a title borrowed from the British, was created "to encourage more intelligent planning for the future." Arnold named Spaatz to be Chief of the Air Staff and Lt. Col. Harold L. George to head the new Air War Plans Division. Additionally, the Air Staff included assistant chiefs of staff for personnel, intelligence, materiel, maintenance, and distribution. The Air Staff also included an air inspector and air adjutant general.

It was a major step in the institutionalization of the nation's air power, but it wasn't a cure-all. Formation of the Air Staff failed to break Arnold of one of his bad habits: his addiction to calling on trusted individuals informally to carry out various assignments. He subsequently created a group of close personal advisers to review current policies and to undertake specific tasks.

Arnold's advisory council became his own personal group of "idea men" and included, at various times during World War II, Colonels Jacob E. Smart,

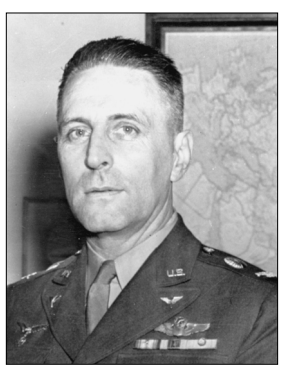
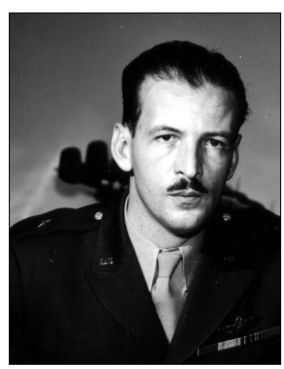
Fred M. Dean, Emmett O'Donnell Jr., Charles P. Cabell, and Lauris Norstad. Smart recalled that Arnold had directed him to spend all of his time "thinking" rather than dealing with mundane staff matters. However, on one occasion, after Arnold had failed to convince Marshall of something or other, he admonished Smart: "From now on, you spend 30 percent of your time thinking and 70 percent on how to sell an idea."

As it happened, the new Air Staff had barely caught its breath before being faced with a large challenge. The German war machine had achieved major spectacular victories in Europe, Britain's plight grew desperate, and the Roosevelt administration continued to prepare for war. The ABC–1 discussions, and the subsequent Rainbow No. 5 war plan, stipulated that, for the United States, the European theater would be decisive. With the establishment of the AAF and its Air Staff, Arnold directed expansion of the Air Staff's Air War Plans Division, and he named George to organize and enlarge the division "to develop overall plans for the Army Air Forces."

The Barbarossa Factor

The war took a new turn when Hitler, on June 22, 1941, launched Operation Barbarossa, a massive, full-scale invasion of the Soviet Union. In early July 1941, Roosevelt, having already stressed the importance of air expansion, ordered the War Department to develop an estimate "of the overall production requirements required to defeat our potential enemies." The President wanted prompt action. The War Plans Division of the War Department prepared to respond.

However, at the insistence of Spaatz and George, Arnold recommended to the War Department that the Air War Plans Division of the Air Staff prepare


Three who participated in the writing of AWPD–1 were (left to right) Lt. Col. Harold L. George, Maj. Laurence S. Kuter, and Maj. Haywood S. Hansell Jr., photographed here when a brigadier general.

the air requirements as directed by Roosevelt. Brig. Gen. Leonard T. Gerow, head of the War Department's War Plans Division, agreed, and as a result, the now-famous AWPD–1 air war plan was born. Written by George, Lt. Col. Kenneth N. Walker, Maj. Laurence S. Kuter, and Maj. Haywood S. Hansell Jr., it described requirements for wartime victory in the air.

The creation of the Army Air Forces and its Air Staff did not, of course, solve all problems of air coordination. Marshall demonstrated an understanding of the need for improved efficiency and coordination between airmen and others on the War Department General Staff. His close relationship with Arnold prefigured the sound partnership between the two during the war. Marshall and Arnold, in their own ways, had carried on a campaign designed to gain more freedom and flexibility for Army airmen.

Nonetheless, the War Department's War Plans Division still blocked the AAF from a clear, sustained role in overall strategic planning. Even greater freedom with complete autonomy would have to wait until early 1942 when the AAF would become coequal with Army Ground Forces and the Services of Supply. By that time, Arnold's Air Staff had made its mark, and would continue to do so throughout the war. It shaped Army Air Forces plans, strategy, and resources. Moreover, with great foresight, the expanded Air Staff (at Arnold's direction) created detailed plans to organize an independent air force once the war was over.



For his role in the Tokyo raid, Col. "Jimmy" Doolittle receives the Medal of Honor from President Franklin D. Roosevelt. Looking on admiringly is Doolittle's wife "Joe," accompanied by Gen. George C. Marshall at the left and Maj. Gen. "Hap" Arnold at the right.

Doolittle: Renaissance Man of Aviation

General James H. "Jimmy" Doolittle, who died in California on September 27, 1993, at the age of ninety-six, was an authentic American hero and aviation pioneer. Undoubtedly best known by the public for his World War II feat of leading the first American bombing attack on Japan in April 1942 from the deck of the aircraft carrier *Hornet*, General Doolittle excelled as test pilot, racer, aeronautical scientist, commander of air forces in World War II, spokesman for an independent air force, and advocate for the advancement of military science. He truly deserves the appellation Renaissance Man of Aviation.

Even in his youth, Jimmy Doolittle seemed to go out of his way to probe the unknown. During his high school years in Los Angeles, he took up prize-fighting and did so well in the ring, winning a statewide boxing championship, that he considered a professional career in boxing. Disciplined and tough, he might well have pursued fighting as a livelihood except for the entreaties of his mother and of Josephine "Joe" Daniels, who subsequently became his wife.

During World War I, Doolittle enlisted in October 1917 as a flying cadet in the Army Signal Corps Reserve and was commissioned in March 1918 as a second lieutenant in the Aviation Section. After World War I, he participated in record-breaking flights, including a flight in a D.H. 4B from Florida to California, which earned him the Distinguished Flying Cross. In the early 1920s, at the Air Service Engineering School at McCook Field, Ohio, the Air Service's aviation research center, Doolittle flew every conceivable type of plane while checking the effects of weather on flight. He earned a bachelor's degree in 1922 from the University of California at Berkeley, a master's degree in 1924 from MIT, and a doctorate in aeronautical science in 1925, also from MIT, one of the first people in the country to earn this degree. His dissertation was "The Effect of the Wind Velocity Gradient on Airplane Performance."

Doolittle: Renaissance Man of Aviation initially appeared as "Renaissance Man of Aviation" in *Air Power History,* Vol. 40, No. 4, Winter 1993, pp. 4–8.

Fulcrum of Power: Part I



The young James H. Doolittle enlisted in the Army Signal Corps Reserve as a flying cadet.

Although Doolittle, from his early years, had been considered pugnacious and daring, his entire career showed him to be a deliberate planner who executed flights and operations only after careful, intense study. For example, in the early 1920s, while testing night lights on routes to be used for airmail flights between Dayton and Cleveland, he prepared by flying at ground level day after day until he knew "every silo, every barn, every telephone line."

In the 1920s and 1930s, air racing became exceedingly popular in the United States. Competition was keen, and pilots in the military services participated, although money for military aviation was scarce. Lieutenant Doolittle, of the U.S. Army Air Corps, participated in and won many of the famous national air races, setting numerous air records. In 1925, he won the Schneider Cup race, a race for seaplanes only, much to the chagrin of the U.S. Navy. Although not an experienced water flyer, Doolittle made careful calculations about wind, speed, and technique, and succeeded in winning. The *New York Times* editorialized that "it must have been a grievous sight to sailors when Lieutenant James H. Doolittle, United States Army, pontoons on his landplane, romped away with the cup." He received the Mackay Trophy for this feat.

Meanwhile, as a young officer not actually participating in the fight of the Army's airmen for greater autonomy, Doolittle closely observed the struggle led by Brig. Gen. William "Billy" Mitchell. (Mitchell's court-martial started two days after Doolittle won the Schneider Cup race.) In retrospect, Doolittle expressed his admiration for Mitchell, tempered by the realization that Mitchell's zealotry hurt his own cause:

> We were saddened to learn of the outcome of Mitchell's court-martial, but understood why it was necessary. Although many of the young pilots agreed with his concepts of air power, most of us thought he had gone overboard in his criticisms. Like all zealots, he was intolerant of any view other than his own. I think he would have been successful if he had been more flexible in the application of his ideas.



Among the enthusiasts en route to the Dayton International Air Races, and publicizing the event, is front-seat pilot, Lt. James H. Doolittle, above.

Doolittle's focus in the late 1920s remained his intense pursuit of the basic quest of aeronautical science and engineering: how to better the performance and safety of aircraft. To this end, he applied his scientific training and flying skill. At Mitchel Field's Full Flight Laboratory, established in 1928 by the Daniel Guggenheim Fund for the Promotion of Aeronautics, he worked on flight instrumentation and the problem of blind flying. Accidents occurred because pilots could not fly by instruments or did not trust them. Pilots encountered weather situations in which they had to either bail out or attempt to stagger through. This was foolish, emphasized Doolittle: "Progress was being made in the design of aircraft flight and navigation instruments and in radio communication. If these sciences could be merged, I thought flying in weather could be mastered." His flying career and his laboratory work taught him that the most important principle in flying was to learn one's limitations. Those who did "would probably live to a ripe old age, whereas the pilot who flew beyond them would not."

In February 1930, Doolittle resigned from the Air Corps to accept a position with the Shell Petroleum Corporation. He always maintained that this decision was purely economic. It was, however, a difficult decision; he knew that he would miss testing Army aircraft and associating with the gifted people in the Air Corps and in the aircraft manufacturing industry. His application for a commission as a major in the Reserve — skipping the rank of captain — was approved. Doolittle later reflected that his contemporaries resented his two-step promotion, despite the ten years he spent as a lieutenant. With Shell

Oil, Doolittle coordinated its aviation departments in San Francisco, St. Louis, and New York. He also kept the company in the public's eye by continuing to participate in air shows and races.

His approach to speed races relied on a fundamental knowledge of aircraft engineering. He won the Bendix Trophy race from Burbank, California, to Cleveland in the Laird special. Zantford Granville and his brothers, of Springfield, Massachusetts, invited Doolittle to fly the Gee Bee R–1 racer in the



The Gee Bee "little monster."

Thompson Trophy race in 1932. After inspecting the plane, Doolittle immediately described it as "extremely hot to handle." Nonetheless, he climbed aboard, flew it to Cleveland, and subsequently won the Thompson Trophy with a record speed for the race of 252.686 miles per hour. Earlier, during speed trials for the race, he set a world's speed record of 296.287 miles per hour in the plane. To Doolittle, the Gee Bee was a "little monster" and the most dangerous plane he had ever flown. These racing planes were "the guinea pigs of aviation," and the races, the proving ground for testing design and construction concepts. Important advances in safety and in engine, wing, and fuselage design flowed from the experience in the air races. However, the price in planes and pilots was great.

In the 1930s, Shell produced 87-octane gasoline for the airlines, but Doolittle convinced Shell officials that higher octane fuel would absolutely be required for the higher performance engines that were certain to come. Under his prodding, the company reluctantly made the expensive investment in research facilities to manufacture iso-octane, a fuel that was the basis for its 100-octane gasoline. Remarkably, the decision was made during the depression, when no market for the product existed. Doolittle recalled that many in the company publicly termed this project "Doolittle's folly." He thought that he had received "more credit than was due me for persuading the company to

take the risk. I think it was because Doolittle is kind of a weird name and I seemed to get my name before the public when other people who did more didn't get as much recognition." After Shell made the first delivery of 100-octane gasoline to the Air Corps for testing, an Army board finally recommended the fuel for combat aircraft, and the order was given that all aircraft engines after January 1, 1938, would be designed to use 100-octane fuel. Ultimately, this proved a key to increasing the performance of American combat aircraft in World War II.

In the late 1930s, Doolittle continued to encourage young engineering students to consider careers in aeronautics. In January 1940, he was appointed president of the Institute of Aeronautical Sciences, and in that post he emphasized to college students the importance of having the best minds working on the problems of aeronautics.

Meanwhile, with Nazi Germany's invasion of Poland, then of France and the Low Countries, the United States prepared for war. Doolittle returned to active duty in July 1940 as a major, working with the automobile manufacturers to convert their plants to aircraft production. He was promoted to lieutenant colonel in January 1942, before leading sixteen B–25 medium bombers in the famous raid on Tokyo. The genesis of this daring mission resided in President Franklin D. Roosevelt's desire to shore up home-front morale after a series of devastating setbacks in late 1941 and early 1942. Roosevelt prodded Gen. George C. Marshall, Army Chief of Staff, and Lt. Gen. Henry H. Arnold, Chief of the Army Air Forces, to devise a plan to bomb the Japanese home islands. Roosevelt had become a devotee of strategic bombing and constantly admonished Marshall and Arnold to do everything necessary to win the war as quickly as possible with the least loss of American lives.

Arnold gave Doolittle top priority for the Tokyo raid, ordering Maj. Gen. George C. Kenney and Brig. Gen. Kenneth B. Wolfe to provide him with logistic and engineering support. This was a joint mission, of course, and the Navy's outstanding support and cooperation meshed well with Doolittle's work. Characteristically, after Roosevelt presented him with the Medal of Honor for planning and leading the Tokyo raid, Doolittle said that the medal should be reserved for men who risked their lives in combat to save others. He told General Arnold that he would spend the rest of his life attempting to earn this award.

An interesting turn in potential wartime command occurred between the Tokyo raid and September 1942. Gen. Douglas MacArthur, commander of Allied forces in the Southwest Pacific Area, asked General Marshall for an air commander to replace Lt. Gen. George Brett. Arnold's first recommendation to Marshall was Lt. Gen. Frank M. Andrews, who nursed a long-held antipathy to MacArthur and made it clear that he would not work for MacArthur under any circumstances. Arnold next proposed Jimmy Doolittle, but MacArthur did not want the alleged flamboyant racer commanding the air



Maj. Gen. James H. Doolittle receives the Distinguished Service Medal from Gen. Dwight D. Eisenhower, as Lt. Gen. Carl A. Spaatz looks on.

forces in the Southwest Pacific. Arnold then tapped Gen. George C. Kenney, who ultimately turned in a brilliant performance as MacArthur's airman.

In September 1942, as a brigadier general, Doolittle took command of the Twelfth Air Force, assembled to support the Allied landings in North Africa. He faced a problem attempting to win the confidence of the operation's commander, Lt. Gen. Dwight Eisenhower, who seemed to take an instant dislike to him, even though he came highly recommended by Marshall and Arnold. Again, it seemed that Doolittle's reputation had preceded him. In November 1943, he assumed command of the Fifteenth Air Force in Italy, and in January 1944 he was made Commander, Eighth Air Force in England, under Gen. Carl A. Spaatz, U.S. Strategic Air Forces in Europe Commander, and General Eisenhower, Supreme Allied Commander.

By turning in a superior job commanding the air forces in the Mediterranean and Europe, Doolittle gained Eisenhower's complete confidence. Eisenhower, in fact, came to rely on Doolittle's judgment and, in retrospect, considered him to be one of the outstanding operational air commanders of the war.

In the immediate postwar years, Doolittle became an important advocate for the creation of an independent air force, a role that was not new to him. In 1934 he had been the lone dissenting member of the Baker Board, which recommended against air independence and unity of command and called for abolishing the position of Assistant Secretary of War for Air. The board did, however, propose creation of a General Headquarters Air Force, as had the prior Drum Board report. Doolittle emphasized to the Baker Board:

> I believe that the future security of our nation is dependent upon an adequate air force. This is true at the present time and will become increasingly important as the science of aviation advances. I am convinced that the required air force can be more rapidly organized,

> equipped, and trained if it is developed as an entirely separate arm. If complete separation is not the desire of the committee, I recommend an air force as part of the Army but with a separate budget, a separate promotion list, and removed from the control of the General Staff.

Doolittle stressed the necessity of neutralizing the enemy's air element before successful ground operations could occur. "The first lesson," he said, "is that you cannot lose a war if you have command of the air and you cannot win a war if you haven't."

Doolittle testified in 1935 to Congressman John J. McSwain's House Military Affairs Committee (McSwain was a long-time advocate of an independent air force), emphasizing that the air force in the future would be the first line of defense as well as of offense. As to organizing for national defense:

> I feel there should be a supreme commander; and under that supreme commander, who will perhaps be a Secretary of National Defense, three secretaries — one of Navy, one of Army, one of Air…I feel that only through a separate Air Force, entirely divorced from the Army and Navy, can we efficiently promote and develop a defense machine that will provide adequate security in case of a national emergency.

After World War II, Doolittle, his reputation as wartime commander and hero preceding him, impressed congressional lawmakers with his strong advocacy of the concept of unity of command. This meant a coordinated organization of land, sea, and air forces, each under its own commander and each responsible to a supreme commander. This pattern evolved during the war as clearly the most effective way to organize combat forces in the operational theaters. He emphasized the importance of carrying over hard-learned wartime lessons into peacetime:

> When a war is over, the commands in theaters of operations are…liquidated and nothing remains except the home organization. If there is no unity there, there is no unity at all. It is the form of the home organization that will control the training, the tactics, the doctrine, the thinking and the habits of the men whom we will train to fight the next war if it comes to us.

He believed that leaders should be trained in peacetime in an organization that, by its nature, will compel them to think in broad concepts. The United States required a defense establishment that featured fundamental research, the creation of an independent air force, and a single department of national defense to coordinate the three services.

Doolittle's postwar ideas for organizing the national defense team were a harbinger of the National Security Act of 1947. He had crystallized the concept of deterrence, the idea that America would not be an aggressor nation but

if provoked, would carry the fight to the enemy. The key would be long-range air power to deter aggressors.

Besides speaking out for creation of the United States Air Force, Doolittle helped found the Air Force Association and in 1947 became its first president. Meanwhile, he had returned to Shell Oil in 1946 as a vice president and later became a director. Appointed in 1951 as a Special Assistant to the Air Force Chief of Staff, he served as a civilian assisting the Air Force in scientific matters. He retired in February 1959, ending all formal connections to the Air Force.

General Doolittle also played a pivotal role in American civilian space endeavors. A friend of Hugh Dryden and Theodore von Kármán, he served as chairman of both the National Advisory Committee for Aeronautics (NACA) and the USAF Scientific Advisory Board during the period of the Soviet Union's October 1957 launch of *Sputnik I* and afterward. In these posts, he marshaled a group of the nation's leading space scientists to determine the feasibility of transforming the NACA into a space agency. The scientists' proposal formed the foundation of the plan to organize the new National Aeronautics and Space Administration (NASA). Because of his role in planning for the national space agency and the nation's leaders' esteem of him, Doolittle headed President Eisenhower's list of candidates to be the first NASA Administrator. Only after Doolittle made clear his reluctance to take on the responsibilities of this position did the President withdraw his name.

Contrary to his sometime-image as a daredevil racer and risk-taker, General Jimmy Doolittle was a deliberate, calculating scientist, engineer, pilot, operational commander, and innovator. He always examined a situation thoroughly before making a decision, and appearances to the contrary, nothing this man did was ever by the seat of his pants.

To reflect on Doolittle's originality and astonishing contributions over a long period seems to ignore his humanity. For all of his hard work, enormous success, and acclaim, he was a genuinely modest and gracious person who tended toward self-deprecation, always giving credit to others. At the pinnacle of success, receiving the Medal of Honor in the White House for the Tokyo raid, he thought that he did not deserve the medal, and even considered turning it down.

Here is a life that deserves close study, in all its hues, for it can teach us much about courage and leadership, and about ourselves.



President Roosevelt was determined to provide American-made airplanes to the Allies. He and his entourage are here at Bolling Field, near Washington, D.C., as lend-lease B–24 Liberators are presented in a ceremony to a friendly European government.

Prelude to War

On the eve of Pearl Harbor, the United States was clearly unprepared for a global conflict. Building the American war machine to a size and strength suitable to the task of battle against Japan and Germany took years. Even so, America had not been totally idle in the run-up to the Japanese attack. By late 1941, the United States had for some years been making modest war preparations. These actions reflected Franklin Roosevelt's concern about Germany's rampage in Europe and Japan's aggression in East Asia.

President Roosevelt was especially worried about Britain's ability to stay the course in battle against Hitler. During the period 1939–41, Roosevelt pushed the American military and American industry to plan for a wartime footing. He moved the Joint Army-Navy Board, predecessor to the Joint Chiefs of Staff, and the Munitions Board into the newly created Executive Office of the President. Keenly aware of and deeply troubled by the pivotal role played by the Luftwaffe in Germany's victories, the president placed special emphasis on the "increased range, increased speed, [and] increased capacity of airplanes abroad." He advocated an enormous increase in the production of aircraft — to 50,000 airplanes per year, counting the estimated requirements of the Royal Air Force.

This was a huge number, sufficient, said Maj. Gen. Henry H. "Hap" Arnold, Chief of the Army Air Corps, to "stagger any mere officer." Harry Hopkins, President Roosevelt's confidant, warned Robert A. Lovett, Assistant Secretary of War for Air, that he might fall out of his chair when he heard the figures.

Presidential Pressure

After Congress passed the Lend-Lease Act in the spring of 1941, Roosevelt pressured the Army Air Forces to give up large numbers of production aircraft

Prelude to War initially appeared as "When Arnold Bucked FDR" in *Air Force Magazine,* Vol. 84, No. 11, November 2001, pp. 86-90.

to Britain, which was then locked in a desperate struggle with Germany. The President also insisted that U.S.-produced airplanes and equipment be sent to the Soviet Union and China, which were also fighting the Axis powers. Nor did Roosevelt stop here. In the summer of 1941, he clamped a de facto oil embargo on Japan and took military measures to reinforce Hawaii and the Philippine Islands. Once the United States was in the war, FDR left strategy and tactics to the military, but when the United States was a nonbelligerent in 1941, he was determined to throw all available switches to funnel the fruit of America's productive capacity to the Allies.

Roosevelt's actions were taken to shore up the Allies and to prepare the United States for a potential two-front war. However, it put dramatic pressure on the AAF. Roosevelt's determination to send aircraft to the British meant that Arnold had to fight tooth-and-nail for airplanes to build up his own air forces. Arnold observed, "The Air Force was rapidly changing its status from one of peace to one of war." But the task of quickly deploying men and equipment overseas and within the continental United States confronted Arnold and the AAF with daunting organizational, personnel, and equipment problems.

Indeed, Roosevelt's commitment to Britain brought the President and his uniformed Air Chief into sharp conflict. (Gen. George C. Marshall, the Army Chief of Staff, also felt the heat, of course. He noted that British requirements presented "a tremendously complicated task here in Washington.") Arnold's problem revolved around the need to build up a U.S. air force — "the world situation demanded it" — while simultaneously supplying the British and keeping Roosevelt at bay. So tense were the relations between President and commander that Arnold was worried that he would be relieved.

Meanwhile, Hopkins had visited Britain and returned home to recommend shipping the RAF more B–17Cs. Arnold's reaction was pointed: "It eliminates the present objectives in building up our air force, and it prevents the forming of a striking force and reduces, to the vanishing point, the low combat strength of this force."

Well aware of the developing rift between FDR and Arnold, Secretary of War Henry L. Stimson and Lovett recommended to Arnold that he visit England and observe the situation for himself. Arnold followed through and spent two weeks in April talking with British leaders, civilian and military. He saw firsthand what the British were up against. In addition, while in England, viewing the air war up close, Arnold became convinced that "destruction by air power could make a landing of ground forces possible." He went on, "The Navy could ensure the existence of England but air power and air power alone could carry the war home to central Germany, break down her morale, and take away from her the things essential to combat."



British Prime Minister Winston Churchill observes a B−17C in flight, the aircraft type that Harry Hopkins, President Roosevelt's confidant, had recommended be supplied to the RAF for use in its struggle against Germany.

Out of the Doghouse

Stimson ensured that Arnold personally brief the President. At this meeting in the first week of May 1941, according to Stimson, Arnold presented "an admirable statement" on what he had found. Roosevelt commented that it was the best briefing he had received on the British situation. Stimson, who held a high opinion of Arnold, was convinced that the Air Chief's splendid briefing was all that got Hap Arnold out of FDR's doghouse.

Arnold, meanwhile, was anxious in early 1941 to determine how the B–17C would perform in Europe under RAF command. RAF Bomber Command wanted to use the heavy aircraft for high-altitude daylight raids. The Americans recommended a maximum altitude of 25,000 feet for combat operations. Also, crews should take special training with the Sperry bombsight, which was new to the RAF. However, the RAF failed to follow these recommendations, and beginning in May 1941 the B–17Cs operated from altitudes above 30,000 feet. RAF crews took little bombing practice. After a mere 22 missions spanning two months, only 12 of the original 20 B–17s were left.

According to Arnold, this trouble with the B–17s was "to hound us in our bombardment relations with the RAF for a long time." The performance of these Flying Fortresses, in Arnold's words, turned out to be "a fiasco." The British had been warned to use them with caution and to fly in formation. They ignored this advice, and as a result the entire operation was "badly mishan-

dled" by Bomber Command. On the other hand, the B–17s demonstrated that they could take a great deal of punishment. Arnold marveled, "sometimes they were literally shot to pieces, but still they came back."

By the summer of 1941, Army planners had succeeded in crafting basic objectives and plans should the United States enter the war. The initial dialogue in the spring of 1941 with the British to address coalition warfare, termed ABC–1 for American-British Conversations, sketched fundamental goals. The European theater was judged to be decisive, and a sustained air offensive against Germany was contemplated. Subsequently, the Rainbow No. 5 war plan, reflecting the conclusions of ABC–1, detailed a strategic offensive in Europe and a defensive posture against Japan in the Pacific. The Joint Army-Navy Board approved Rainbow No. 5 in May 1941, and several weeks later the Secretaries of War and the Navy approved it.

President Roosevelt continued to call for accelerated war preparations — dragging along a reluctant American public — and on July 9, 1941, almost three weeks after Germany had stunned the world by invading the Soviet Union with 160 divisions, he asked the Army and the Navy for an estimate of "overall production requirements needed to defeat our potential enemies."

First War Plan

Arnold received approval from the War Department to have the new Air War Plans Division of the Air Staff (created when the AAF was established in June 1941) prepare the requirements, known as the Air Annex. The plan, called AWPD–1, was developed and refined under enormous pressure, day and night. In many ways, the United States already was at war, although the actual declaration of war had not yet arrived.

The plan was drawn up by Lt. Col. Harold L. George (head of the Air War Plans Division), Lt. Col. Kenneth N. Walker, Maj. Laurence S. Kuter, and Maj. Haywood S. Hansell Jr. (recently returned from England with folders on German targets). It identified the following major target systems: aircraft assembly plants, electric power, transportation, and synthetic-oil production. This became the blueprint for the conduct of the air war against Germany in the early months of conflict.

AWPD–1 stated a requirement for more than 63,000 aircraft, about 7,500 of which were to be heavy bombers. The AAF planners foresaw Britain functioning as the site of many airfields from which the bombers would decimate Nazi Germany's industrial base. These plans depended heavily on the ability of American industry to produce huge numbers of aircraft, since in the summer of 1941 the AAF had fewer than 700 bombers of all types — heavy, medium, and light. In late August 1941, the AAF's George briefed the war plan to Marshall, who could have dissented or asked for major revisions. Instead, he stated: "I think the plan has merit. I should like the Secretary and assistant sec-

retaries to hear it." According to one of AWPD–1's authors, Hansell, this response "marked a crucial turning point in the evolution of American air power."

Stimson also approved the plan, emphasizing: "General Marshall and I like the plan. I want you gentlemen to be prepared to present it to the President." However, Imperial Japan struck on December 7, and the United States entered the war before Roosevelt ever received the briefing. In late December of 1941 an Anglo-American conference in Washington endorsed the plan's concept, although it never did reach the President's desk.

The Nazi attack on the Soviet Union on June 22, 1941, had generated a sense of urgency in American war planning. While the AAF's planners in Washington drafted AWPD–1, Arnold found himself at sea in August aboard HMS *Prince of Wales* at Argentia, off the coast of Newfoundland. Arnold had been on one of his frequent inspection tours in early August when he received a message from Marshall directing him to return immediately to Washington. What followed was a sea voyage over several days to Placentia Bay in Newfoundland where Marshall, Arnold, the U.S. Chiefs of Staff, their British counterparts, and high-ranking U.S. and British diplomats met with Roosevelt and Prime Minister Winston Churchill.



Among the American military members attending as President Franklin D. Roosevelt and Prime Minister Winston Churchill met aboard the HMS Prince of Wales *at Argentia were General Arnold, seen standing at the far left, and General Marshall, who stands behind Churchill in this group.*



Generals Doolittle at the left and Spaatz at the right flank this Free French general as they inspect P–40 aircraft presented by America to her Ally.

Our Friends

The key issue was production and allocation of aircraft. This was no surprise to the AAF Chief, who observed: "On top of other headaches, [there] was the daily business of satisfying White House, Congressional, and War Department superiors who were constantly receiving phone calls, visits, and letters from people, official and unofficial, American, British, French, Dutch, Chinese, Polish, Russian,…and what not, criticizing the Air Forces' procedures, offering free advice and recommendations, or demanding a priority share of our equipment." As one historian commented, "American air power was getting strangled in the cradle by an excess of Presidential generosity."

Until passage of the Lend-Lease Act, British crews had picked up aircraft at U.S. factories. In May 1941 Roosevelt directed Stimson to "take full responsibility" for delivering the aircraft to "the point of ultimate takeoff." AAF crews then began flying aircraft from the manufacturing plant to terminals where British airmen or American civilians took over for the flight across the Atlantic. The British subsequently termed the ferry route, forerunner to the AAF Ferrying Command, the "Arnold Line," honoring the AAF Chief. By the end of the war, British Commonwealth nations had received 26,000 aircraft; the Soviet Union, 11,450; and China, nearly 1,400.

Before meeting with the British, Arnold had convinced Roosevelt and Marshall that no aircraft should be given to the Allies until the Americans had met their own needs. No commitments would be made to Britain until the AAF had studied their requests. As it was, Arnold noted, "The British as usual asked

for everything they wanted, regardless of whether we have or ever will have an air force. They never blinked an eye when they asked for 100 percent of our production."

As it turned out, the British had acquired erroneous U.S. production figures. Consequently, they were requesting numbers of airplanes that exceeded actual production by a wide margin. Arnold explained this to the British officers, prompting their representative, Air Vice Marshal Wilfred Freeman, to emphasize to Arnold: "When Air Marshal Peter Portal comes over, I am going to insist that he see just two people — one is the President of the United States and the other is you." Thus, said the AAF Chief, the service was able to get away without losing "everything we owned, including our pants."

Subsequently, Arnold was able to persuade Stimson that the AAF had first priority. He emphasized to the Secretary of War that it would not be possible to create the air force needed "to take decisive action" if large quantities of long-range aircraft were exported.

Meanwhile, the AAF had taken action to improve the air defense of the continental United States and to build up its overseas forces. The War Department had created four distinct zones, defined geographically, in the United States — the Northeast, Central, Southern, and Western Defense Commands. Arnold redesignated the existing continental U.S. air districts — Northeast, Northwest, Southeast, and Southwest — as First, Second, Third, and Fourth Air Forces. Across the North Atlantic, the AAF moved to establish installations across the air route to Britain. During 1941, AAF personnel worked on communications and weather stations in Labrador, Baffin Island, Newfoundland, Greenland, and Iceland. By late 1941, the foundation had been built for a ground-based communications system that would aid aircraft flying across the North Atlantic to the British Isles.



General Andrews, in tropic attire, meets Secretary Stimson for an inspection tour of the Panama Canal defenses.

In the Caribbean, Maj. Gen. Frank M. Andrews organized the Caribbean Air Force. The fulcrum was the Panama Canal

Zone, and by late 1941, 183 aircraft were assigned there. The Caribbean Air Force, covering the entire theater, was responsible for air defense and all air operations. In September 1941, Marshall appointed Andrews to be commander of all U.S. forces in the Caribbean, the first time an airman had occupied a unified command post.

Summer of 1941

While it intensified efforts to sustain England with the tools of war, the Roosevelt administration was well aware of the threat to American interests posed by Japan in the Pacific. In the summer of 1941, the Far East situation had turned ever more dangerous. The Japanese had moved south, occupying French Indochina. As a result, the administration placed a freeze on Japanese assets in the United States, in effect creating an economic blockade of Japan.

The need for improved air defenses in Hawaii and the Philippines was in fact a requirement of exceptionally long standing and had been emphasized by Brig. Gen. William "Billy" Mitchell in his 1924 report on his Far East trip. Mitchell suggested that it seemed inevitable that at some point in the future Japan and the United States would be at war with one another.

Japanese aggression in East Asia and the worsening diplomatic situation between the United States and Japan prompted Stimson to warn that "all practical steps" needed to be taken to increase American defensive strength in Hawaii and the Philippines. Stimson was also much concerned about a secret letter he had received in early 1941 from Secretary of the Navy Frank Knox, who pointed out that the Navy had reexamined the security of the Pacific fleet at Pearl Harbor. Knox emphasized "the increased gravity of the situation with respect to Japan and by reports from abroad of successful bombing and torpedo plane attacks on ships while in bases." Knox added: "If war eventuates with Japan, it is believed easily possible that hostilities would be initiated by a surprise attack upon the fleet and the naval base at Pearl Harbor."

Not only had the War Department been building up forces in Hawaii, but Arnold had sent 21 B–17s to Hickam Field. Commanded by Maj. Gen. Frederick L. Martin, the Hawaiian Air Force had been activated in November 1940 and consisted of the 18th Bombardment Wing at Hickam and the 14th Pursuit Wing at Wheeler Field. In late 1941, of 231 aircraft assigned to the Hawaiian Air Force, only half were regarded as up-to-date airplanes.

Aggressive Defense

The AAF's strategy was to give the Hawaiian Islands an aggressive defense featuring long-range aircraft to locate and attack enemy aircraft carriers. However, the decision by the War Department in 1941 to reinforce the Philip-

pines meant that the Hawaiian Air Force received a lower priority in the allocation of aircraft.

With the change in War Department policy to in fact reinforce the Philippines (subsequently reflected in the Rainbow No. 5 war plan and approved by the Joint Army-Navy Board), Arnold in October 1941 sent Maj. Gen. Lewis H. Brereton to the Philippines to command the Far East Air Force under Gen. Douglas MacArthur. Retired as Army Chief of Staff, MacArthur had been building up the Philippine military as a field marshal in the employ of the island government, and in July 1941 the War Department recalled him to duty and placed him in command of the newly created U.S. Army Forces in the Far East. With the administration's directive to not only defend but reinforce the islands, Roosevelt was attempting to send the Japanese a message. Brereton had more than 300 aircraft under his command, but less than half were combat ready.

As Arnold saw it, the key to defense of the Philippines was the B–17, and he was prepared to allocate several heavy bombardment groups to Brereton. He ordered the 19th Bombardment Group, which had flown the first B–17s to Hawaii in May, to transfer to the Philippines. By October, Col. Eugene L. Eubank had arrived with the first echelon of the 19th Group. In September, the 14th Bombardment Squadron, commanded by Maj. Emmett O'Donnell Jr., in a historic flight flew nine B–17Ds from Hickam Field — via Midway, Wake, Port Moresby in New Guinea, and Darwin in Australia — to Clark Field, near Manila.

These moves by the AAF to reinforce the islands meshed with Marshall's September directive that "United States Army Forces in the Philippines be placed in the highest priority for equipment." Stimson, a former governor-general of the islands, cheered deployment of the B–17s to the Philippines, stating that this gave the United States the opportunity to "get back into the islands in a way it hadn't been able to for 20 years."

Stimson applauded the AAF concept of using the B–17, with its great range, to attack an invading fleet far out at sea. Marshall subsequently observed: "If we could make the Philippines reasonably defensible, particularly with heavy bombers in which the Air Corps at that time had great faith, we felt that we could block the Japanese advance and block their entry into war by their fear of what would happen if they couldn't take the Philippines and we could maintain heavy bombers on that island."

As the Roosevelt administration in 1941 moved American industry toward a wartime configuration and accelerated the shipment of war equipment to Britain, the Soviet Union, and China, the Army Air Forces prepared for war. These preparations assumed staggering proportions — not only aircraft production but training of pilots and aircrew, establishment of a myriad of technical schools, and the building of bases and their supporting infrastructure.

Fulcrum of Power: Part I

As Marshall put it, “It used to be we had time and no money; now we have money and no time.” Personnel strength of the AAF between the end of 1939 and December 1941 increased from 43,000 to nearly 300,000. Of utmost importance, the AAF formulated war plans and engaged in coalition planning with the British. This provided a strategic framework that created the backdrop for the AAF’s landmark AWPD–1, which estimated wartime requirements.

Deeply concerned about aircraft production and unit readiness, and attempting to build up the forces, Arnold left in late November for the West Coast to inspect bases and production facilities. Diplomatic negotiations with the Japanese, ongoing since February, had broken down, and Army and Navy commanders in the Pacific were being warned that hostile action by the Japanese was “possible at any moment.”

On December 6, 1941, Arnold met in California with the pilots and crews who were planning to fly more B–17s to the Philippines, after a brief stop in Hawaii. The next day, he joined Donald Douglas, an aircraft manufacturer, to discuss production issues. Before the day ended, the United States was at war, and the Army Air Forces would be put to the test.



Supreme Allied Commander Gen. Dwight D. Eisenhower meets with British Prime Minister Winston S. Churchill at an airstrip about two months after the successful invasion of Continental Europe.

The Overlord Air Controversy

It had taken several years, not without setbacks and frustration. The logistical problem was immense — from artillery and bulldozers to steel-mesh mats and ambulances. All of it, and the men, had to be transported across the Channel. First to fight for a foothold. Then to push into the Continent, over which Hitler's malignancy had spread, drawing the democracies into a struggle to the finish.

The Allies had massed 5,000 ships, from landing craft and midget submarines to battlewagons. American air strength alone was 13,000 aircraft, of which 4,500 were bombers. It was the largest, most complex military operation in history. In early May 1944 the date had been set for June 5, but by the night of June 3 the weather had turned overcast and stormy, and the invasion had to be postponed one day. Though the weather remained chancy, the monumental operation could not be held off longer.

June 6, 1944, would be D-Day for Operation Overlord, the invasion of Nazi-held Europe. Gen. Dwight D. Eisenhower, Supreme Commander, Allied Expeditionary Force, made this decision. Though the armada was ready, what lay ahead? Would the weather, at best marginal, hold? How stiff would enemy resistance be? Could beachheads be established and held? Could air cover be maintained? Would Overlord, on which so much depended, succeed?

From a vantage point of thirty years, all is clear. Facts and statistics are recorded. The hammer thrust succeeded. The U.S. 82d and 101st Airborne Divisions staged the largest airborne operation ever, dropping into the Cotentin Peninsula; the U.S. First Army assaulted Utah and Omaha beaches; the British 2d Army hit Gold, Juno, and Sword beaches in Normandy. Casualties were high at Omaha — 2,500 men. The American airborne lost about the same; the British, about 3,000; and the Canadians, nearly 1,100 men. The toll totaled more than 9,000, one-third killed. But six weeks later, a front had been estab-

The Overlord Air Controversy initially appeared as "Prelude to D-Day: The Bomber Offensive" in *Air Force Magazine,* Vol. 57, No. 6, June 1974, pp.60–65.

lished, setting the stage for "breakout and pursuit" in the summer. For Nazi Germany, Overlord signaled the opening of the last act.

These are historical facts, statistics, and judgment. They mask controversy. Thirty years later, disagreement remains about Overlord air planning and about which air campaigns contributed most to success. There is agreement on one point: the Allies had won the air battle before June 6, 1944, ensuring the success of Overlord. On D-Day, the Luftwaffe was hardly seen over the battlefield. The story of how the Luftwaffe was defeated and how the tactical and strategic air plans were formulated for Overlord and its aftermath reflect deep conflict.

Conflicting Concepts of Air War

Origins of this controversy predate World War II and are rooted in an enduring air dispute. In the 1920s and 1930s, some American airmen held that air had an independent mission, apart from ground and naval support. Such independent operations, they maintained, would circumvent trench carnage. However, the War Department believed that the First World War demonstrated paramountcy of ground forces.

Before World War II, the heavy bomber had not been combat-tested. Strategic bombing was still only theory. The War Department General Staff thought the bomber ancillary. Nonetheless, in April 1937 Maj. Gen. Frank M. Andrews, Commanding General, GHQ Air Force, expressed a view characteristic of Air Corps bomber advocates. The basic element of air power, Andrews said, was bombardment aviation which should be organized as "a relatively self-contained entity." Future capabilities of bombardment craft "challenge the imagination." Bombers would be able to destroy "vital organs that exist in the national body."

Bomber development progressed — the XB–17 flew in July 1935 from Seattle to Dayton — and instructors at the Air Corps Tactical School at Maxwell Field, Alabama, formulated the concept of high-altitude, daylight precision bombing without fighter escort. This became the American strategic bombing doctrine.

In the meantime, war was imminent. In September 1938, the Nazis terrorized the Czechs. President Franklin D. Roosevelt became alarmed, and on September 28 he summoned civilian and military leaders, including Maj. Gen. Henry H. "Hap" Arnold, acting Chief of the Air Corps. Only a few days earlier, Arnold had met Harry Hopkins, Roosevelt's adviser and "conscience." Arnold had impressed him. Hopkins had then briefed the President on air requirements. At this meeting, Roosevelt demanded 10,000 planes initially and the establishment of an aircraft production goal of 20,000 within a year. Arnold later recalled that, on September 28, 1938, the Air Corps "achieved its Magna Carta." From that day, Hopkins and Arnold cultivated a special rela-

tionship, the President's confidant serving as a conduit between General Arnold and President Roosevelt. Two days later, Prime Minister Neville Chamberlain signed the Munich pact.

In the fall of 1939, after Hitler attacked Poland, General Arnold, now Chief of the Air Corps, established an Air Intelligence Section. The Strategic Section of this unit began to determine critical elements of Germany's war industry. When Roosevelt requested the Secretaries of War and the Navy to establish requirements, Arnold's Air War Plans Division prepared an Air Annex to the War Department's reply. AWPD–1 was written by Col. Harold L. George (Division Chief), Lt. Col. Kenneth N. Walker, and Majors Laurence S. Kuter and Haywood S. Hansell Jr. Submitted in August 1941, it outlined a sustained air offensive against Germany. Priority targets included electric power, transportation, petroleum refineries, and synthetic-oil production, with neutralization of the German air force a priority "intermediate" objective.

When Britain went to war, air observers Brig. Gens. Carl A. "Tooey" Spaatz and George C. Kenney went to England, and substantive Anglo-American planning began. Presaging American entry into the conflict, the ABC–1 report was issued on March 27, 1941, forecasting an air offensive and invasion of Europe. Also, since 1939 the War Plans Division of the War Department General Staff had been working on "rainbow" plans, and in April 1941, Rainbow No. 5 outlined an Atlantic-European offensive with a "strategic defense" in the Pacific. This plan provided that in war the air forces would conduct "offensive air operations from bases in the British Isles against German military power at its source." In May, it was approved by the Joint Board, and in June, by the Secretaries of War and the Navy.

Even after Pearl Harbor, U.S. leaders agreed with the British that their first priority must be Germany's defeat. "I am convinced," said General Arnold, now Commanding General, Army Air Forces, "that a blow against Germany is of first importance." The means, he emphasized, would be "precision daylight bombing…as planned by the Eighth Air Force and for which it is equipped and trained."

But these plans could not be immediately implemented. Time would be required to build the Army Air Forces and gain combat experience. Poor weather and the Luftwaffe were proving difficult obstacles. Then, in November 1942, the invasion of North Africa (Operation Torch) significantly dispersed bomber strength. It had also changed command arrangements. General Eisenhower had summoned Spaatz, now a major general, from his Eighth Air Force command, to Algiers to be his Deputy Commander in Chief for Air, and Maj. Gen. Ira C. Eaker had become Eighth Air Force Commander. Spaatz's forces were merged with British units, all under the overall command of the RAF's Air Chief Marshal Sir Arthur Tedder.

Arnold firmly believed that German morale could be broken and that, should an invasion be necessary, Allied troops would subsequently have a



As General Eisenhower's Deputy Commander in Chief for Air, Gen. Carl A. "Tooey" Spaatz merged his forces with British units, all under the command of RAF Air Chief Marshal Sir Arthur Tedder, pictured here at the right.

much less difficult time. The high-altitude precision daylight bombing concept, from an unescorted formation, had yet to be applied effectively. In September 1942, this doctrine formed the basis for AWPD–42 which described a combined bomber offensive: bombing by the AAF in daylight; area bombing by the RAF at night. Top-priority targets were submarine yards; German transportation and electric power industries; and oil, aluminum, and rubber production. Again, German aircraft production was a priority intermediate goal.

Casablanca and the Combined Bomber Offensive

Meanwhile, the British exerted pressure on the Americans to join in nighttime bombing. Air Chief Marshal Sir Arthur T. Harris, Bomber Command head, argued that if the U.S. VIII Bomber Command would join the RAF at night, Germany could be knocked out of the war. Thus, at the Casablanca Conference in January 1943, American airmen were forced to defend daylight bombing before their air forces had been built up.

General Arnold called his commanders to this conference — Lt. Gen. Frank Andrews, the commander of U.S. forces in the Middle East; General Spaatz, commanding the Allied Air Force in North Africa; and General Eaker, Eighth Air Force Commander. Arnold talked with Prime Minister Winston Churchill "long and hard" about continuing daylight bombing, "why we figured the Germans could not stop us… how we figured our formations of B–17s and



Gen. Henry H. "Hap" Arnold confers here, while in the United Kingdom, with Maj. Gen. Ira C. Eaker, standing at the right, the Eighth Air Force Commander.

B–24s, subsequently with long-legged fighters, could protect themselves against German aircraft." Andrews and Spaatz also talked with Churchill.

Then General Eaker emphasized to the Prime Minister that VIII Bomber Command had been held back by inexperienced crews, lack of long-range escort, commitment to Torch, and by poor weather. Nonetheless, the Eighth Air Force's losses in daytime were lower than the RAF's at night. Daylight bombing would augment the night effort; it was more accurate, especially against small targets, and it would prevent the Germans from resting. Fires set by day would guide the British at night, effectively an around-the-clock offensive. Eaker argued forcefully that the Eighth was trained and equipped for day operations; should it operate at night, its losses would rise.

Churchill wrote that General Eaker presented his case "with powerful earnestness…skill, and tenacity." The Prime Minister accepted his argument, and Arnold recalled that "we had won a major victory, for we would bomb in accordance with American principles, using the methods for which our planes were designed."

On January 21, 1943, the Combined Chiefs of Staff issued the Casablanca Directive for a joint bomber offensive, the objective being "the progressive destruction and dislocation of the German military, industrial, and economic system, and the undermining of the morale of the German people to a point where their capacity for armed resistance is fatally weakened."

This directive established such primary targets as submarine yards and bases, the aircraft industry, and transportation, oil, and other industries. Subsequently, the Combined Chiefs approved Operation Pointblank against the German air force, identifying a target that, if crippled, would greatly assist the Allied invasion. The Allies thus continued strategy for which each was suited — the British bombing at night, the Americans by day. But VIII Bomber Command was still restricted by the number of available bombers and crews, and by overcast and low cloud cover.

During the second half of 1943, American bombing operations increased. In August, the Ninth Air Force in North Africa struck oil refineries at Ploesti, Romania. Though a substantial part of Ploesti's refining capacity was destroyed, more than 50 aircraft and some 500 airmen were lost. Then, attacks on Regensburg and Schweinfurt in August and on Schweinfurt in October—in which the Americans lost 120 bombers and hundreds of crewmen—brought on a crisis. These losses were prohibitive.

Contrary to accepted strategic doctrine, Eaker was now convinced that long-range fighter escort was the answer. During the week of the October Schweinfurt mission, the Eighth lost 148 planes; as a result, deep raids were canceled. But on December 13, 1943, Kiel and Hamburg were struck, and, for the first time, P–51B Mustang fighters accompanied the bombers. Equipped with auxiliary drop tanks, they performed exceptionally well. Subsequently, the turning point came as "Big Week" in February when the Germans lost more than 500 fighters and pilots. This proved the beginning of the end for the Luftwaffe. During February–April, at the direction of General Doolittle, now commanding the Eighth Air Force, Mustangs and P–47 Thunderbolts of Maj. Gen. William E. Kepner's VIII Fighter Command sought out the Luftwaffe and gained air superiority, thereby assuring success of both the bomber offensive and the invasion.

By the time long-range fighters had achieved control of the air, General Eaker had left his Eighth Air Force command (December 22, 1943) to become Air Commander in Chief of Mediterranean Allied Air Forces. He wrote Arnold that it was "heartbreaking to leave just before the climax." Spaatz returned to England from the Mediterranean to command the U.S. Strategic Air Forces in Europe under Eisenhower, who was to become Supreme Allied Commander, Allied Expeditionary Force. Air Chief Marshal Tedder became Eisenhower's deputy and Air Commander in Chief for Overlord. Maj. Gen. James H. Doolittle came from the Mediterranean to command the Eighth Air Force. Brig. Gen. John K. Cannon took Spaatz's command at Twelfth Air Force, and Maj. Gen. Nathan F. Twining took over Fifteenth Air Force with its additional fifteen heavy bomber groups (originally scheduled for the Eighth Air Force) to be used against Pointblank targets, complementing bomber operations from England.



General Carl Spaatz, as Commander of U.S. Strategic Air Forces in Europe, addresses men of the Eighth Air Force, with Lt. Gen Jimmy Doolittle (standing, center), Eighth Air Force Commander, and Maj. Gen. William E. Kepner (standing to the right), VIII Fighter Command Commander, attending.

Who Controls Strategic Air?

Meanwhile, controversy surrounded the role of air power in Overlord. The invasion would fail unless air elements were effectively employed. Who would command these air forces? Against which target systems? Involved were command authority and strategy, and no shortage of strongly held views.

Under Supreme Commander Eisenhower, Air Marshal Sir Trafford Leigh-Mallory, Fighter Command Commander, had been appointed Commander in Chief of the Allied Expeditionary Air Force. The AEAF, with light bombers from the U.S. Ninth Air Force and the British 2d Tactical Air Force and fighters from Air Defence of Great Britain, would provide tactical support for Overlord. Leigh-Mallory commanded no heavy bombers. He planned to get this support from Spaatz and Harris. This would cut into strategic bombing resources.

However, Leigh-Mallory had to protect the cross-Channel operation and then prevent the Germans from moving their forces to confront the Allies on the beaches. Failure in either of these operations would prove disastrous. Thus,

he formulated plans for air cover to protect the armada and also to attack German air bases in France and the French railway system. But Leigh-Mallory's AEAF did not have the air strength to do this. The railway plan, especially, required heavy bombing capacity. He needed Spaatz and Harris.

Harris wanted to press his area attacks on German towns. And Spaatz, with long-range escort, was determined to send daylight bombers deep into the Reich. The primary target should be synthetic-oil plants. The U.S. Strategic Air Forces' commander argued the Germans would defend these targets and provide the opportunity for American fighters to destroy the Luftwaffe. Insufficient fuel would affect German transport and industry and, at the crucial point, the enemy's ground forces. Spaatz thus proposed a strategy to cripple Germany's war economy and her ability to contest the invasion.

Tedder, the Deputy Supreme Commander, strongly supported the railway plan, believing it should include attacks on repair facilities, main lines, and sidings. General Eisenhower, having admired Tedder's performance in the Mediterranean, endorsed this plan, convinced it was necessary to Overlord's success. "There is no other way," he emphasized, "in which this tremendous air force can help us, during the preparatory period, to get ashore and stay there."

Eisenhower staked everything on his position, declaring that because he was invested with overall responsibility he could not accept anything less than "complete operational control." Should he lose on this issue, he would withdraw from command. Nonetheless, Air Chief Marshal Sir Charles Portal, Chief of the Air Staff, thought the railway plan would avail little. Harris objected that strategic air had other tasks besides Overlord, and the British Chiefs stressed that bombers should remain directly responsible to the Combined Chiefs. Spaatz agreed, not wanting these planes diverted, and emphasized his point by sending for Eaker, who advised Eisenhower not to adopt the transportation plan. The real issue, then, was Eisenhower's control of strategic air elements.

Nor was Churchill to acquiesce in turning over heavy bombers to Eisenhower. For his part, General Arnold concluded it would be unwise for him to oppose Eisenhower on an issue the Supreme Commander felt so strongly about. Therefore, though Spaatz could press his stand, Arnold took the position that this was a matter for Eisenhower to decide. In late February, Churchill made his objections known to Eisenhower and Portal. On March 10, 1944, Portal informed the Prime Minister that a compromise had been reached whereby Tedder would develop the overall air plan, advised by Spaatz and Harris, with the tactical plan handled by Leigh-Mallory under Tedder's supervision. Additional requests from Eisenhower for more bombers than were provided for in original plans would have to be approved by the Combined Chiefs. The way now apparently clear, on March 25 Eisenhower ruled that heavy bombers would be used against the railway system in northern France, Belgium, and western Germany. Eisenhower and Tedder also decided to use

interdiction strikes before D-Day and permit Spaatz to attack synthetic-oil production. This wise compromise would prove to be crucial.

By April, however, Churchill and his War Cabinet had nagging thoughts about how many French civilians might be killed or injured. On April 3, the Prime Minister wrote to Eisenhower that the Cabinet had taken an adverse view of the recommendation "to bomb so many French railway centers, in view of the fact that scores of thousands of French civilians — men, women, and children — would lose their lives or be injured." Eisenhower refused to yield. "We must never forget," he replied, "that one of the fundamental factors leading to the decision for undertaking Overlord was the conviction that our overpowering Air Force would make feasible an operation which might otherwise be considered extremely hazardous, if not foolhardy."

Nevertheless, though Portal advised Churchill that the scope of the rail campaign had been reduced, the Prime Minister remained reluctant. On April 29 he told Eisenhower that the Cabinet was still against it. He emphasized that the plan had been opposed by Spaatz, Harris, the War Office, the Ministry of Economic Warfare, and the Joint Intelligence Committee, and by Field Marshal Alan Brooke, who doubted its effectiveness on the basis of experience gained in Italy.

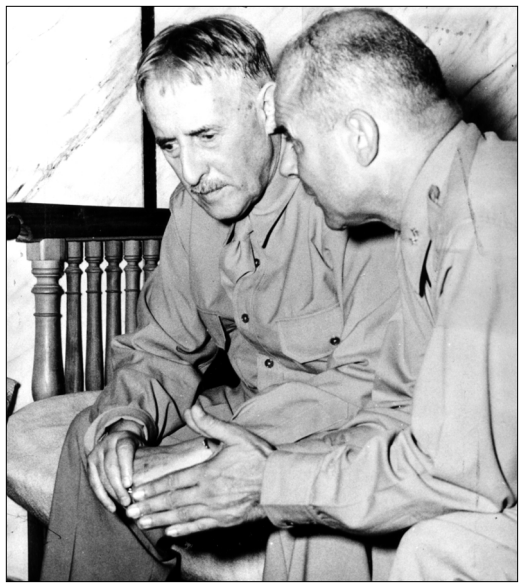
On May 7, Churchill wrote to President Roosevelt suggesting they "share responsibilities" for settling this dispute. Roosevelt replied unequivocally: "However regrettable the attendant loss of civilian lives, I am not prepared to impose from this distance any restriction on military action by the responsible commanders that in their opinion might militate against the success of Overlord or cause additional loss of life to our Allied forces of invasion." The Prime Minister finally acquiesced, but not without pain.

The attrition rail campaign went ahead. As D-Day neared, Allied air forces flew interdiction strikes against bridges, viaducts, and rolling stock. In three months of attrition attacks, the Eighth Air Force and VIII Bomber Command conducted more than 20,000 sorties and dropped some 65,000 tons of bombs on 80 targets. Rail traffic was much reduced before D-Day; however, the effect on movement of German forces and supplies was difficult to judge accurately. French civilian casualties were substantially lower than anticipated.

Interdiction operations by the U.S. Ninth and the British 2d Tactical Air Forces were also successful. From late May to D-Day, the Ninth destroyed 18 of 24 bridges across the Seine between Paris and Rouen. As between interdiction and attrition, with hindsight it seems the campaign against bridges probably helped the Allies more than strikes on the rail network.

The Heavies Hit German Oil

Though heavy bombers of the Eighth and Fifteenth Air Forces and the RAF Bomber Command had been diverted to Overlord, it will be recalled that



Before General Doolittle returned to England to command the Eighth Air Force in the bombing of oil targets in preparation for Operation Overlord, he had served as the Commander of Twelfth Air Force in Algeria. He is shown conferring here with Secretary of War Henry L. Stimson, seated on the left, during a visit by Stimson to a North African base.

Eisenhower's decision had left the door open for Spaatz to strike synthetic-oil targets. During May, the Eighth pounded synthetic-oil plants while the Fifteenth hit oil refineries at Ploesti and in Austria, Yugoslavia, and Hungary. On May 12, General Doolittle sent 935 heavy bombers — escorted by fighters from the Eighth and Ninth Air Forces and the RAF — against synthetic-oil plants at Zwickau, Merseburg-Leuna, Brüx, Lützkendorf, Böhlen, and other towns. Almost 200 German fighters attacked savagely but were beaten off by P–47s and P–51s. Although Eighth Air Force lost 46 bombers and the Allies lost 10 fighters, the Luftwaffe suffered another severe setback. Moreover, oil plants were heavily damaged, and in Merseburg-Leuna a building was destroyed in which the Germans had been conducting heavy-water experiments for their atom bomb project.

This excellent mission was noteworthy because it demonstrated that the Luftwaffe would desperately defend crucial targets. By this time, the Luftwaffe had already been badly hurt. In May, Spaatz's oil campaign would break its back, flushing out fighters and squeezing off its fuel supply. By August, all German forces would be critically hampered by lack of fuel. Much later, Albert Speer, Germany's Minister of Armaments and War Production, noted that the Allied campaign against German oil had proved decisive. Moreover, in his memoirs (published in 1970) Speer wrote that the American idea to selectively destroy a few critical industries had been correct all along. Once this plan had been adopted early in the war, he emphasized, it should have been rigorously pursued rather than placed on the back burner. "The idea was correct," Speer wrote, "the execution defective."

Could an around-the-clock Allied strategic air offensive against Germany's war economy and morale have collapsed the Nazi state within a reasonable

period without an invasion? The answer to that question must forever remain speculation. From the beginning, American leaders had planned an invasion under code names Sledgehammer and Bolero. An invasion was always top priority. Gen. George C. Marshall had been especially insistent, defending this idea against Churchill's concept of assaulting the Nazi periphery. And lest these leaders forget, Stalin was always prepared to remind them. Ever since late 1941, he had made it a point. Churchill himself never forgot the brutal lecture he received in Moscow from the Soviet dictator in July 1942. After the Prime Minister explained why a cross-Channel operation had to be postponed, Stalin berated him and concluded that "any man who is not prepared to take risks cannot win a war."

Not that Roosevelt and Churchill (or Generals Marshall and Eisenhower) were averse to the role of air power. That idea would be wrong in the extreme. They recognized that air had a pivotal role to play, but in the last analysis, as they saw it, primarily in support of ground operations. They would not provide the resources nor approve a plan to concentrate on bombing Germany out of the war without invasion.

D-Day: Allied Air Supremacy

So denied their ultimate opportunity, Spaatz and Harris did their best to support Overlord. And the bomb units — air power generally — made a decisive contribution to the success of this massive invasion. On D-Day, the Luftwaffe fighter commander on the invasion coast had only 80 operational aircraft, and the German air force could mount only about 250 combat sorties. American aircraft alone mounted over 8,700. In Overlord, the German air force was not a serious challenger. The Allied air forces had already won this battle. "If you see fighter aircraft over you," Eisenhower told his invasion forces, "they will be ours."

Air superiority for Overlord had been won early in 1944 when the great bomber fleets, escorted by long-range fighters, assaulted critical targets on the Continent, and the Luftwaffe rose to the challenge, to be beaten back and finally defeated. Gen. Carl Spaatz had been insistent — and correct. The enemy would fight for oil, and the enemy would lose his fighters, his crews, *and* his fuel.

Ultimately, the war was won everywhere. On the Eastern and Western fronts. On land, sea, and in the air. Though the historian does not search for certainty, there can be no doubt of air power's decisive contribution.

Strategy and assessments aside, one is most impressed by the men. By those who went up in planes to fight. They persevered. Many never came back. These airmen had extraordinary courage. There will never be another battle like it.



Gen. Henry H. "Hap" Arnold admired Gen. George C. Kenney's skills as an air commander.

The Genius of George C. Kenney

"It may truthfully be said that no air commander ever did so much with so little." Thus did Gen. Henry H. "Hap" Arnold, Commanding General, Army Air Forces, describe Gen. George C. Kenney, commander of Far East Air Forces, at the close of World War II.

George Churchill Kenney was a kind of renaissance airman: an engineer, flier, logistician, tactician, strategist, and exceptional leader. It can be said that, as an operational airman, he was first among equals during World War II. Because he was considered to be a tinkerer and a doer who could resolve difficult problems, General Arnold inserted him into trouble spots. Kenney's greatest challenge probably came in the Pacific in the period 1942–43, when he had limited resources to meet it. As Kenney emphasized to Arnold, he was operating on a shoestring. However, he succeeded brilliantly in this test because he had long ago mastered the intricacies of airmanship.

Born on August 6, 1889, Kenney grew up in Brookline, Massachusetts. He spent three years at the Massachusetts Institute of Technology. While taking flying training under Bert Acosta, a crack flier, Kenney showed the flair and confidence that subsequently distinguished his career. He landed dead-stick on his first landing and recalled that Acosta asked, "What is the idea, coming in there dead-stick?" Kenney replied, "Any damned fool can land it if the motor is running," and he added, "I just wanted to see what would happen in case the motor quit."

During World War I, Kenney flew seventy-five missions, downed two German aircraft, was shot down himself, and was awarded the Distinguished Service Cross and Silver Star. Afterward, he decided to make Army aviation a career. He soon gained a reputation for technical and tactical innovation, as well as candor and wit.

The Genius of George Kenney originally appeared as "The Genius of George Kenney" in *Air Force Magazine,* April 2002, Vol. 85, No. 4, pp. 66–71.

Fulcrum of Power: Part I

When Brig. Gen. Frank M. Andrews was appointed in March 1935 to command the General Headquarters Air Force, he tapped Kenney to be his assistant chief of staff for operations and training. In this key post on the GHQ Air Force staff, Kenney had responsibility for combat flying training. Along with assumption of this position, Kenney was promoted to lieutenant colonel, his first promotion in seventeen years. Andrews knew Kenney well from the Air Corps Tactical School, where from 1927 to 1928 Kenney was an instructor and Andrews a student. Andrews had been impressed with Kenney's ability to explain technical problems and to find solutions to them. At the tactical school, Kenney developed doctrine and revised the basic attack aviation textbook.

At GHQ Air Force, Kenney emphasized training in instrument and night flying. He also wrote tables of organization and planned maneuvers and traveled extensively. "During the first year," Kenney noted, "I was home at Langley Field [Virginia] something like 39 days; the rest of the time I was all over the country." His tenure at GHQ didn't last long, however. Kenney's outspoken and sometimes biting verbal style caused him to run afoul of the War Department General Staff. Like Andrews, Kenney championed the new B–17 long-range bomber, but the General Staff did not want to hear this. "They said there was no sense in having an airplane as big as that," he recalled. "They didn't like some of the remarks I made because I was a temporary lieutenant colonel and a permanent captain, and these were all major generals."

As a result, the War Department banished Kenney to Ft. Benning, Georgia, where, during the 1936–38 period he taught tactics at the Infantry School. Maj. Gen. Oscar Westover, Chief of the Air Corps, undoubtedly had a hand in Kenney's treatment. Westover and Andrews were at loggerheads; Andrews advocated more B–17s and autonomy for the Air Corps, whereas Westover preferred not to rock the boat. It was Arnold, then a brigadier general and assistant chief of the Air Corps, who rescued Kenney and assigned him to various special projects in Washington, D.C.

The Troubleshooter

When Westover was killed in an air crash in 1938 and Arnold became Chief of the Air Corps, one of his first actions was to send Kenney to a trouble spot at Wright Field, Ohio. Kenney went out to head the production engineering section of the Air Corps Materiel Division. "Every time [Arnold] got something going wrong," Kenney recalled, "he would say, 'Send George Kenney out there; he is a lucky SOB. He will straighten it out.' I never was supposed to have any brains. I was just lucky."

Following the Nazi invasion of Poland in late 1939, Arnold ordered Kenney to France to study French aircraft and equipment and also to assess the Luftwaffe. Kenney returned home and reported that American military aviation was far behind what the German air force was flying.



Indicative of George Kenney's personal style and acceptance by his compatriots is this enthusiastic show of support for Kenney's campaign to become Mess Officer of the 91st Aero Squadron.

After Japanese forces attacked Pearl Harbor in December 1941, the United States moved to organize its forces in the Pacific and to begin preliminary planning aimed at the defeat of Japan. To organize for victory in the Pacific, however, Arnold first needed to assign an energetic and aggressive officer to replace the air commander under Gen. Douglas A. MacArthur, commanding general of the Southwest Pacific theater. According to Arnold and Gen. George C. Marshall, the Army Chief of Staff, MacArthur's air commander, Lt. Gen. George H. Brett, "was in wrong" with MacArthur and his staff. Marshall said the situation was rife with "clashes of personalities." Brett had in fact been shut off from MacArthur and his staff.

Arnold wanted to send Lt. Gen. Frank Andrews, then commanding the Caribbean Defense Command. However, Andrews turned him down. He was appalled that Arnold thought he would work for MacArthur, with whom he had battled in the 1930s and whom he detested. It was Brig. Gen. Laurence S. Kuter, deputy chief of the Air Staff, who suggested to Arnold that he send Kenney to MacArthur. Arnold thought the blunt-talking Kenney probably "wouldn't last long out there." Kenney, however, had two things going for him. First, he knew how to organize air forces to gain maximum combat efficiency and effectiveness, and second, he was an experienced airman with the ability to lead.

Before he left Washington, though, Kenney realized that one of the major difficulties he would face related to Allied strategy. Marshall and Arnold had made it clear to him that the European conflict was the top military priority. Kenney noted that he was supposed to help MacArthur hold the line in the Pacific "until the European show is cleared up."

Removing Deadwood

The emphasis on the European theater was bound to affect the flow of equipment to the Southwest Pacific. Moreover, Kenney knew that he had to straighten out difficult personnel and logistical problems in his new assignment. With Arnold and Marshall, he raised the issue of removing some officers among his new staff. "I am going to get rid of a lot of the Air Corps deadwood," Kenney informed them.

Upon arriving in the theater, Kenney found logistics to be "a hell of a mess." Combat aircraft were not able to get into the air. Spare parts were nowhere to be found. "A lot of stuff has gone out there," Kenney said, "but no one knows what has happened to it." There were even complaints from the field that requests for parts were turned down because of improperly filled out requisition forms. Kenney made clear that he was putting an end to this practice. "You don't win wars with file cabinets," he said.

Before he could tackle the logistics issue, he had to face MacArthur. According to Brett, neither MacArthur nor his staff possessed an understanding of air operations. Yet Brett said that after conferring only with his immediate staff, MacArthur made all the decisions himself. Moreover, Brett emphasized that Maj. Gen. Richard K. Sutherland, MacArthur's chief of staff, was a bully and overly protective of the boss. To reach MacArthur, Kenney had to get past Sutherland, who had shut Brett out and had taken it upon himself to write air operations orders.



Lt. Gen. George C. Kenney (back to camera) speaks to Colonel Prentis (left) as Maj. Gen. Richard K. Sutherland and Gen. Douglas MacArthur look on.

"What I Know"

Kenney decided to confront Sutherland. In a meeting, he jabbed a dot onto a piece of paper. As he thrust it before MacArthur's chief of staff, he said, "The dot represents what you know about air operations, the entire rest of the paper what I know." When Sutherland reacted belligerently, Kenney suggested they see MacArthur. Sutherland backed down.

Brett had told Kenney that he rarely saw MacArthur, and added, "Every endeavor I have made to explain what I was trying to do has been lost among lengthy dissertations which I would not take the time to deliver to a second lieutenant." Now, it was Kenney's turn. He recalled, "I listened to a lecture for approximately an hour on the shortcomings of the Air Force in general and the Allied Air Forces in the Southwest Pacific in particular." The air forces, MacArthur charged, had done nothing. Kenney interrupted and told him that he would take care of air operations. He added, "If, for any reason, I found that I couldn't work for him, I would tell him so and do everything in my power to get relieved." According to Kenney, MacArthur grinned, put his hand on his shoulder, and said, "I think we are going to get along together all right."

Meanwhile, the situation in the Southwest Pacific had turned critical. Japanese forces had stormed through the southern Philippines, most of New Guinea, and the islands northeast of Australia. An invasion of the Australian continent seemed possible. Prior to Kenney's arrival in the theater in July 1942, Japan had taken heavy losses in the Coral Sea and Midway battles. Despite that, Japanese troops had established positions in the Solomon Islands and were advancing in New Guinea across the Owen Stanley mountain range toward Port Moresby.

Kenney immediately focused on building an organization that could meet the demands of the theater. In early August 1942 he established Fifth Air Force in Brisbane, Australia, 1,000 miles from the New Guinea front. He appointed Brig. Gen. Ennis C. Whitehead, his deputy, as commander of the Fifth Air Force advanced echelon at Port Moresby.

MacArthur planned to move his forces northwest along the northern coast of New Guinea toward the Markham Valley and Finschhafen.

Owning the Air

For that to succeed, Kenney emphasized to MacArthur, the Allied air forces had to gain air superiority over Japanese forces. Kenney said that the Allies had to "own the air over New Guinea." He added that there was no use talking about "playing across the street" until the Allies got the Japanese troops "off of our front lawn." Once having gained control of the air, Fifth Air Force would support the ground forces and hammer enemy shipping and troop con-



Generals Kenney and MacArthur formed a strong working relationship.

centrations. The Allies would advance northward up the New Guinea coast, and ultimately the island-hopping campaign would succeed.

Kenney knew that MacArthur's strategy depended upon aerial resupply. He had to straighten out the chaotic maintenance and supply systems. He made certain that critical equipment found its way from Australia to New Guinea. Kenney noted that he was "inventing new ways to win a war on a shoestring." He explained, "We are doing things nearly every day that were never in the books," and added, "It really is remarkable what you can do with an airplane if you really try; anytime I can't think of something screwy enough, I have a flock of people out here to help me…We carry troops to war, feed them, supply them with ammunition, artillery, clothes, shoes, and evacuate their wounded."

By the end of 1942, MacArthur had gained confidence in Kenney. The feeling, apparently, was mutual. "It is a lot of fun to talk to General MacArthur," Kenney maintained. "He thinks clearly, does not have preconceived ideas, weighs every factor, and plays the winning game for all it's worth. As soon as air power could show him anything, he bought it."

Kenney definitely showed him something. By early 1943, Fifth Air Force had gained air superiority, putting MacArthur's forces in a position to turn the tide of war. In March 1943, Kenney's fliers, aided by Australian airmen, dealt Japan a crippling blow in the Battle of the Bismarck Sea. He employed skip-

bombing, a concept he developed in 1928 while at the tactical school. This time, B–25s and some A–20s went in very low, skipping bombs over the water to strike an enemy convoy, inflicting heavy losses on Japan.

Tackling Washington

Kenney was continually frustrated by the Europe-first strategy and did not appreciate Arnold's description of the Southwest Pacific as a "defensive" theater. He badgered Arnold at every opportunity for airplanes to conduct offensive operations. Arnold explained that he could not "maintain every theater at offensive strength," as this "dispersed effort would invite disaster." His objective, he informed Kenney, was to keep Kenney's forces at sufficient strength to enable Kenney to support himself defensively and carry out a limited offensive against the Japanese.

Kenney made several trips to Washington, always keeping in mind the need to balance his loyalty to MacArthur, as the theater commander, with his loyalty to Arnold, the AAF boss. On one trip, though, Kenney held discussions with Under Secretary of War Robert P. Patterson and Assistant Secretary of War for Air Robert A. Lovett and then met with President Franklin D. Roosevelt.

To Roosevelt and the Joint Chiefs of Staff, he emphasized the need to replace his losses to maintain air superiority. Roosevelt asked Kenney to "be reasonable about it," saying he would see what he could do even if he had "to argue with the whole British Empire about it." Later, Arnold informed Kenney that the JCS would be sending him several bomb groups and several fighter groups.

In the summer of 1943, Kenney began to campaign for B–29s to be deployed to the Southwest Pacific. It is, he stated, "the plane with which we are to win the war." Kenney's concept was to hurl the very long-range bombers against the oil refineries at Palembang, Sumatra, and Balikpapan, Borneo. "If you want the B–29 used efficiently and effectively, where it will do the most good in the shortest time," he told Arnold, "the Southwest Pacific Area is the place, and the Fifth Air Force can do the job…Japan may easily collapse back to her original empire by that time [1944], due to her oil shortage alone."

However, this was one battle that Kenney would not win. Arnold had long ago determined that the B–29 would be employed solely against the Japanese home islands. And the AAF Chief was not about to relinquish the B–29s to a theater commander—in this case, MacArthur.

Nonetheless, Fifth Air Force intensified its efforts to support Mac-Arthur's drive up the north coast of New Guinea toward Lae and Salamaua. Kenney's forces had been striking Rabaul, but now their attention turned to Wewak, where Japan had a large concentration of aircraft. In mid-August 1943, Fifth Air Force bombers and P–38 pursuit aircraft attacked the Wewak airdromes, destroying about 175 enemy aircraft on the ground. As a result of this devas-

tating strike, Japan had to base its forces farther to the rear, leaving Lae and Salamaua vulnerable.

Airlift in Action

Both Lae and Salamaua fell in September 1943 to MacArthur's offensive. Kenney had made that possible by orchestrating the first large-scale airlift of the war. Kenney's C–47 transports air-dropped 1,700 troops and an Australian artillery battery into Nadzab, 19 miles northwest of Lae. The scale of the airlift operation was daunting. In fact, MacArthur, when he was briefed, asked Kenney whether he had discussed the airlift with MacArthur's staff. Learning that he hadn't done so yet, MacArthur exclaimed, "Well, don't, you will scare them to death!" Meanwhile, air operations by Fifth Air Force in 1943–44 against the Rabaul complex of harbor and airfields rendered the area practically useless to Japanese forces.

By mid-1944, MacArthur and Kenney picked up the pace. Ground forces occupied Hollandia as well as Wakde, Biak, Owi, Woendi, and Numfoor Islands. At the same time, Kenney joined Thirteenth Air Force with Fifth Air Force as part of Far East Air Forces. Whitehead took command of Fifth Air Force.

MacArthur's accelerated offensive moves and Kenney's shift of Thirteenth Air Force into FEAF set the stage for MacArthur's return to the Philippines. The invasion of the Philippines had been moved up from December 1944 to October 1944. Sixth Army landed on the east coast of Leyte Gulf on October 20. And when Allied forces landed on Luzon in January 1945, no enemy aircraft opposed them. Kenney's FEAF, along with Navy aircraft, destroyed hundreds of Japanese airplanes on the ground. By March 1945, Manila had fallen. (Also in March, on a trip to Washington, Kenney was personally informed by President Roosevelt that he would receive his fourth star.)

Following the capture of Iwo Jima and with the invasion of Okinawa in April 1945, Fifth Air Force used Okinawa to launch strikes against Kyushu, one of the Japanese home islands. In July 1945, Brig. Gen. Thomas D. White's Seventh Air Force joined FEAF and teamed up with Fifth to strike Kyushu and enemy shipping.

Meanwhile, Arnold's plan to use the B–29s for direct attacks against the Japanese home islands had taken shape. In April 1944, the Joint Chiefs had approved creation of Twentieth Air Force, based in Washington, D.C., with Arnold as executive agent of the JCS. In March 1944, Kuter, Arnold's deputy, gave Kenney the bad news, at which time Kenney's pique got the better of his judgment. B–29 raids against Japan from the Marianas, he said, would accomplish little; they would be just "nuisance raids." Nonetheless, Japan, by mid-1945, was being strangled by blockade and hammered by the B–29 campaign.

At the Potsdam Conference in July 1945, President Truman ordered use of

the atom bomb against Imperial Japan. In late July, Gen. Carl A. "Tooey" Spaatz arrived on Guam to head the newly established U.S. Strategic Air Forces in the Pacific. After receiving authorization from Truman and Marshall, Spaatz ordered the use of the atom bomb. On August 6, 1945, the United States struck Hiroshima, and on August 9, it hit Nagasaki. The next day, Japan asked for peace.

Toward an Independent Air Force

The war was over, but Kenney had more work to do. In the immediate post–World War II period, when hopes were high for the success of the United Nations organization, he was named the senior U.S. member of the U.N. Military Staff committee. This committee had been organized to assist the Security Council on military issues and potentially to implement plans for creation of a U.N. military force.

Kenney's post at the United Nations did not last long, though. In early 1946 Spaatz and Gen. Dwight D. Eisenhower agreed on a postwar reorganization for the air forces, establishing the Strategic Air Command, the Tactical Air Command (upon which Eisenhower had insisted), and the Air Defense Command. Spaatz appointed Kenney as SAC's first commanding general. However, Kenney spent little time in the position. Instead, with the battle over unification approaching a climax in 1947, Kenney was encouraged by W. Stuart Symington, the Assistant Secretary of War for Air, and General Spaatz to go on the road to speak about the need for a separate air force. Knowledgeable and articulate, Kenney advocated an independent air force to audiences from coast to coast. He left the running of SAC's daily operations to his deputy, Maj. Gen. Clements McMullen. Although McMullen was an excellent supply and maintenance man, the training of SAC's combat crews suffered.

Meanwhile, the Cold War heated up, and in the summer of 1948, the Soviet Union began the Berlin blockade. Gen. Hoyt S. Vandenberg, who succeeded Spaatz in April 1948 as Air Force Chief of Staff, asked Charles Lindbergh to assess SAC's combat readiness. Lindbergh reported in September that SAC's readiness left a great deal to be desired. As a result, Vandenberg and Symington decided in October to replace Kenney with Gen. Curtis E. LeMay, Commander, United States Air Forces in Europe and the architect of the B–29 campaign against Japan.

Kenney was assigned as Commander, Air University at Maxwell AFB, Alabama. He wrote *General Kenney Reports: A Personal History of the Pacific War*, which is characteristically candid and one of the very best memoirs of the war. One of the few World War II air generals to write memoirs, he suggests signposts for successful leadership: Vision, ability to craft plans, organizational skill, a great attention to detail without losing sight of the major objective, and a sensitive common touch — the ability to communicate and inspire.



General Kenney, as Commander, Air University, Maxwell Air Force Base, Alabama, visits Lt. Gen. George E. Stratemeyer and Maj. Gen. Laurence C. Craigie (standing in the center), at Haneda Air Base in Japan.

He retired in August 1951 and continued writing, including a book about MacArthur.

MacArthur had quickly recognized that Kenney was a man who had a plan and, what's more, got results. Over and above everything else, Kenney was a straight shooter and true to himself. After the war, MacArthur had this to say about Kenney: "Of all the commanders of our major air forces engaged in World War II, none surpassed General Kenney in those three great essentials of successful combat leadership: aggressive vision, mastery over air strategy and tactics, and the ability to exact the maximum in fighting qualities from both men and equipment."

As Kenney's Fifth Air Force director of operations, Lt. Col. Francis C. Gideon, observed in retrospect, "He was unique; for the war to be fought in the Southwest Pacific under General MacArthur, he may have been the only one who could have succeeded."



General Arnold was convinced that the B–29 would prove to be the key for defeating Japan with a conventional bombing campaign.

General Arnold, the Atom Bomb, and the Surrender of Japan

Gen. Henry H. "Hap" Arnold, Commanding General, U.S. Army Air Forces in World War II, aimed to force the surrender of Japan without an invasion of the Japanese home islands. This had been his great obsession since the entry of the United States into the Pacific war in December 1941. The vehicle for Arnold's accomplishment of this objective would be the very long-range B–29 strategic bombing offensive from the Mariana Islands. Arnold's obsession, of course, was directly related to his determination to succeed in the campaign to make the AAF a separate and coequal service with the Army and the Navy.

In the prosecution of the B–29 bombing offensive, Arnold enjoyed the firm support of President Franklin D. Roosevelt and Army Chief of Staff Gen. George C. Marshall, although Marshall in June 1945 also supported as absolutely necessary a planned ground invasion of Kyushu. Roosevelt relentlessly pressured Marshall and Arnold to bomb Japanese cities. The President, outraged at Japanese military operations against China, had expressed as early as December 1940, one year before the Japanese attack on Pearl Harbor, a desire to see Japan bombed. As Commander in Chief, Roosevelt, through Marshall, gave Arnold and his operational commanders carte blanche to do whatever necessary to defeat Japan as quickly as possible and with the least loss of American lives.

Determined to prove that a conventional bombing campaign could defeat a modern nation — a concept held by air leaders long before World War II —

General Arnold, the Atom Bomb, and the Surrender of Japan initially appeared as "General Arnold, the Atomic Bomb, and the Surrender of Japan" in *The Pacific War Revisited,* eds. Günter Bischof and Robert L. Dupont, Baton Rouge: Louisiana State University Press, 1997, pp. 163–178.

Fulcrum of Power: Part I

General Arnold at Potsdam in July 1945 stated his position that it was not necessary to drop the atom bomb, as recommended by the Joint Chiefs of Staff and subsequently ordered by President Harry S. Truman. Arnold's position was based on his fervent desire to drive Japan out of the war by conventional bombing, without a ground invasion, thereby sealing the postwar creation of an independent U.S. Air Force.

The Army Air Corps' search for the long-range strategic bomber had gathered momentum in the 1930s, culminating in 1934 in the acceptance of the Boeing Company's four-engine bomber design, Model 299, the prototype of the B–17 Flying Fortress. The development of the B–29 strategic bomber began before World War II and continued during the war under the so-called Very Long Range project. The grave difficulties experienced by the AAF in the development and production of this revolutionary aircraft, together with Arnold's own iron determination to deploy this weapon against Japan, are the keys to understanding Arnold's insistence that it was not necessary to drop the atom bomb.

Arnold, as Chief of the Army Air Corps, initiated the B–29 development program on November 10, 1939, two months after Nazi Germany's invasion of Poland. Arnold's move came in response to a recommendation of the Kilner Board to request authority of the War Department to let contracts to develop a four-engine bomber superior in range, speed, and bomb load to the B–17 and the B–24. Boeing's design for the XB–29 was judged to be superior by the Air Corps, and the XB–29 contract was let in September 1940.

Thus began four years of frustration in engineering, testing, and production, during which a number of AAF leaders doubted that the program would succeed. Although the first production models were completed in July 1943, severe problems would be encountered well into 1944. Arnold took the risk of cutting developmental and procurement corners in order to accelerate production. Under increasing pressure from Roosevelt and Marshall to produce results quickly, Arnold ordered the new bomber into production before it had been properly tested.

Some officers in Air Corps Materiel Division doubted that the radical project would succeed. It took all of Arnold's determination and daring — and the firing of some key officers — to drive the B–29 Very Long-Range program to completion. Several special plants were built for the production of the gigantic bombers with their three-story-tall tail assemblies and 2,200 horsepower Wright Cyclone R–3350 turbo-supercharged engines. Among other firsts that the Superfortress featured were a radar navigation system and pressurized crew compartments. A new fire-control system was also installed.

The Army Air Corps originally planned to buy 250 B–29s, but after the Japanese attack on Pearl Harbor the order increased to 500 and, after a February 1942 production meeting in Detroit, to more than 1,600. This meeting marked the formation of the B–29 Liaison Committee headed by Brig. Gen.

Kenneth B. Wolfe, who was to become the key official in the developmental program and in 1944 would lead the B–29 into combat from Chinese bases in Operation Matterhorn.

For more than two years after the Detroit meeting, grave difficulties were encountered in the Very Long-Range program, prompting some to call it "the three-billion dollar gamble." Between September and December 1942, test flights indicated trouble with the aircraft's engines which frequently failed or caught fire.



Guy W. Vaughan, Curtiss-Wright Corporation president, presents General Arnold with a scale model of the Wright Cyclone R–3350 turbo-supercharged engine used to power the B–29 very long-range bomber.

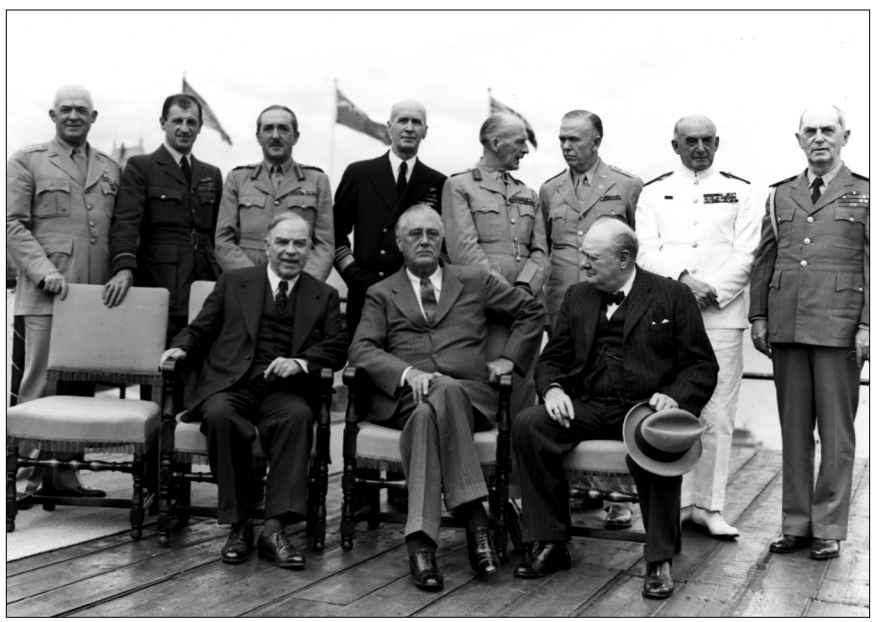
On February 18, 1943, disaster struck. With Boeing test pilot Edmund T. Allen at the controls, two engine fires broke out during a test flight from Seattle, the fire spreading into a wing. This second prototype plane crashed into a meat-packing plant three miles from the end of the Boeing runway, killing Allen, his entire crew of ten, nineteen people in the building, and one fireman. Investigations ordered by Arnold and Harry Truman (at the time a U.S. Senator) determined that the engines were defective and that the manufacturer's quality control was unsatisfactory. This shocking development resulted in Arnold's creation of the B–29 special project, under Wolfe and Col. Leonard Harman, to supervise all testing, training, and production. Incredibly, a third prototype almost crashed because of crossed aileron control cables, another disaster and the potential end of the program barely being averted.

Many more accidents, most caused by engine overheating, occurred, and the B–29 was still not operational even when deployed in April 1944 to the China-Burma-India theater of operations. In April 1944, during a single week, five B–29s crashed near Karachi due to engine overheating, the worst week in the history of the plane's overseas deployment. The overheating problem was ultimately solved by a crash engine-cooling project designed by engineers at Wright Field and the National Advisory Committee for Aeronautics.

Arnold, meanwhile, keenly felt the pressure of time, of having to show results commensurate with the large resources being poured into the Army Air Forces. In October 1940, as Chief of the Air Corps, Arnold wrote to the assis-

tant secretary of war that the B–29 was the only weapon with which the AAF "could hope to exert pressure against Japan without long and costly preliminary operations." As already noted, President Roosevelt, angered by Japan's bombing and operations against China, as early as December 1940 emphasized the importance of bombing Japan. After the attack on Pearl Harbor, others at the top levels of government, including Secretary of State Cordell Hull and Secretary of the Treasury Henry Morgenthau, expressed the opinion that bombing Japanese cities would raise both American and Chinese morale. The April 1942 Doolittle raid on Tokyo was such a morale-raiser.

In January 1943, at the Casablanca Conference, FDR again raised the subject, suggesting that several hundred planes be deployed to China, including heavy bombers, to strike Japan. The president stressed that Japan should be struck heavily and relentlessly. The subject of the B–29 entered deliberations of the Allied leaders in August 1943 at the Quadrant Conference in Quebec.



It was at the Quebec Conference that General Arnold (back row, far left) presented his plan to use the B–29 strategic bomber for defeating Japan. Hosted by the Canadian Prime Minister, Mackenzie King, the meeting also had President Roosevelt and British Prime Minister Winston Churchill in attendance. Other conferees standing to Arnold's left are Air Marshal Sir Charles Portal of Great Britain; Gen. Sir Alan Brooke, Chief of the Imperial General Staff; Adm. Ernest J. King, Chief of Naval Operations; Field Marshal Sir John Dill, Chief of Joint Staff Mission at Washington, D.C.; Gen George C. Marshall, Chief of Staff, U.S. Army; Sir Dudley Pound, Admiral of the Fleet and First Sea Lord; and Adm. W. D. Leahy, Chief of Staff to President Roosevelt.

Here the Combined Chiefs of Staff agreed that the target date for Japan's unconditional surrender should be within twelve months of Germany's surrender. Arnold at this time unwrapped his "Air Plan for the Defeat of Japan," prepared by Wolfe, calling for deploying B–29s to central China. With their 1,500-mile range, the Superfortresses would be able to attack Japan's industrial structure. The Wolfe plan, enthusiastically endorsed by Arnold, aimed to smash Japanese industry and morale to the point where the enemy would be forced to surrender without the necessity of an invasion.

Although the first objective of the United States and Britain was the defeat of Nazi Germany, the two countries pledged in May 1943 "to maintain and extend unremitting pressure against Japan with the purpose of continually reducing her military power and attaining positions from which her ultimate surrender can be forced." General Arnold emphasized: "If B–29s are first employed against targets other than against Japan, the surprise element will be lost, and the Japs will take the necessary actions to neutralize potential useable bases."

Beginning in the summer of 1943, however, Lt. Gen. George C. Kenney, commander of the Allied air forces and the U.S. Fifth Air Force under Gen. Douglas MacArthur, requested of Arnold that B–29s be deployed to the Southwest Pacific theater. Kenney had heard from Washington that the Superfortress was "the plane with which we are to win the war." Kenney's plan was to strike the great oil refineries at Palembang, Sumatra, and at Balikpapan, Borneo. Airfields would be built in northwest Australia. Kenney emphasized to Arnold that Japan would thus be denied the critical oil supply she required to continue the war: "If you want the B–29 used efficiently and effectively where it will do the most good in the shortest time, the Southwest Pacific Area is the place and the Fifth Air Force can do the job…Japan may easily collapse back to her original empire by that time [1944], due to her oil shortage alone."

However, Arnold never wavered in his determination to employ the Superfortresses against the Japanese home islands. In this conviction he was strongly supported by Wolfe, chief of the B–29 special project, and by Brig. Gen. Laurence S. Kuter, Assistant Chief of Air Staff, Plans. At the Cairo Conference in late 1943, President Roosevelt approved a plan to base the B–29s in India and China by May 1944. Kuter, at Arnold's direction, informed Kenney in March 1944 in Australia of the decision to base the bombers in India, staging through China (Operation Matterhorn), and ultimately launching them from the Marianas by October 1944. These decisions by Arnold were of course integral to the Joint Chiefs' strategy of twin Pacific offensives, including the Central Pacific, bypassing Truk, capturing the Marianas, and then moving through the Carolines and Palaus to link with MacArthur's drive northwest to the Philippines.

Before deploying B–29s to western China, as long advocated by Roosevelt, Arnold made certain that he would control the big bombers. Seeking at all

costs to avoid deploying them under the control of an Army or Navy theater commander (MacArthur or Nimitz), the Joint Chiefs approved Arnold's recommendation in April 1944 to establish the Twentieth Air Force under the direct command of Arnold in Washington. With this unprecedented organization, Arnold would command the Twentieth as executive agent of the JCS.

Operation Matterhorn, the B–29 bombing campaign from the Chengtu Valley of western China begun in June 1944, proved to be merely preliminary to operations from the Marianas. Wolfe, commander of the XX Bomber Command, failed to overcome severe maintenance and logistical difficulties with this initial B–29 campaign against Japan. Frustrated by the lack of results, Arnold promoted Wolfe to two-star rank and ordered him back to the states. He replaced Wolfe in August 1944 with Maj. Gen. Curtis E. LeMay. Arnold would subsequently note that "with all due respect to Wolfe he did his best, and he did a grand job, but LeMay's operations make Wolfe's very amateurish."

Meanwhile, Brig. Gen. Haywood S. "Possum" Hansell Jr. took command of the XXI Bomber Command of the Twentieth Air Force in the Marianas. In October and November 1944, Hansell's crews attacked enemy facilities at Truk and Iwo Jima with little result. Reacting to prodding from Arnold, in late 1944 and early 1945 Hansell's B–29s struck Japanese aircraft engine, component, and assembly plants. Results were again much less than had been



Brig. Gen. Haywood S. "Possum" Hansell Jr. stands in his flight jacket before the B–17 "Dry Martini" with Col. Curtis E. LeMay in May 1943. LeMay was Arnold's choice to replace Hansell at XXI Bomber Command in 1945 during the bombing of the Japanese home islands.

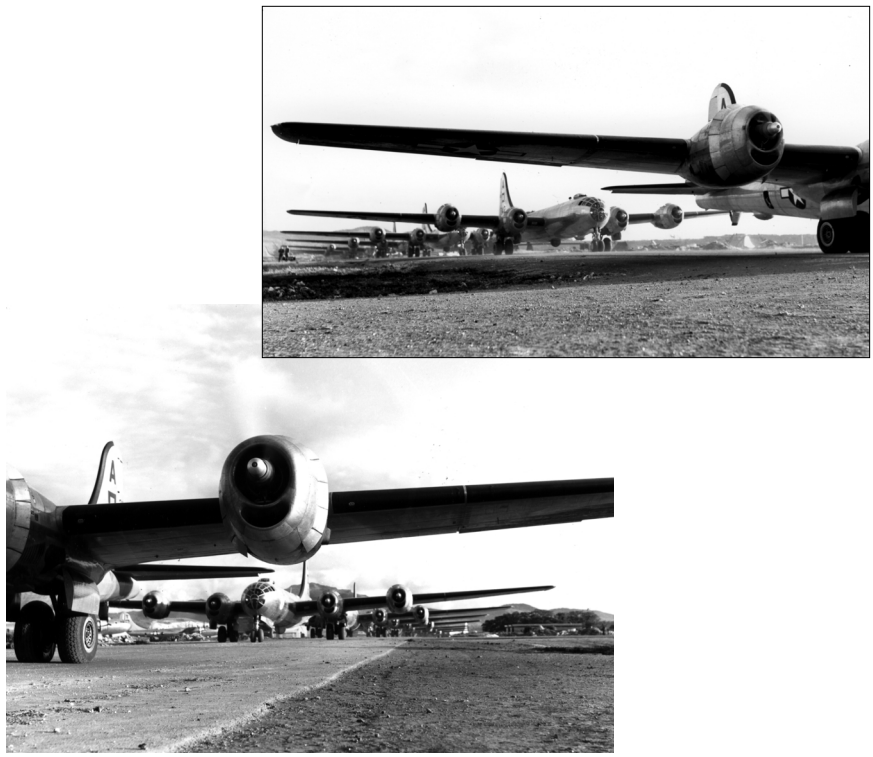
anticipated, bad weather and mechanical failures being the primary culprits. Despite a successful strike on January 19, 1945, against the Kawasaki Aircraft Industries plant, Arnold had already decided to replace Hansell with LeMay. Impatient with commanders who were not producing up to his expectations, Arnold insisted on quick results. The B–29 was his pet project, much time and money had been invested, and he was totally committed to showing striking results with the big bomber.

Arnold remained especially aware that Roosevelt wanted something decisive accomplished before an invasion might have to be mounted. Thus, Hansell became a victim even though he himself had not been satisfied with what the XXI Bomber Command had accomplished. The bombing campaign from high altitude had been impeded by inadequate facilities, unsatisfactory maintenance, poor bombing accuracy, and most important, high winds and cloud cover over Japan. Time was a commodity that Arnold could not spare. To replace Hansell, he summoned LeMay, who had served as a group commander under Hansell in England in 1943 and who had replaced Wolfe at the XX Bomber Command. A hard-driving perfectionist, LeMay took command on January 20, 1945.

Between January and March 1945, LeMay's B–29 campaign produced no better results than Hansell's. A crisis had been reached. Arnold, notoriously impatient and under severe pressure from Roosevelt, Marshall, and the Joint Chiefs, figured that he had run out of time to show results.

LeMay and his bomber commanders were well aware of Arnold's impatience, and LeMay had been informed in February and March 1945 by Brig. Gen. Lauris Norstad, Chief of Staff of the Twentieth Air Force in Washington, that Arnold desired an incendiary campaign. LeMay knew he had to act quickly and effectively: "The turkey was around my neck. We were still going in too high, still running into those big jet-stream winds upstairs. Weather was almost always bad." Even in a good month, only seven days of bombing could be anticipated; in a bad month, only three days. Sustained high-altitude daylight precision bombing with good results was almost impossible. LeMay's view of Arnold's state of mind was that "General Arnold, fully committed to the B–29 program all along, had crawled out on a dozen limbs about a thousand times, in order to achieve physical resources and sufficient funds to build those airplanes and get them into combat…So he finds they're not doing too well. General Arnold was absolutely determined to get results out of this weapons systems." It was, in fact, Arnold's great obsession of the war.

In Washington, Norstad spelled it out to LeMay: "If you don't get results, you will be fired…There will never be any Strategic Air Forces of the Pacific — after the battle is fully won in Europe and those European forces can be deployed to the Pacific. If you don't get results, it will mean eventually a mass amphibious invasion of Japan, to cost probably half a million more American lives."



B–29s lined up in preparation for 1-minute takeoffs in the bombing of Japan.

In March 1945, LeMay acted, switching tactics from the weather-prone high-altitude daylight bombing to low-level area nighttime attacks with incendiaries, as desired by Arnold and Norstad — and President Roosevelt. Arnold noted that reports of the Foreign Economic Administration and the U.S. Committee of Operations Analysts stressed the vulnerability of Japanese cities to area incendiary bombing. The result was the March 9/10, 1945, attack on Tokyo by 334 B–29s unleashing 2,000 tons of bombs, resulting in a holocaust with more casualties than the atom-bombing of Hiroshima or Nagasaki. The Japanese were almost totally unprepared for this, a Pearl Harbor in reverse. From March through May 1945, the XXI Bomber Command under LeMay struck pulverizing blows against Japan's urban areas, confirming Arnold's and Norstad's judgment about the vulnerability of Japanese cities.

At the same time, Arnold had been kept informed of the development of the atom bomb since May 1943 by Maj. Gen. Leslie R. Groves, director of the Manhattan Engineer District. Arnold directed the modification of the B–29s to carry the atom bomb, and he ordered atomic weapons training for the 509th Composite Group. Creation of this atomic warfare–capable unit, under Col.

Paul W Tibbets Jr., began in the summer of 1944, and by the end of the year a list of potential targets had been chosen. No one knew for certain when the bomb would be ready, or if it would work. Adm. William D. Leahy, Chief of Staff to Roosevelt and Truman, was convinced it would not work: "This is the biggest fool thing we have ever done," he informed Truman. "The bomb will never go off, and I speak as an expert on explosives." On June 1, 1945, the Interim Committee on the Atomic Bomb recommended to Truman that the bomb be employed against Japan as soon as possible and without warning.

Meanwhile, the JCS scheduled an invasion of Kyushu for November 1, 1945, to be able to intensify the blockade and bombardment before invading Honshu. Arnold, wanting to drive Japan out of the war before an invasion, flew to the Pacific in June 1945 to determine from LeMay when Japan might capitulate. LeMay informed Arnold that by October 1, 1945, her cities and industry destroyed, Japan would be unable to continue the war. The invasion of Kyushu would not be necessary. This estimate by LeMay was underscored by a preliminary report from the U.S. Strategic Bombing Survey, based on firsthand reports of the effects of bombing on Germany, that an invasion of Japan would not be required. Arnold immediately concluded that Japan could be forced to surrender without a costly invasion.

As a result, he sent LeMay to Washington to brief the JCS before their June 18 meeting with Truman to decide whether to plan for an invasion. Delayed en route from the Pacific, LeMay arrived on the nineteenth, a day late. On the eighteenth, Truman had approved Operation Olympic, the invasion of Kyushu, directing that preparations for it be completed. Planning for Operation Coronet, the invasion of Honshu in March 1946, would continue.

At the meeting with Truman on June 18, Marshall emphasized that "air power alone was not sufficient to put the Japanese out of the war. It was unable alone to put the Germans out." Marshall's position was strongly supported by MacArthur, the Southwest Pacific theater commander, who sent Marshall a voluminous message justifying the invasion. Admirals King, Nimitz, and Leahy all supported planning for Olympic (although subsequently stating that an invasion would not be required), as did Secretary of the Navy James V. Forrestal. Secretary of War Henry L. Stimson also argued for Olympic but expressed hope that the war would end before the invasion. The question of dropping the atom bomb was also discussed at the meeting, and all agreed with the Interim Committee that no warning should be given. Truman wanted to prevent "an Okinawa from one end of Japan to the other." With Truman having already made his decision, LeMay's meeting on June 19 with the JCS was, in LeMay's words, "a fiasco." Marshall dozed throughout LeMay's briefing and, according to LeMay, "the Joint Chiefs were not at all interested in what a two-star general had to say."

In July 1945, Arnold accompanied Truman to the Potsdam Conference. There, on July 16, Truman received word of the successful test of the atom

bomb at Alamogordo, New Mexico. Truman convened his advisers — Stimson, Byrnes, Leahy, Marshall, Eisenhower, Arnold, and King. Arnold alone stated his view that it was not necessary to drop the atom bomb; Japan was reeling under the conventional B–29 onslaught and would be forced to surrender by October.

Barton J. Bernstein has written that before Hiroshima, no "top military leader — Admiral William Leahy, Admiral Ernest King, or General Henry Arnold — ever raised a political or military objection to the use of the A-bomb on Japanese cities or argued explicitly that it would be unnecessary." According to Bernstein, only after the war did Leahy utter moral and political objections and did King and Arnold raise questions about the military need for the A-bombings. There is evidence, however, that Arnold, fearful that the atom bomb would steal the thunder from the B–29 conventional-bombing campaign, thought it militarily unnecessary to use the weapon, provided that the B–29s kept up the intensive bombing of Japanese cities. Had the conventional bombings continued, Japanese casualties would have been higher than the casualties caused by the atom bombs.

But Truman could not be certain as to precisely when Japan would cave in to the bombing and the naval blockade. It could take many months. Marshall thought that the invasion of Honshu would cost at least a quarter million American casualties. Thus, returning from Potsdam, Truman ordered that the bomb be dropped. Yet the atom bombs dropped on Hiroshima and Nagasaki, Arnold insisted, "did not cause the defeat of Japan, however large a part they may have played in assisting the Japanese decision to surrender." Japan was forced to surrender, he said, "because air attacks, both actual and potential, had made possible the destruction of their capability and will for further resistance." Those attacks, he added, "had as a primary objective the defeat of Japan without invasion."

Truman's decision to drop the bomb, made in the context of a particular moment in history, was of a piece with Roosevelt's wartime strategy. Roosevelt's and Truman's guidance to the Joint Chiefs, and thereby to Arnold, Norstad, and LeMay, was to do everything possible to save American lives and to shorten the war — beyond question, the desire of the American public. Had the bomb not been dropped, would Japan have surrendered before the November 1, 1945, invasion of Kyushu? Truman and Marshall thought it would take many months. Arnold, LeMay, Leahy, and King thought Japan could be forced to surrender without an invasion. After the war, Japanese leaders said they could not have held out much longer, even without the use of the bomb. The Strategic Bombing Survey concluded that, without the bomb or the invasion, Japan would have been forced to accept unconditional surrender, probably by November 1 and certainly by the end of the year.

General Arnold was under enormous pressure in Washington to produce results quickly with the least loss in American lives. He saw it as a race against



The Japanese surrender aboard the battleship USS Missouri *in Tokyo Bay.*

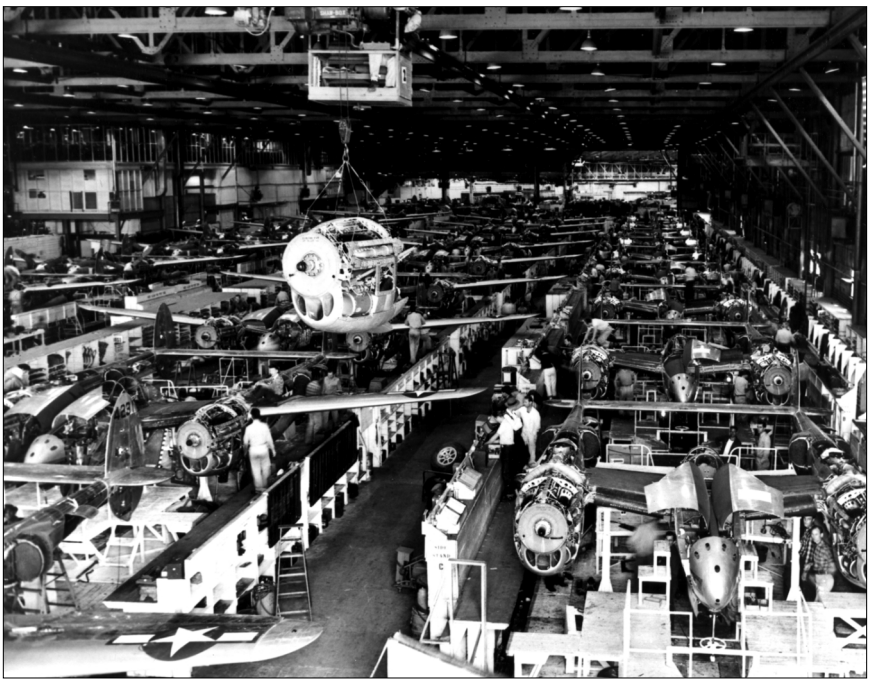
time. He had directed and pushed, against great odds, the development and production of a revolutionary aircraft, the B–29. The program suffered severe setbacks, sufficient under normal circumstances to close the assembly lines and stop production. Arnold viewed the B–29 as the weapon to make the decisive contribution to winning the war against Japan. The B–29 campaign, along with the naval blockade, would force a modern nation to surrender.

This was the so-called independent use of air power, and it would seal the case for a postwar independent U.S. Air Force, something Arnold never lost sight of during the war. Anticipating Germany's surrender, Arnold and Gen. Carl A. Spaatz, Commander, U.S. Strategic Air Forces in the Pacific, had planned for an even more powerful air offensive against Japan, employing forces transferred from Europe. Japan capitulated before this offensive could be mounted. Arnold believed that the Japanese position was "hopeless" before the atom bomb was employed and that the bomb allowed the emperor "a way out to save face."

The bomb, in a real sense, did steal the thunder of the conventional B–29 attacks. "We were never able," wrote Arnold, "to launch the full power of our bombing attack…The power of those attacks would certainly have convinced any doubting Thomases as to the capabilities of a modern Air Force. I am afraid that from now on there will be certain people who will forget the part we have played." Thus, in retrospect, General Henry H. Arnold's fear can be seen as having at least partially come true: The dropping of atomic weapons and the way in which the war against Japan ended cast a perceived shadow over the contribution made by the Army Air Forces' B–29 conventional-bombing offensive. To this day, that shadow has colored the never-ending controversy over the contribution of strategic bombing to victory in World War II.

Part II

The Postwar World



The Lockheed P–38 assembly line during World War II.

The Quiet Victory

In the enormous literature of World War II, including that on the European and Pacific air wars, writers have usually emphasized operational exploits. Planning, organization, doctrine, strategy, and dramatically crucial battles have caught the attention and imagination of millions. The uphill struggle of the Allies in World War II, battles fought on a tremendous scale, and the subsequent unfolding of the ultimate triumph never fail to excite interest and admiration. However, another story, though far less dramatic and rarely told, remains extraordinarily important, holding as it does vital lessons about war and peace. This is the story about the plans, actions, and events that ended the global conflict and ushered in an era of postwar prosperity. It is a story played out on a large canvas, involving large-scale wartime planning, production, and logistics.

Most observers are aware of the enormous contribution to victory made by the tremendous productive capacity of American industry. Much less discernible and appreciated are the planning and events that occurred during and after the war that probably prevented a postwar recession, even an economic depression. With rare foresight, the U.S. government, including the military — and especially the Army Air Forces — anticipated the end of the war and made plans for war contract termination and disposition of materials and equipment. These plans were formulated long before the war was over. Ultimately, they were carried out efficiently and with dispatch.

This, then, is the story of the shutting down of the great war-production engines of American industry in order that they might be rapidly converted to the production of peacetime commodities. Despite its scale, when compared to the drama of the great battles, it is a quiet story.

The Quiet Victory initially appeared as "The Quiet Victory" in *Air Force Magazine,* July 1984, Vol. 67, No. 7, pp. 80–89.

Fulcrum of Power: Part II

The Challenge from Roosevelt

In May 1940, with Nazi Germany on the march, France just weeks from falling, and the Battle of Britain not far off, President Franklin D. Roosevelt made a dramatic call for production of 50,000 military aircraft. Although the President's pronouncement caught the imagination of the country, it confronted military planners with a tremendously difficult task. They had to convert a target figure into a procurement program.

The startling fact was that the United States had not yet terminated all contracts from World War I. Yet, as far as procurement objectives were concerned, World War II was already under way. President Roosevelt's 50,000-aircraft figure included equipment for both the Army and the Navy. The Army Air Corps part of the target was 36,500, after the Navy's total had been subtracted. In the fiscal 1941 military budget, the War Department called for 166 aircraft, but the House of Representatives was about to trim this number to 57 planes. However, with war raging in Europe and energized by Roosevelt's call, Congress provided 1,900 additional aircraft. With the aircraft as yet undelivered from fiscal years 1939 and 1940, the Air Corps counted some 7,700 planes in active programs. As subsequently approved by the President and by Army Chief of Staff Gen. George C. Marshall, the Air Corps program called for more than 18,000 aircraft by April 1942.

After the Japanese attack on Pearl Harbor, President Roosevelt asked for an increased military output. He wanted 60,000 aircraft in 1943 (45,000 tactical planes and 15,000 trainers), and in 1943 he requested 125,000, including 100,000 tactical planes. These figures, it should be noted, were greater than those forwarded by military planners. Roosevelt, it seems, had simply raised the military's numbers. When his adviser, Harry Hopkins, protested, the President allegedly said: "Oh, the production people can do it if they really try." Robert Sherwood, author of *Roosevelt and Hopkins*, observed that the President "was never afraid of big round numbers." The goal of 125,000, aircraft however, was unrealistic. Although Lt. Gen. Henry H. "Hap" Arnold, Commanding General, AAF, wanted 133,000, he ultimately settled for a 1943 goal of 107,000. Assistant Secretary of War for Air Robert A. Lovett actually thought that 88,000 would be more realistic.

This difference of opinion about production goals resulted in a confrontation between Lovett and Arnold. Lovett considered Arnold's 133,000 figure ridiculous, way beyond the bounds of realism. Lovett described Arnold's goal this way: "It is a little bit like asking a hen to lay an ostrich egg; it is unlikely that you will get the egg, and the hen will never look the same." Nonetheless, General Arnold insisted. He agreed that it was like asking a "peacetime hen" for a wartime ostrich egg, but "if we can induce her to lay it, I for one feel that we must accept the wear and tear on the hen." Arnold never liked negative thinking. He believed in driving toward objectives without compromise.

However, Lovett's judgment proved correct. In 1943, acceptance of military aircraft totaled 84,433.

Gearing up for War

The tremendous aircraft production record of American industry in World War II can be traced to prewar planning and expansion of productive capacity in 1940 and 1941. The key factor here was the 1939 and 1940 demand for planes by England and France that financed expansion of the American aircraft industry. At first, most of these planes were trainers and obsolescent P–36As, B– 10Bs, and P–35s. Later the English and French ordered the A–20 and P–40 and subsequently, even more advanced planes. Secretary of War Henry L. Stimson observed in early 1941 that were it not "for the early British orders, and the French orders which were subsequently taken over by the British, we would have at this time only a small fraction of the existing aircraft plants and productive facilities."



General Arnold (standing, far right) and Assistant Secretary of War for Air Robert A. Lovett are met by two other army officers at Ellington Field, Texas, during their inspection tour to assess the aircraft needs of the AAF.

Fulcrum of Power: Part II

Among the companies that significantly expanded their capacity during this period were the Boeing, Lockheed, Douglas, Martin, Consolidated, North American, and Curtiss firms. Pratt & Whitney and Wright Aeronautical had substantially expanded their engine plants between 1938 and 1940. However, the aircraft industry could not have done it alone. The giant automotive industry converted to production of aircraft and aircraft parts. The tremendous cost involved in this conversion was met, nearly 90 percent of it, by the government. It should be emphasized that, in 1939–41, the Army Air Corps was in an especially sound position in regard to knowledge of industrial capacity. This was due in no small measure to General Arnold.

Before becoming Chief of the Air Corps in 1938, upon the death of Maj. Gen. Oscar Westover in an air crash, Arnold had nurtured his contacts with industry. His personal relationships with the captains of industry and his knowledge of potential industrial capacity proved a large bonus to the Air Corps and later to the Army Air Forces. And urged on by the former president of General Motors, Lt. Gen. William S. "Bunky" Knudsen, now a member of the National Defense Advisory Commission (NDAC) and the NDAC's Aeronautical Section, the aircraft industry and the converted automotive



Lt. Gen. William S. Knudson (standing, far left), a former General Motors executive, served as OPM Director General before President Roosevelt transferred him to the War Department and charged him with directing and expediting arms output. Others with him on this occasion are, left to right, Gen. Henry H. Arnold, Adm. William F. Halsey Jr., and Under Secretary of War Robert P. Patterson, who subsequently became the Secretary of War.



Maj. Gen. Oliver P. Echols, when a brigadier general, was Chief of the Materiel Division at Wright Field. He stands here (far right) with Generals Marshall, Andrews, and Arnold (respectively, from left to right) on an inspection tour in July 1942.

industry mushroomed. Robert P. Patterson, the Under Secretary of War who subsequently became Secretary of War, also played an important part in putting this expansion into effect.

Other Air Corps officers participating in this program were Brig. Gen. Oliver P. Echols, Chief of the Materiel Division at Wright Field; Lt. Col. Kenneth B. Wolfe, Chief of the Production Engineering Section, Materiel Division; and Col. Edwin W. Rawlings, who, after playing a key role in budgeting for the early expansion, subsequently was named Chief, Production Resources Section, Production Division of the AAF Materiel Center at Wright Field. Rawlings, adept at finance and with a keen sense of the critical details of aircraft production, would later hold a number of critical positions with the Air Technical Service Command (ATSC). In 1945–46, Rawlings, as a brigadier general and Chief of the Readjustment Division, AAF Materiel Command, and then as Chief of the Procurement Division, ATSC, was instrumental in directing the termination of wartime contracts.

The expansion of aircraft production necessitated a complex system of administration. An Aircraft Division was established under the War Production Board with an office at Wright Field. This division listed priorities to meet schedules set by the Joint Chiefs of Staff. An Aircraft Scheduling Unit headed by Col. Edward M. Powers included civilians and hundreds of temporary offi-

cers with expertise as lawyers, accountants, and businessmen. Beginning in October 1943, Colonel Rawlings was the administrator of the Aircraft Scheduling Unit.

The Production Miracle

The aircraft production record of the United States in World War II was a stunning achievement. Incredibly, by the time of the Japanese attack on Pearl Harbor in December 1941, America had already become the world's top producer of military aircraft. This was achieved despite the export to the Allies of materials and equipment that would have been important to the production of American aircraft. Between July 1940 and the end of August 1945, the United States produced almost 300,000 military aircraft, more than 802,000 aircraft engines, and a total airframe weight, including spare parts, of 2,859,098,000 pounds. The cost of this program totaled almost $45 billion, nearly one-quarter of the total munitions output of $183 billion.

In the process, aircraft manufacturing changed from handwork to mass production. In 1940, the aircraft industry produced about 13,000 planes, fewer



Acres and acres of bomber tails constituted the Boeing production line.

than half of them military. In 1944, more than 96,000 military planes came off the assembly lines. In airframe weight, production during 1944 exceeded the total for the rest of the world.

The breakdown of the total of almost 300,000 military aircraft is as follows: bombers, 97,810; fighters, 99,950; reconnaissance, 3,918; transport, 23,929; trainers, 57,623; communications, 13,643; and special-purpose, 2,420. Heavy bombers — B–29s, B–24s, and B–17s — though totaling less than 12 percent of production, by number, constituted more than 35 percent of total airframe weight.

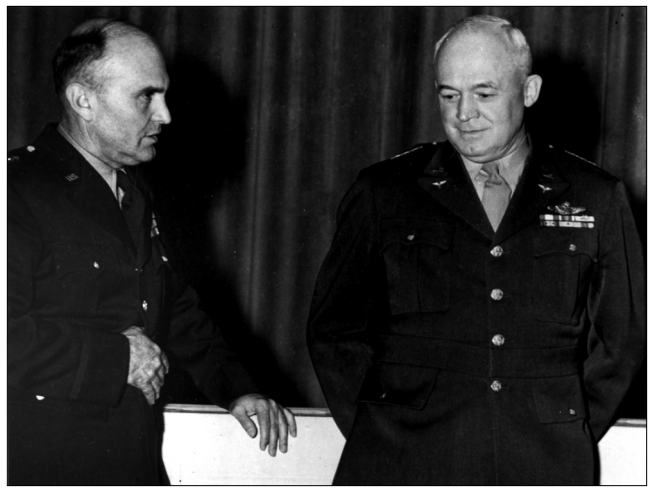
The leading manufacturers before America entered the war retained their position during the conflict. They delivered more than 70 percent of planes accepted between July 1940 and the end of August 1945. North American, Consolidated Vultee, Douglas, Curtiss, Lockheed, Boeing, Grumman, Republic, Bell, Martin, and Chance Vought. Pratt & Whitney and Wright, with their licensees, supplied most of the hundreds of thousands of engines. These figures, reflecting a revolution in the production of military planes, illustrate the enormous reconversion task that confronted the United States once the war was over.

This country had learned a lesson from the disorganized, messy demobilization that followed World War I. As mentioned, when the United States entered World War II, it still had not terminated contracts from the previous world war. But when Japan surrendered in 1945, the Army Air Forces was ready to take action to shut down aircraft production and the flow of materials and yet still keep developmental work going. AAF leaders had to be careful to allow for continued research and development as an investment in the future.

Planning for War's End

The Army Air Forces started planning for reconversion long before the close of the war. This farsighted planning began in 1943 and accelerated during 1944. General Arnold directed the Air Staff to draw up complete plans in 1944. In April 1945, he told Lt. Gen. Ira C. Eaker, Deputy Commander, AAF, and Chief of the Air Staff (who had just returned from his Mediterranean command) to accelerate final planning for termination of war contracts, disposition of materials, and reconversion of production facilities.

In June and July 1945, the Air Staff and the Air Technical Service Command joined in preparation of detailed plans and scheduling. These plans proceeded on the assumption that Japan would collapse by the end of August 1945. Plans were completed in July, disseminated in the Air Staff, and forwarded to the commands and government agencies outside the War Department. Revisions were requested. The completion date was scheduled for August 10 so that the AAF could promulgate directives immediately to put them into effect. Instructions to be carried out by all concerned agencies and



General Eaker, here standing at the left, was General Arnold's choice to accelerate planning for the termination of war contracts.

groups were contained in the publication "AAF Materiel Demobilization Plan for V-J Day." Readjustment from wartime to peacetime would start with the flash of a single order: "Put the Plan into effect."

On August 14, 1945, after President Harry Truman announced that Japan had accepted the Potsdam surrender terms, the AAF issued the demobilization order. Immediately, delivery overseas of thousands of aircraft halted. Movement of aircraft at ports of embarkation ceased. Aircraft in transit rerouted. Shipments of materiel stopped. Cargoes at dockside were examined to determine what should proceed to destination. Ships at sea were turned around. Officers of the Army Air Forces, working with the Transportation Corps, provided instructions about AAF materiel in transit. All instructions and revised orders were completed by August 16.

Beginning on V-J Day, termination notices were promulgated. Within twenty-four hours of Truman's announcement, notices went out to more than 3,000 contractors involved with approximately 10,500 contracts and purchase orders. This was possible because the AAF had discussed cutbacks with major prime contractors well in advance. About $8.5 billion in contracts were canceled in this 24-hour period. Approximately 33,000 planes were eliminated from scheduled production in postwar 1945 and 1946. Between V-E Day and V-J Day, about 44,000 planes had been scratched from production. After Japan's surrender, the only aircraft that continued in production, on reduced schedules and in limited quantities, were B–29s, P–80s, P–61s, and long-range models of P–51s and P–47s. Production of B–17s, B–24s, and B–25s was eliminated entirely.

The Nucleus Amid the Surplus

To sustain developmental work, the Army Air Forces took action to review and revise aircraft requirements simultaneously with cancellation of the contracts. These adjustments, approved by the Office of War Mobilization and Reconversion, were in accordance with the War Mobilization Act of 1944 and with a letter of August 8, 1945, from Truman to Under Secretary of War Robert P. Patterson. According to this letter, "It is vital to the welfare of our people that this nation maintain developmental work and the nucleus of a producing aircraft industry capable of rapid expansion to keep the peace and meet any emergency." Provisions for holding tools in standby for future airframe and engine production were already in place. Under the Contract Termination Law, the AAF and contractors agreed to retain and store AAF-owned tools. The Reconstruction Finance Corporation disposed of additional machine tools.

Before the end of the war, AAF leaders were keenly aware of the great importance of keeping alive a growing aircraft industry. Arnold and Lovett set the pace, building support for both research and production. Secretary Lovett believed that an intergovernmental group was required to coordinate and develop policies affecting the aviation industry. Lovett gained the backing of Assistant Secretary of the Navy Artemus Gates, and in March 1945 an interdepartmental memorandum established the Air Coordinating Committee. This group played an important postwar role in framing governmental aviation policy. Moreover, Lovett's successor, Stuart Symington (who subsequently became the first Secretary of the Air Force), made the military aircraft industry a top priority. This concern became a centerpiece of the President's Air Policy Commission (known as the Finletter Commission) report of January 1948.

After Japan's defeat, the AAF declared to the Reconstruction Finance Corporation more than 35,000 planes as surplus. By the end of June 1946, an additional 33,000 were declared surplus. This total of about 68,000 planes included approximately 21,000 bombers, 10,000 fighters, 5,600 medium and heavy transports, and 31,000 trainers and other small aircraft.

Statistics provide some idea of the magnitude of difficulty involved in the demobilization of the aircraft industry. During the war, it had expanded to the largest single industry in the world, covering about 250,000,000 square feet in the production of planes and parts. The government financed this expansion almost totally, inasmuch as three-quarters of this expansion reflected AAF projects, including machinery and tools. In early 1946, a survey conducted by the Aircraft Industries Association indicated that only twenty airframe plants would be retained for postwar military and commercial production, for a total area of about 24,000,000 square feet. Additional production facilities for engines, propellers, and other spare parts brought the total area to about 35,000,000 square feet, constituting about 14 percent of peak wartime area, compared to three times the prewar area.

Fulcrum of Power: Part II

The complexity of the termination job that faced the Army Air Forces was, naturally, heightened by the fact that it had to be accomplished nearly instantaneously. For example, when it came to contract termination, some planes had already been produced, others were close to completion, and some had barely gone into production. Considerable materials were en route to contractors, plus subcontractors and sub-subcontractors were involved.

The Contract Settlement Act

The keys to the success of the termination process were the planning and events that had commenced as early as 1943. In the summer of 1943, the AAF recommended to Congress the adoption of what became the Contract Settlement Act of 1944. Passed by Congress, this legislation made possible negotiated settlements with government contractors. It was strongly opposed by the General Accounting Office, which failed after World War I to settle all contracts expeditiously. Thus the AAF's suggestions in 1943 and 1944 contributed significantly to the establishment of War Department policies and procedures for settling terminated contracts, financing termination claims, and disposing of termination inventories



Gen. Brehon B. Somervell, standing here at the right with Lt. Gen. "Hap" Arnold in December 1942, was instrumental in managing wartime termination and surplus disposal problems.

In early 1944, Gen. Brehon B. Somervell, Chief of Army Service Forces, convened a conference in Washington for industry leaders from the New England states. This was one of the earliest efforts to discuss termination and surplus-disposal problems. Regional conferences were also held to train personnel in termination procedures. In July 1944, the AAF staged two contractor conferences on the West Coast. A crucial element of the entire program was to familiarize the subcontractors with the War Department's termination planning. Unless subcontractors presented claims promptly, prime contractors could not forward their final claims to the government.

Training of officers in termination procedures was crucial. In June 1944, the War Department reactivated the Army Industrial

College in Washington, D.C., to train personnel as members of settlement teams. The basic course lasted three to four weeks. Beginning in July 1944, the Industrial College inaugurated a two-month termination course for AAF officers. The Army Air Forces Termination Officers' Training School, Vandalia, Ohio, trained almost 800 officers and civilians in termination and procurement. More than 1,200 auditing AAF personnel took termination accounting courses at the Budget and Fiscal Office, Wright Field. Several hundred AAF officers also received termination training at the Harvard Graduate School of Business Administration. All of this training, in line with the basic philosophy of the Contract Settlement Act, emphasized that termination should be "fair, fast and final."

Collaborating with the Readjustment Division of the Army Service Forces and with the Navy, the AAF was instrumental in formulating the Army-Navy Joint Termination Regulation of November 1944. This regulation established uniform readjustment procedures and policies for contractors doing business with the War and Navy Departments.

Time of Transition

The summer of 1944 proved to be a vital time of transition in the AAF's concerted planning for contract termination. With the invasion of the European continent a success, on July 1, 1944, Maj. Gen. Charles E. Branshaw, Commanding General, AAF Materiel Command, directed that the Readjustment Division be activated at Wright Field under the AAF Materiel Command. An amalgam of the Termination Section of the Procurement Division and the Property Disposal Staff of the Production Division, the new chief of the Readjustment Division was Col. Edwin W. Rawlings.

Rawlings was a budget and production-control specialist with an extensive background in the redistribution of surplus property, including aircraft components and hardware. Previously with the Aircraft Scheduling Unit, he had been at the center of production control and redistribution involving hundreds of AAF contractors. He now headed the Readjustment Division, consisting of four sections: Termination, Property Disposal, Training, and Administrative. The Training Section operated and sponsored schools for readjustment officers and men at Vandalia, the Army Industrial College, and at Harvard University. As the overall division chief, Rawlings directed termination of contracts, negotiated contractor settlements that involved termination, cleared plants of government-owned machinery, equipment, and materials, and directed storage and disposal of surplus property. In 1944–45, this work laid the foundation for a massive reconversion of industry from a wartime to peacetime footing.

These evolving reconversion plans and reorganizations were not without their critics. Lovett in 1944 believed that this activity hurt the war effort. He was not opposed to it, but he held that it was being overdone. The war was far

from over, and Lovett argued that sensitivity to readjustment caused delays and even cutbacks of requirements because of the fear of having excess equipment should the conflict suddenly end. Lovett wondered how "we can be expected to fight a cashier's campaign in which the last American bullet kills the last German soldier on the day before payday." He was against fine-tuning and argued, "we ought to be shot if we do not have more than we can deploy in the Pacific and not try to balance the thing out to the last penny."

Meanwhile, one of the most important AAF activities involved termination of cost-plus-fixed-fee contracts. This resulted in surplus parts, materials, and scrap—all government property. Termination settlement stipulated that the government would take over surplus parts and materials. Under AAF sponsorship, the government had supplied most of the machine tools and equipment used in manufacturing AAF materiel. Termination of these kinds of contracts usually involved much negotiation.

As directed by Rawlings, the key to contract settlements which involved billions of dollars was the "termination team." This group comprised a contracting officer, negotiators, a property disposal officer, an administrative officer, a legal officer, and an accounting officer. All were trained to accomplish a specific task, working directly with the contractor. The contracting officer served as the "captain" of the team; he signed the settlement documents. With the legal officer, he directed interim financing and settlement of subcontractor claims. The property disposal officer inspected the site and set procedures for property that was to be retained by the contractor and subcontractor or that was to be returned to the supplier.

Settlements negotiated by these teams might be checked by a Settlement Review Board at Headquarters, Air Technical Service Command. Members of this board were named by the Chief of the Readjustment Division. If asked by the contracting officer, the board reviewed especially difficult termination proposals.

Disposition of materials was one of the most tricky and potentially controversial decisions related to partially completed aircraft. With sufficient planes in the inventory, the question was whether to complete them off the production line or to cut them for scrap. Rawlings and his people determined that it was more economical to cut than to store these aircraft in the Arizona desert. Scrap dealers cut up the aircraft and engines and sold them as junk. Once this process started, Rawlings appeared continuously before congressional committees to explain the decision.

Liferafts Full of Goldfish

Fast and fair settlement of terminated contracts and disposition of materials and equipment by the Army Air Forces made an extraordinarily important contribution to the reconversion to a peacetime economy. "This rapid conversion,"

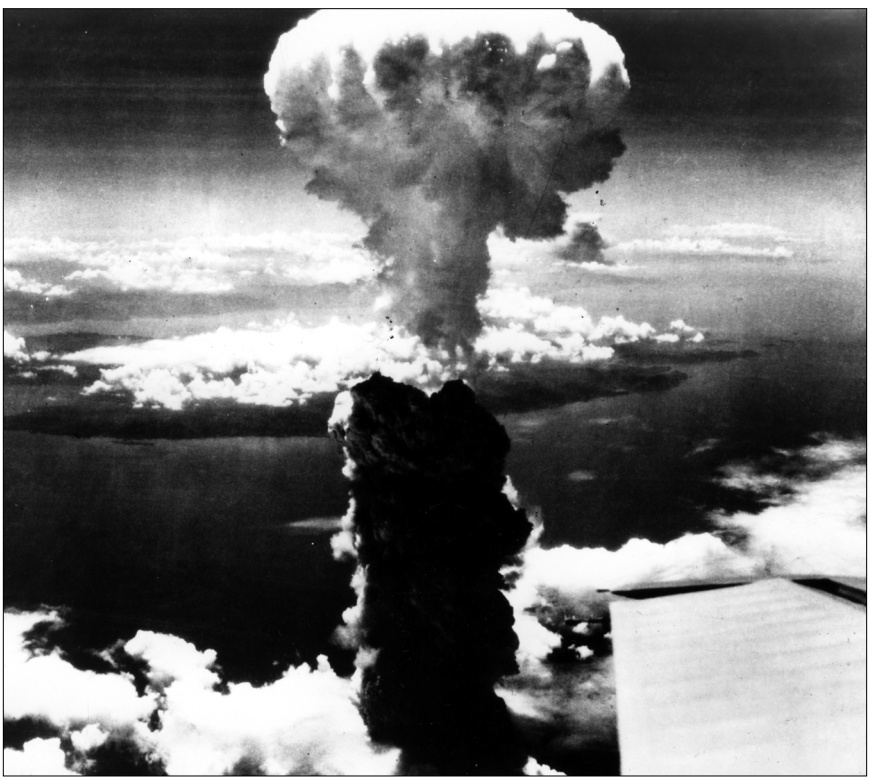
General Rawlings observed, "no doubt prevented a recession." The War Department estimated that it would take 5,000 AAF officers several years to finish reconversion, but the job was essentially completed in considerably less time and by only 2,500 men.

By mid 1946, most contracts were settled. In late 1946, about 90 percent of the dollar value of contracts scheduled for cancellation had been settled. By late 1947, the job was basically complete. Approximately $15 billion in contracts were terminated after the war. The total value of Army Air Forces' terminations exceeded $22 billion. This prodigious amount of work was a tremendous accomplishment by a relatively small group of AAF officers and men.

An Air Force Logistics Command historian summarized reconversion this way: "The sleeping bags now contained happy honeymooners, the Mae Wests were suspended from the necks of nonamphibious Boy Scouts, the liferafts were full of goldfish in suburban backyards, and somebody had converted a surplus plane into a small greenhouse." The massive reconversion succeeded because civilians at the uppermost levels of government and military officers decided before the end of the war that the mistakes of the post–World War I demobilization would not be repeated. Had the United States failed to heed those lessons, it was probable that a recession, and possibly a depression, would have ensued.

Under the Contract Settlement Act, General Arnold, General Eaker, the Air Staff, General Rawlings, and materiel officers at Wright Field triggered the planning during the war that assured an organized, successful reconversion of the world's greatest production machine. These complex plans covered all aspects of the job: administration, training, inspection, negotiation, disposal, retention, settlement, accounting, and much more. Simultaneously, the plans were sensitive to developmental and production requirements to sustain the future force.

And so a few farsighted men guided an industrial transformation from war to peace, a reconversion of the giant American industrial machine. In a real sense, this global conflict ended where it began—on the production line. It was the quiet victory that made possible the war boom.



The plume rises from the exploding atom bomb dropped over Nagasaki, August 9, 1945, the second and concluding atomic attack unleashed during World War II.

The Strategic World of 1946

On Tinian, 1,500 miles southeast of Japan, it was 2:45 in the morning on August 6, 1945. Three B–29s revved their engines. The *Enola Gay,* Col. Paul Tibbets at the controls, started to roll down the center runway, finally gained flying speed, and lifted off just at the end of the concrete. In the darkness, the two companion B–29s, for observation, lumbered off after the *Enola Gay,* and all three winged northward.

William L. Laurence, in *Dawn over Zero,* later wrote that, at 9:15 a.m., "Hiroshima stood out under the clear blue sky. One-tenth of a millionth of a second later, a time imperceptible by any clock, it had been swallowed by a cloud of swirling fire as though it had never existed. The best watches made by man still registered 9:15."

It was, of course, an end and a beginning. On August 9, a second atom bomb was dropped, this time on Nagasaki, and on August 15 the Japanese Emperor announced to his nation that the war was over. On September 2, 1945, the surrender document was signed onboard the USS *Missouri* in Tokyo Bay, formally ending the most destructive war ever waged. But over the next eighteen months a new and different kind of war emerged. It came to be known as the Cold War, and it overturned the very premises on which the United Sates had fought World War II and planned for its peaceful aftermath. Indeed, before the end of the Second World War, when men were just beginning to frame its lessons, the realization began to dawn that hopes long-held were about to be smashed.

Fading Hopes, Dawning Realities

President Franklin Roosevelt had not thought in terms of a postwar balance of power to protect the United States. Rather, he looked forward to mutual

The Strategic World of 1946 initially appeared as "The Strategic World of 1946" in *Air Force Magazine,* February 1971, Vol. 54, No. 2, pp. 72–80.

goodwill between Russia and America, an "era of good feeling." The utopian nature of this kind of thinking was characteristic of the traditional American philosophy which held that war was an exception, an interruption to the normal state of relations between nations. Once the war was over, harmony would be restored, and the struggle for power, ended. This attitude contained that special American amalgam of naïve optimism and the penchant for believing that if we didn't think about unpleasant problems, they were likely to evaporate.

The Soviets harbored no such illusions about the basic nature of man. During the Second World War, the Russians, in fact, had suspected the United States and Britain of devious and even hostile intentions, especially with regard to the delay in opening the second front in the West. From the Soviet viewpoint, the Allies were doing exactly what they would be expected to do — delaying the second front while Russia and Germany exhausted each other.

Then, in February 1945 at Yalta, Stalin had made and received some concessions on United Nations membership, had agreed to zones of occupation in Germany, and had promised to support self-government and allow free elections in Eastern Europe. The victors in the war would cooperate. At the close of the Yalta Conference, the Americans thought that they had done as well as they could. Harry Hopkins, the President's closest adviser, recounted:

> We really believed in our hearts that this was the dawn of the new day we had all been praying for and talking about for so many years. We were absolutely certain that we had won the first great victory of the peace — and, by "we," I mean *all* of us, the whole civilized human race. The Russians had proved that they could be reasonable and far-seeing, and there wasn't any doubt in the minds of the President or any of us that we could live with them and get along with then peacefully for as far into the future as any of us could imagine.

In late June 1945, the charter of the United Nations had been signed in San Francisco. The ink was hardly dry when the chasm between hope and reality was rudely demonstrated. Even as the final drama of the second Great War of the century was played out, it became clear that the concept of free elections and democratic governments meant something quite different to the Russians. In Poland, Hungary, Bulgaria, Romania, and Albania, "free elections" meant that parties not in sympathy with the Communists were barred, and "democratic governments" meant, quite simply, Communist regimes. Eastern and Central Europe were going under Communist control. On August 16, 1945, Churchill, who had lost an election and been replaced as Prime Minister by Clement Attlee during the last days of the Potsdam Conference, warned that a great tragedy was unfolding in Eastern Europe.

This was not all. The Soviets had always coveted the Middle East, and on January 19, 1946, nine days after the first meeting of the U.N. General Assembly in New York, Iran charged the USSR with attempting to overthrow her



The Soviet Premier, Joseph Stalin, strides toward the left as General Arnold, Commanding General of the U.S. Army Air Forces, and British Prime Minister Winston Churchill look on in their meeting in Tehran at the Russian Embassy in Iran in late 1943.

government. The fact of the matter was that the Soviets had refused to withdraw their troops from Iran and were in the process of trying to reduce that country to the status of a Soviet satellite.

The United States Disarms

Thus, the U.S. Army Air Forces came out of the Second World War facing a dynamic situation — a confluence of historical forces, as we have seen, going in opposite directions at the same time. On the one hand, the military was facing a massive postwar demobilization; and on the other, cold-war challenges were heating up rapidly. The AAF had played a major part in the victory over the Axis powers. Buffeted in the early part of the war in Europe, it had, as Gen. Carl "Tooey" Spaatz put it, worked things out "by experiment in the grim practice of war." After very tough going in 1942–43, the Army air arm had come on strong after being buttressed by long-range P–51 Mustang escort fighters, had carried the fight to the enemy, driven him from the skies, and brought his war effort to the point of collapse.

Fulcrum of Power: Part II



Brig. Gen. Emmett O'Donnell, Lt. Gen. Jimmy Doolittle, Gen. Carl "Tooey" Spaatz, and Maj. Gen. Curtis LeMay, seated left to right, were principal planners in the air offensives in Europe and the Pacific.

In the Pacific the results were, if anything, even more striking. The bombing of Japan was more concentrated, and the destruction, comparatively greater, considering that it had occurred over a shorter period. Although dropping the atom bombs unquestionably played a major part in the Japanese decision to surrender, the fact remains that Japan had begun peace initiatives to the Soviet government before Hiroshima. The American strategic bombardment campaign against Japan in the summer of 1945 was a model of bold execution, and there is no question but that it shortened the Pacific war and made an invasion of the Japanese home islands unnecessary.

Thus, as part of the demobilization, the Army Air Forces were in the process of being dismantled. The great majority of the military were returning to civilian life, and by early 1946, the AAF had suffered a tremendous loss, not only in men but in combat effectiveness. Few combat-ready units remained. Despite the fact that it was being torn apart, the Army air arm had reorganized its forces. General Spaatz had succeeded General H. H. "Hap" Arnold as Commanding General, AAF, on February 15, 1946 (Spaatz had commanded a combat aerial unit in the First World War), and on March 21, 1946, the Strategic Air Command, the Tactical Air Command, and the Air Defense Command were created.

Lessons of the Air War

The men who came out of the war to build the foundation for the postwar air arm lived at a historic crossroads of great moment, a point in time when one kind of world vanished and another replaced it. Generals Arnold and Spaatz believed the war had proved them correct. At the same time (and to this day) a case was made to the contrary. Some argued that the reckoning fell somewhere between. At any rate, the air leaders thought that their understanding of what was now required to keep the peace was based firmly on the lessons of the Great War just ended. "What we shall lose in size as a peacetime air force," said General Arnold, "we must compensate for in the lessons we have learned in two world wars."

What were these lessons, as the air leaders understood them? Primarily, they numbered three. The first was that a sustained strategic air offensive, successfully directed against the enemy's war-making capacity, could bring his ability to carry on the conflict to the point of collapse. The second was that, in the atomic age, no nation could long survive a sustained air attack. And third, whereas in World War II we had time to come back and ultimately gain victory, an all-out war in the future would probably be decided early. Because of the enormous destructive potential of the atom bomb, the time required to achieve a strategic decision had been vastly reduced. "A world accustomed to thinking it horrible that wars should last four or five years," wrote strategist and author Bernard Brodie, "is appalled at the prospect that future wars may last only a few days."

The historic "cushion of time," which the United States had always enjoyed, had vanished. No longer would it be possible to mobilize our resources after hostilities began, although this was not recognized at this time by all military or government leaders. The era of come-from-behind victories was over. The next game, if all-out, would be won early; the Second World War would not be repeated. The mobilization philosophy, therefore, now had to be relegated to history's dustbin. Forces in-being would be absolutely necessary. We needed a capability to *deter* aggression. Arnold, Spaatz, and W. Stuart Symington, Assistant Secretary of War for Air, all thought that the next war would be total war. "If we can do it to others," declared Symington, "others can do it to us…The surest defense will be our ability to strike back quickly with a counteroffensive…"

Therefore, the postwar air arm had to be the kind that would convince any potential aggressor that by attacking he had a great deal more to lose than he stood to gain. The cutting edge of this force would be strategic air — a force that could react swiftly and against an enemy's homeland. Arnold, Spaatz, and Symington agreed, and the U.S. Strategic Bombing Survey made the point that the threat of immediate retaliation offered the best means of deterring an attack. In the postwar period, this would require improved aircraft and also the

use of overseas bases. At the close of the war, General Arnold forecast that as the air arm developed in the postwar period, the need for a large Army and Navy would be less. He noted that

> Air superiority…is the first essential for effective offense as well as defense. A modern, autonomous, and thoroughly trained Air Force in-being at all times will not alone be sufficient, but without it there can be no national security.

The interesting thing here is that, despite analysis that tended to be vague and sometimes ambiguous, these men arrived at a conclusion that made sense, a finding that even now with hindsight is easily defensible. Consequently, although their predictions as to the character and duration of the next war were wide of the mark, they arrived at eminently practical conclusions as to the kind of air force that would be required in the postwar period.

In the face of demobilization, did the air leaders want more men and aircraft? Did they remain dedicated to their long-held goal of an independent air force? Of course they did. But given the situation at that time and all that had happened since World War I, it would be a disservice to them and to history to conclude that these men were anything less than honest in believing that the nation's security depended to a large degree upon them. One may think them wrong, although now the weight of evidence is on their side, but they were intellectually honest. They harbored no conspiratorial visions. In the years ahead, they would accomplish their objectives fairly in the give-and-take of democratic politics. Others would have to be convinced, if they were to succeed. Their job became one of persuasion.

In this task, the USSR — by its postwar behavior — was to prove a valuable but unwitting ally. The fact is our airmen would never have succeeded if the nation's citizens and leaders hadn't believed their case to be reasonable and based on reality. They were men of character, apolitical in temperament, who thought in terms of advancing technology, of what could be done if we put our minds and resources to work. Not given to history or philosophy, their minds were not unduly cluttered with doubts and fears.

The New World Takes Shape

As we have seen, at almost the same time that the AAF created its postwar organization, the Soviets were menacing Iran, and discordant notes were sounding in Europe. Churchill, now out of power and brooding about the deteriorating situation, had been invited by President Truman to deliver an address at Westminster College in Fulton, Missouri, and on March 5, 1946, delivered his "Iron Curtain" speech. With characteristic eloquence, he said:

> From Stettin, in the Baltic, to Trieste, in the Adriatic, an iron curtain has descended across the continent. Behind that line lie all the capitals

> of the ancient states of Central and Eastern Europe. Warsaw, Berlin, Prague, Vienna, Budapest, Belgrade, Bucharest, and Sofia, all these famous cities, and the populations around them lie in what I must call the Soviet sphere, and all are subject in one form or another, not only to Soviet influence, but to a very high and, in many cases, increasing measure of control from Moscow…

Before the "iron curtain" of which Churchill spoke descended, the United States had been studying (since Hiroshima, really) the compelling question of the international control of atomic energy. Now, on June 14, 1946, a little more than three months after the Fulton speech, Bernard Baruch, America's "elder statesman," addressed the first session of the newly established United Nations Atomic Energy Commission. Addressing himself to the members of the commission and "my fellow citizens of the world," Baruch declared that "we are here to make a choice between the quick and the dead." The major ideas embodied in this first postwar disarmament plan that Baruch presented were based on a study conducted by the State Department Committee on Atomic Energy under the chairmanship of Under Secretary of State Dean Acheson, aided by a Board of Consultants under the direction of David Lilienthal.

With the Baruch Plan, the United States proposed the international ownership and control of atomic energy and the surrender of a large measure of national sovereignty to an International Atomic Development Authority. The American proposal rested on two assumptions: first, that the U.S. atomic-weapons monopoly would prove to be fleeting, and second, that any disarmament agreement must rest on strict verification to ensure compliance. Promises were not sufficient.

As expected, the Soviet Union rejected the Baruch Plan, thereby reinforcing the impression already created by its expansionist actions. American counteraction would not be long in coming. With its Army of millions now reduced to a few hundred thousand, the American political-military strength would come to rest primarily on the so-called absolute weapon, which was regarded with so much awe and anxiety — the atom bomb.

In addition to Iran, Turkey also was feeling the pressure, as Moscow attempted between mid-1945 and August 1946 to gain control of the administration of the Dardanelles Strait. In Greece, too, large-scale guerrilla warfare had broken out in the fall of 1946, with the Communist forces in northern Greece receiving help from Yugoslavia, Albania, and Bulgaria.

Thus, the United States was confronted immediately with a situation of the utmost gravity, because Britain, the traditional protector of this area, was prostrate in the aftermath of the war. Both countries implied that they would defend Iran if necessary, and the Soviets then announced that their troops would withdraw. In the case of Turkey, the United States sent a task force to the Mediterranean in August 1946 and rejected the Soviet demand for a share in the Dardanelles. This infusion of American sea power into the eastern Mediterranean

set the precedent for the presence of the Sixth Fleet in this area for years to come. Then on February 21, 1947, Britain formally informed the United States it could no longer meet its traditional responsibilities in Greece and Turkey. Only the United States could prevent a Soviet breakthrough. The situation in Greece had become critical. A collapse there not only would have meant a Communist breakthrough into the eastern Mediterranean, it also would have had a great impact upon Western Europe, already demoralized by the war, by grave economic difficulties, and by a general fall from power.

Isolationism Abandoned

Accordingly, President Truman went before Congress on March 12, 1947, and, in one of the most fateful addresses in American history, outlined what became known as the Truman Doctrine. "Totalitarian regimes imposed on free peoples," Mr. Truman declared, "by direct or indirect aggression, undermine the foundations of international peace and hence the security of the United States." He recommended that Congress approve $400 million in economic and military aid for Greece and Turkey, and he proposed to send American military and civilian personnel to help these two countries in their struggle. Mr. Truman grimly observed that "great responsibilities have been placed upon us by the swift movement of events." The United States had little choice but to grasp the burden of leadership. In one stroke, the nation abandoned its policy of isolationism.

While the United States moved to save Greece and Turkey, Europe was in a state of economic collapse. Recognizing that economic chaos would only benefit the Communists, the United States proposed the Marshall Plan in June 1947 to assist all European countries. Based on Secretary of State George C. Marshall's recommendation to the Europeans that they present to the United States a joint recovery plan, the Marshall Plan was also offered to Eastern Europe and to the USSR, but they refused it. In fact, Stalin forced Czechoslovakia to reverse its original acceptance of this aid. Although the Marshall Plan called for massive U.S. loans and shipments of goods to get Western Europe back on its feet, the ultimate objective was to restore the balance of power on the European continent.

The crisis in Europe and the Mediterranean that produced the Truman Doctrine and the Marshall Plan brought about a broader American framework to contain Communist expansion. The idea for the so-called Policy of Containment was originally articulated by the American diplomat George F. Kennan in a memorandum dated February 1946. He later publicly spelled out the basis for containment in a article under the pseudonym "X," in the July 1947 issue of *Foreign Affairs*. Kennan noted that communism taught a perpetual struggle with the non-Communist world in which, under certain circumstances, expansion would be called for. In Europe, therefore, it was now incumbent on the

United States to stop the tide of Red expansion. Thus, the Policy of Containment outlined the general direction that U.S. foreign policy would take during the Cold War era.

USAF: New First Line of Defense

While alarmed at these developments, which indicated that what wartime cooperation there had been was coming unglued, the leaders of the AAF also had to grapple simultaneously with the debilitating effects of demobilization and with the long-deferred plans for organizing an independent air arm. The fight for independence had been long, difficult, and sometimes acrimonious, spilling over into public argument through the numerous boards and committees that debated this issue in the period between the First and Second World Wars.

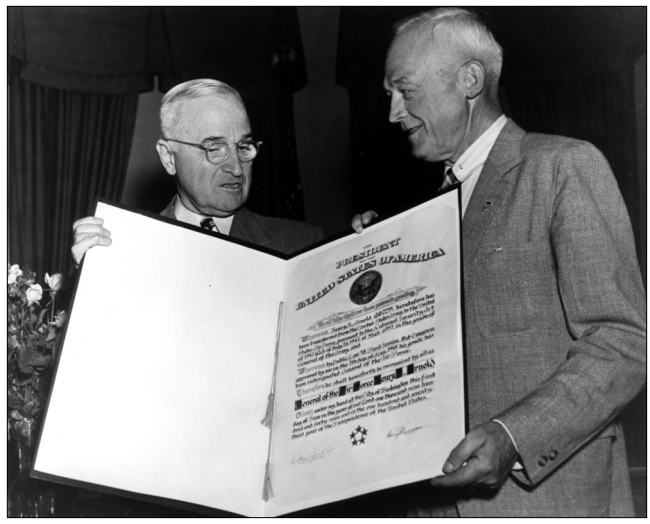
Despite the resistance of the Navy and War Department over the long years since the end of the First World War, the inexorable development of aircraft, the demonstrated effectiveness of the air weapon, and the insistence and perseverance of the airmen had led to a step-by-step advance toward complete independence for the Air Force. The Second World War accelerated this process, and by the close of the war, the argument for independence — a position coequal with the Army's and Navy's — could no longer be postponed.

As a result, many hearings were held between 1944 and 1947 and finally, with President Truman's strong support, the National Security Act of 1947 became law on July 26, 1947. It created a National Military Establishment with three coequal branches under the Department of Defense. Thus, the Army Air Forces became the United States Air Force, and on September 18, 1947, W. Stuart Symington took the oath of office as the first Secretary of the Air Force. On September 26, Gen. Carl Spaatz became its first Chief of Staff.

Events of the relatively short period between the end of World War II and the creation of the National Military Establishment ordained no breathing spell for the United States. Pearl Harbor was still fresh in our national consciousness, and the air leaders thought that a future war might well begin without warning. General Arnold recalled that we had not been ready for the Second World War. We won, but at great cost. And, sounding an implied warning, he observed:

> …at times the margin of winning was narrow. History alone can reveal how many turning points there were, how many times we were near losing, and how our enemies' mistakes often pulled us through. In the flush of victory, some like to forget these unpalatable truths.

Sometimes there is only a fine, almost imperceptible line between extinction and survival. The balance between peace and order on one hand and anarchy and destruction on the other is often delicate. And history shows that, in a



President Truman awarded General Arnold with his fifth star and made him General of the Air Force on June 2, 1949.

democracy, the populace will sacrifice only after the necessity for such an effort has been clearly demonstrated.

In retrospect, perhaps these are the grim lessons of World War II and the immediate postwar years.

They ought not be forgotten.



Stuart Symington and Gen. Carl A. Spaatz, respectively the first Secretary and the first Chief of Staff of the United States Air Force, discuss the initial Headquarters USAF organizational chart.

Planning and Organizing the Air Force

The establishment after World War II of an independent air force may in retrospect have been inevitable, but in the 1945–47 period the Army Air Forces exerted a large effort across many fronts to ensure that a United States Air Force would be created. This drive included not only the testimony of AAF leaders before Congress, but also the formation of groups within AAF headquarters to study problems of organization in the anticipation of a separate air force. This frenetic activity played out against the background of an explosive demobilization that left the Army Air Forces a shambles from the once mighty force that had been built up during World War II.

The creation of the United States Air Force in September 1947 was traceable in large measure to the destructive power wielded by the Army Air Forces in World War II and to the concomitant significant part played by the AAF in the victory won by American arms. The drive for independence was also aided by strong currents in the American populace; concerted planning by the military during the war; a continuing, strong postwar interest in air independence on the part of the Congress; and firm support by President Harry S. Truman.

After the war, the efforts of AAF leaders, led by Gen. Henry H. "Hap" Arnold, Commanding General, Army Air Forces, and Gen. Carl A. Spaatz, who succeeded Arnold in February 1946, and the advocacy of air independence by leaders of the War Department, first by Gen. George C. Marshall and then by Gen. Dwight D. Eisenhower, culminated in passage of the National Security Act of 1947 to create the United States Air Force. During 1946–47, before the formation of the USAF on September 18, 1947, the AAF promulgated the reorganization of major commands as well as vital planning necessary to structuring and manning the future air force.

Planning and Organizing the Air Force initially appeared as "Planning and Organizing the Air Force" in *Aerospace Historian,* Fall/September 1987, Vol. 34, No. 3, pp. 167–175.

Fulcrum of Power: Part II

The Army Air Forces was well positioned for independence, and had been since the reorganization of March 1946. Basically, in September 1947 the Air Force issued the proper orders, directives, and name changes (bases and headquarters). With the exception of the insignia, the uniform remained the same until 1949. Requisite functions were transferred from the Army to the Air Force over a period of two years.

Although some historians have traced the genesis of the Air Force to events and personalities long before World War II, the war propelled the Army Air Forces into a commanding position in the fight for a separate service. The view of the Army Air Corps before the war was perhaps best expressed in 1937 by Maj. Gen. Frank M. Andrews, Commanding General, General Headquarters Air Force:

> I don't believe any balanced plan to provide the nation with an adequate, effective Air Force…can be obtained, within the limitations of the War Department budget, and without providing an organization, individual to the needs of such an Air Force. Legislation to establish such an organization…will continue to appear until this turbulent and vital problem is satisfactorily solved.

Arnold and Marshall, the Army Chief of Staff, had agreed early in the war that the question of independence should be deferred until the war was over. Marshall did not want such a contentious issue to interfere with prosecution of the war effort. Arnold agreed. However, vital progress in planning for independence occurred during the war. Arnold moved in 1943 to form important planning groups within AAF headquarters to chart the course for the postwar air force and ultimately for the United States Air Force.

In 1943, Arnold, thinking seriously about the shape of the postwar air force, began to set in motion the organizational machinery to create plans for the USAF. In 1942 he had established the Advisory Council, first headed by Col. Charles P. Cabell, to deal with any particular issue that he, as commanding general, thought required resolution. And in July 1943, he brought Brig. Gen. Laurence S. Kuter back to Washington from the Mediterranean theater and appointed him as Assistant Chief of Air Staff, Plans. Also, he formed the Special Projects Office in April 1943 under Col. F. Trubee Davison, former Assistant Secretary of War for Air, to coordinate postwar planning with the War Department. Thus one thing that historians and observers critical of General Arnold's grasp of operations, alleged lack of organizational talent, and constant need to promote his cause had ultimately to acknowledge: he possessed great foresight.

Congress also played a vital role. In the spring of 1944, the Woodrum Committee convened to consider the principle of unity of command and its relevance to postwar policy and organization. Although this committee failed to report legislation — the war seemed to be approaching a climax in Europe —

it paved the way for formation of the Joint Chiefs of Staff Special Committee on Defense Reorganization. This committee, chaired by Adm. James O. Richardson, in April 1945 endorsed a single Department of National Defense, although Richardson issued a dissent to the majority report. The Committee's majority called for establishment of Departments of the Army, Navy, and Air Force under a Secretary of the Armed Forces and a single commander of the Armed Forces.



Gen. Henry H. Arnold brought Brig. Gen. Laurence S. Kuter back to AAF Headquarters from Tunis to be the Air Staff representative for postwar planning. Arnold is here congratulating General Kuter on his receipt of the medal of the Legion of Merit.

President Truman, who maintained a long-standing interest in military affairs, made clear in October 1945 his support for universal military training. In December 1945, he proposed a single department of the armed forces, including "parity for air power," with creation of an independent air force. Truman based his view on the record of the AAF in World War II; his conviction that the successful Japanese attack on Pearl Harbor was partially a result of the lack of a unified military; and his experience as chairman of a congressional committee investigating fraud and waste in the gigantic defense industry during the war.

Truman's view, of course, was also conditioned by the existence of the atom bomb, its awesome destructive power demonstrated in 1945 at Hiroshima and Nagasaki. Although the official AAF view after the war did not necessarily downgrade the military impact of the A-bomb, the air position was basically conservative, emphasizing the continuing need for conventional air power. Also, in 1946–47, the Joint Chiefs of Staff had yet to develop an integrated war plan. However, the AAF had taken steps to structure a nuclear strike force, starting to build the first atomic warfare–capable wing in 1946 around the 509th Bombardment Group which had dropped the atom bombs in August 1945.

It is important to note that the airmen's drive for independence was played out against two conflicting currents. One was the explosive demobilization of America's armed forces: between V-J Day and April 1946, AAF strength

dropped from 2,253,000 to 485,000. The postwar nadir of about 304,000 was reached in May 1947. The other was the intensification of the Cold War with Soviet moves in Eastern Europe that caused grave concern in Washington. In this atmosphere, a Gallup poll showed that the American public thought that defense funds were best spent on the air forces.

In this connection General Arnold observed: "The American people have never sponsored a strong peacetime military organization. History has demonstrated that we have thereby neither avoided war nor deterred others from going to war." The traditional American isolation from world affairs and maintenance of skeletal peacetime forces were about to end.

Besides the airmen themselves, no one made a stronger case for independence than the Army Chief of Staff, Gen. Dwight D. Eisenhower. He argued from the unassailable position of the former Supreme Allied Commander, the architect and orchestrator of victory in Europe. It was Eisenhower's firmly held view that cemented the case for air independence. He had worked with Gen. Carl A. "Tooey" Spaatz in North Africa and in Europe. Eisenhower and Spaatz worked unusually well together, their personalities complementing each other. Both preferred quiet competence to self-promotion. Eisenhower considered Spaatz a highly competent practitioner, "the best operational airman in the world."



Generals Eisenhower, at the right, and Spaatz, in the center, had a history of working well together, both in North Africa and in Europe. General Eisenhower also thought highly of Air Marshal Sir Arthur Coningham, at the left, who greatly influenced American air doctrine, as it was formalized after the experiences of North Africa.

On the preeminent issue of independence, General Eisenhower strongly supported the Army airmen. He maintained a healthy respect for the capabilities of modern air power, in all forms. He was convinced that a United States air force should be established coequal with the Army and the Navy. Eisenhower called this the principle of the "three-legged stool," each leg equally vital to the whole.

He advocated a single Department of Defense that in his view would foster unity of command and also economy.

World War II, according to Eisenhower, proved unified command absolutely essential to success. It must be practiced from the top down, starting at the Washington command level. The pursuit of economy was no less important, and Eisenhower was always prepared to talk about this, which frequently included choice words about those who arrogated resources unto themselves:

> I believe it is time to use a sledge-hammer on the empire builders…this spirit of bureaucracy which has manifested itself too long in the governmental services, and I think that it is high time that we in the Army and the Air just set our faces against it and ruthlessly uproot it; the spirit of never letting go of anything that you have ever had hold of.

Without unification, the services would continue their brutal competition for resources. "Competition," emphasized Eisenhower, "is like some of the habits we have — in small amounts they are very, very desirable; carried too far they are ruinous." With the military integrated into a single department, more security could be bought for less. Succeeding Marshall as Army Chief of Staff in November 1945, Eisenhower returned to Washington, convened the War Department staff, and stressed that the Army Air Forces merited independence:

> The Air Commander and his staff are an organization coordinate with and coequal to the land forces and the Navy. I realize that there can be other individual opinions…But that seems to me to be so logical from all of our experiences in this war — such an inescapable conclusion — that I for one can't even entertain any longer any doubt as to its wisdom.

The drive in 1946–47 toward independence moved simultaneously along several tracks. While Stuart Symington, Assistant Secretary of War for Air, and Spaatz, Commanding General, AAF, were out in front in the legislative battle, testifying before the Congress, important work was being accomplished within AAF headquarters and also between Spaatz and Eisenhower. Both the Air Staff and the Air University, under Maj. Gen. Muir Fairchild, had formed groups to study and to recommend a postwar organization of major combat commands. These deliberations occurred between October 1945 and January 1946 but were superseded by crucial talks between Spaatz and Eisenhower.

General Eisenhower came out of the war absolutely convinced of the importance of the concept of mutual dependence between the services. This meant, among other considerations, tactical air support of the Army's ground forces. According to Lt. Gen. Elwood R. Quesada, Commanding General, IX Tactical Air Command during the war and the first postwar commander of the Tactical Air Command, Spaatz made a strong commitment to Eisenhower in

January 1946 that the Army Air Forces, and subsequently, the independent USAF, would support the ground forces with tactical air support. "It was to a large extent that commitment to Spaatz," emphasized Quesada, that "permitted Eisenhower to support a separate Air Force. I think without it he wouldn't have."

Eisenhower's own commitment to the principle of unified command and the concept of mutual dependence of the air, ground, and sea forces meant to him that no single service required the forces and equipment to conduct joint missions, if these forces and equipment duplicated that of the other services. Eisenhower's view had almost as much to do with economy as the principle of unified command:

> Basically, the Army does not belong in the air — it belongs on the ground…Control of the tactical Air Force means responsibility…for the entire operating establishment required to support these planes. This includes the requisite basic air research and development program necessary to maintain a vital arm and the additional specialized service forces to support the arm…Assumption of this task by the Army would duplicate in great measure the primary and continuing responsibilities of the Air Force and, in effect, would result in creation of another air establishment.

In addition to the weight of his own convictions, General Eisenhower was under great pressure from his ground force commanders, led by Gen. Jacob L. Devers, Commanding General, Army Ground Forces, to form a separate air command designated to support the ground forces. As a result, Spaatz and Eisenhower agreed on this point, and on March 21, 1946, General Spaatz directed a major reorganization, including formation of the AAF's postwar combat commands — the Tactical Air Command, the Strategic Air Command, and the Air Defense Command. This peacetime reorganization followed functional lines, each major combat command responsible for one of the missions specified in Field Manual 100–20 of July 1943. The primary support commands established by Spaatz's direction were Air Materiel Command, Air Transport Command, Air Training Command, Air University, and the AAF Proving Ground Command. Effective with the March reorganization, eleven of the AAF's wartime air forces were assigned to the three new combat commands: SAC gained the Eighth and the Fifteenth; TAC took the Third, Ninth, and Twelfth; ADC took control of the First, Second, Fourth, Tenth, Eleventh, and Fourteenth, aligned geographically to match the Army's six continental United States Army areas.

Spaatz and the Air Staff took additional important action. In March 1946, General Spaatz approved creation of the postwar Air Board to recommend policy directly to the Commanding General, Army Air Forces. Also, by early 1946, Spaatz had approved establishment of the Office of the Air Comptroller,

the conception and importance of this office having been emphasized in October 1945 by Assistant Secretary of War for Air, Robert A. Lovett.

This "Spaatz reorganization" was codified in War Department Circular 138 dated May 14, 1946, in accordance with the recommendations of the Simpson Board (formerly the Patch Board), which had been meeting since September 1945 on the subject of the reorganization of the War Department. This circular made the Army Air Forces coordinate with the Army Ground Forces under the Army Chief of Staff and the War Department General Staff. The Army Service Forces was abolished. General Spaatz and the air planners were disappointed with this outcome because they favored having a Chief of Staff for Air with the Air Staff on the same level as the War Department General Staff. However, Spaatz did not make a big point of this with Eisenhower, as the Army Chief of Staff had made clear his strong support for an independent air force.

Generally, Circular 138 stated that the AAF "must be provided with the maximum degree of autonomy permitted by law without permitting the creation of unwarranted duplication in service, supply and administration," a statement that reflected Eisenhower's precepts of economy and efficiency. With President Truman at this time exhorting Secretary of the Navy James V. Forrestal and Secretary of War Robert P. Patterson to reach agreement on unification legislation, Eisenhower and Spaatz agreed that any further reorganization should await unification.

Truman's December 1945 recommendation to create three military departments failed to find favor in the Navy Department, which opposed the plan, fearful that it might lose control of its aviation and even the Marine Corps. The President's plan was strongly supported by Eisenhower, Arnold, and Spaatz. Following Truman's recommendation to Congress in December, the Senate Military Affairs Committee formed a subcommittee in January 1946 to write unification legislation. Maj. Gen. Lauris Norstad, Assistant Chief of Air Staff, Plans, and Vice Adm. Arthur W. Radford, Deputy Chief of Naval Operations (Air), were appointed to aid the subcommittee.

The result of the subcommittee's deliberations was a bill that combined features of two previous reports — the Eberstadt and Collins plans — recommending a Department of Common Defense with three coequal military departments. In 1946, Truman pressed Forrestal and Patterson to reach agreement. Although the Navy remained reluctant, preferring a modification of the present system of coordination through the JCS and its committees, Norstad and Vice Adm. Forrest P. Sherman resolved the sticky issue of roles and missions in January 1947, opening the way for the drafting of a unification bill.

Subsequently, Patterson and Forrestal reported to Truman that they had worked out the crucial issues and had agreed on a framework for the National Security Act of 1947. Draft legislation for the act was approved by the President and Congress in July 1947.

Fulcrum of Power: Part II

Meanwhile, the Hall Board, chaired by Maj. Gen. William E. Hall (Chief of the War Department Advisory Group) with representatives from the AAF and War Department, convened in January 1947 at General Eisenhower's request to identify and recommend solutions to the major unification problems connected with the AAF's separating from the Army. The Hall Board proceeded from the proposition that "none of the services desires drastic action on the passage of the Unification Bill which would upset existing procedures and throw our Armed Forces into an interim state of confusion and resultant ineffectiveness." Because the details of transfer were so numerous and complex, the board set two years from the date of passage of legislation for the transfer of personnel, property, records, and installations.

One of the Hall Board's major concerns was that an independent air force would not form separate special services. This had been agreed to by Eisenhower and Spaatz. The board's report stated that the War Department would continue to support the air force logistically after unification. The Hall Board suggested that each department should have chaplain organization and the minimum medical service for basic needs (i.e., organic medical service for troop units and installations). There would be no duplication in the general hospital or medical supply system; both were to be operated by one department for the others.

While Maj. Gen. Hugh J. Knerr, Secretary-General of the Air Board, was concerned that the War Department was attempting to keep airmen subservient, even after unification, Eisenhower emphasized to Spaatz in March 1947,

> I have repeatedly stated that if there develops an intention, either in Congress or elsewhere, to set up such completely separate special services, I will oppose the whole plan with all the emphasis I can possibly develop. In this you have agreed with me unreservedly, and yet it appears that many others interpret certain features of the Hall Board report as announcing such an intention.

General Eisenhower was especially disturbed about the medical corps, opposing the specialization of aviation medicine (which he termed "silly") and advocating consolidation of medical organizations. Spaatz discussed the question of technical services with the Army Chief of Staff in late March. He emphasized that he would adhere to their agreement on separate services, and then he admonished the Air Staff that the Hall Board report called for unification rather than duplication.

Secretary of War Robert P. Patterson echoed Eisenhower's concern and noted that the War Department was committed to common services. Patterson had become agitated over a passage in the report that "the proposed legislation neither specifically prohibits nor authorizes the creation of common supply, procurement, or distribution of services." He did not want any service building and controlling all resources required for a specific mission instead of rely-

ing on the means and resources already available in another service. As a result of Patterson bringing this issue to Eisenhower's attention, General Hall disseminated to the War Department staff the following statement:

> In no case will this report be interpreted to violate either of these basic provisions: (1) The Air Force will not set up additional technical services as an immediate result of unification; and (2) Service support of the Air Force by the Army will continue following unification with the understanding that the Secretary of National Defense will effect such changes in services as later prove desirable.

The important word was "immediate," because the Air Force eventually intended to establish its own services after the two-year period of transfers from the Army had been accomplished. Maj. Gen. Earl E. Partridge, Director of Operations, emphasized:

> We do not feel that we are now autonomous because we can't support ourselves…The number of people transferred to us determines the state of our independence. If we get the functions without the people we are lost. We can't perform these functions without reducing something else.

Prior to establishment of the air force, one of Spaatz's primary objectives was to retain officers of the administrative and technical services who had been serving with the Army Air Forces. These Arms and Services with the Army Air Forces (ASWAAF) personnel worked in such specialties as chemical, finance, adjutant general, medical, engineers, and transportation. The AAF also wanted to absorb functions being done for the AAF by the administrative and technical services.

In early 1947, Spaatz again emphasized his long-held view that ASWAAF personnel should be considered an important part of the AAF. He wanted to counter the idea that somehow these officers were less important to the air arm:

> This feeling, if it becomes general, will be a serious blow to the Air Forces. It will insure that we do not get the best officers from other branches of the service to serve with us and it will further insure that such officers will not join up with the Air Forces as permanent personnel if unification, with full autonomy for the Air Forces, becomes a reality.

Spaatz desired that officers from their branches be used in their own specialties. After formation of the USAF in September 1947, Spaatz and Eisenhower agreed that no officer would be transferred from the Army to the Air Force without approvals by his branch chief and also by General Spaatz. Should a disagreement ensue, Eisenhower would make the decision.

Fulcrum of Power: Part II

As noted, Spaatz and Eisenhower were in agreement that the Air Force would not immediately duplicate many of the Army's support services. However, in time the Air Force would form its own technical segments, including engineering, logistical, and communications organizations. In General Knerr's opinion, until this materialized, the Air Force would continue to be the "poor relative of the War Department." In September 1947, the Air Force created 12 major career fields: medical, chaplain, justice, aeronautical engineering, electrical engineering, automotive and armament, construction, personnel and administration, general supply and procurement, information, flying, and nonflying tactical.

Also in September, the Air Force completed plans for a reorganization of its headquarters featuring the Deputy Chief of Staff system. The genesis of the Deputy Chief of Staff system, instituted in USAF headquarters in October 1947 after the USAF's creation, lay in the less than satisfactory functioning of the Assistant Chiefs of Air Staff (A-Staff), or the so-called General Staff system.

At Spaatz's direction, the Air Board under General Knerr undertook to study the problem. Also, the Air War College at the request of Maj. Gen. Muir "Santy" Fairchild formed a study group to recommend a new headquarters organization. Knerr's idea for a three-deputy system, based in principle on the corporate organizational model, was accepted by the Air Board and ultimately by Spaatz and Gen. Hoyt Vandenberg, who had taken a key role in promulgating a new headquarters organization.

The headquarters reorganization, instituted in October 1947, established three deputy chiefs of staff: Deputy Chief of Staff, Materiel (Lt. Gen. Howard A. Craig); Deputy Chief of Staff, Operations (Lt. Gen. Lauris Norstad); and Deputy Chief of Staff, Personnel and Administration (Lt. Gen. Idwal H. Edwards). The Air War College study also called for a Deputy Chief of Staff system but, among other things, had recommended a Deputy for Plans and Operations.

Thus, General Knerr's concept of the deputy system was incorporated into the USAF headquarters. He saw the deputy system as combining responsibility and authority in one person. On the other hand, the General Staff system, according to Knerr, encouraged people to "pass the buck…It is a source of despair to those who are not so constructed but who find themselves in staff positions. The deputy system is a barren prospect for 'do it tomorrow' people. Caught in such a system they stand out as the choke-points causing delay, self-labeled for elimination."

Gen. George C. Kenney, Commanding General, Strategic Air Command, Lt. Gen. George E. Stratemeyer, ADC Commander, and Gen. Nathan F. Twining, Commanding General, Air Materiel Command, supported Knerr's proposal. Kenney liked the idea of decentralizing operations:

> Too often we see the top crowd trying to operate as well as do the primary job of organizing…This organization [deputies]…decentralizes operations to the operator.

General Stratemeyer agreed with Kenney: the deputy system would "get these people out of this operating business, and we are annoyed with it every day of the world [*sic*]." Twining emphasized that the deputy structure (which he operated at Air Materiel Command and which Spaatz had formed in Europe during World War II) encouraged decisions. In contrast, the A-Staff system had impeded decision-making.

The Air Board envisioned the deputy system as just right for USAF headquarters. In essence, the deputies would function as commanders and could issue orders in the name of the Commanding General. Each deputy should have directors under him, on a "staff" level. In this way, the staff function would be placed directly below the command level. Unlike the numbered A-Staffs, the deputies would have functional titles such as Personnel, Operations, and Materiel. "When we come to an autonomous air force," General Knerr observed, "we are not going to keep our hands tied to the old archaic system of numbering and lettering they have in the War Department staff; we are only doing it now because it is expedient."

It was Gen. Hoyt Vandenberg's idea to combine Operations and Plans at the director level. He also advocated that the Air Comptroller be placed on line with the deputies in the new headquarters setup. The commanding general would be known as the Chief of Staff of the Air Force. Under him would be a Vice Chief of Staff supported by the deputies, and below them, the directors.

In addition to the three deputy chiefs of staff, the top of the Headquarters USAF structure included the Air Comptroller (Lt. Gen. Edwin W. Rawlings); the Air Inspector (Maj. Gen. Junius W. Jones); and the Secretary-General of the Air Board (Maj. Gen. Hugh J. Knerr). These last two officers were not directly in the chain of command. The reduction in the number of people reporting directly to General Spaatz fulfilled the concept of giving the deputies authority as well as responsibility.

The creation of the United States Air Force in September 1947 was only a beginning. Although the organization of the fledgling Air Force had been set, much remained to be done. Stuart Symington, the first Secretary of the Air Force, described the 1947 act as a good chapter, but certainly not a good book. Although roles and missions had been spelled out by President Truman in an executive order — the Navy argued that they should be detailed in the unification act itself but they lost this point to Eisenhower and the AAF — a battle over service functions clearly was inevitable.

Also, there remained voices in the Air Force that thought the Navy had "won out" in the unification legislation. Although a separate air force had been created, the Navy had kept its aviation and prevailed in its view that the



Lt. Gen. Edwin W. Rawlings served as the first Air Comptroller in the newly organized U.S. Air Force. Among his previous assignments, he had been responsible for directing the termination of wartime contracts.

Secretary of Defense should be a coordinator rather than a true administrator. However, here, too, the lack of legislated authority within the Office of the Secretary spelled trouble, and it became only a matter of time (1949) before the basic legislation was amended to strengthen the office. In 1948–49, James V. Forrestal, Secretary of Defense, and Symington led the drive to amend the National Security Act of 1947.

Two additional points deserve emphasis. The idea must be rejected that Eisenhower and the Army leadership supported the AAF's drive for independence primarily because they feared that in the postwar era the airmen would dominate the War Department. General Marshall supported air independence on its merits — once the war was over. General Eisenhower believed that the Air Force had earned independence, and he was a strong advocate as long as he thought a separate air force would not duplicate various functions. He opposed the Navy's position that it had to "own" everything in order to perform its various missions and that it could not rely on the other services for mutual support.

Second, Eisenhower and key congressmen made the point that over a period of years, as the National Military Establishment evolved, substantial savings could be realized by eliminating duplicative functions such as intelligence, procurement, facilities, storage, and communications. However, the history of the unification period teaches that predictions in this regard should be eschewed; anticipated results frequently failed to materialize.

As noted, postwar reorganization in large measure was based on the perceived successes and failures of the World War II organization. The major command reorganization of March 1946 and the Headquarters USAF organization of October 1947, featuring the Deputy Chief of Staff system, reflected the wartime experience. The general outline of Air Force organization, as it evolved during the unification era, has had a reasonably long life and still serves today's Air Force in good stead. The Air Force remains basically organized functionally by mission; it still emphasizes the importance of planning as well as research and development. In this regard, it is worth noting that Arnold and Lt. Gen. Ira C. Eaker, Deputy Commander, AAF, and other air

leaders, possessed a firm vision of the future. "We believe," observed Eaker in June 1947, "that the Air Force stands at the threshold of a new era. Whereas in the past it has been largely a corps of flying men, in the future, certainly, ten to fifteen years from now, it will be more nearly a corps of technicians and scientists."

Even today General Arnold has his detractors. It is thought that he lacked the breadth of vision of, for example, Frank Andrews. It is said that he was a self-serving promoter and a man who lacked a grasp of strategy and operations. Assuming all this to be true (and I do not), Arnold's accomplishments, it seems to me, still always greatly outweigh his liabilities. When it came to building a global, operational Air Force almost from scratch, his achievement from today's vantage point, remains extraordinarily impressive. Similarly, when conceptualizing and directing the establishment of the postwar Air Force, his vision was true, if not brilliant. Arnold's words are as appropriate today as they were in 1945:

> An Air Force is always verging on obsolescence…Present equipment is but a step in progress, and any Air Force which does not keep its doctrines ahead of its equipment, and its vision far into the future, can only delude the nation into a false sense of security.



Watching as President Truman signs the 1947 proclamation announcing August 1 as Air Force Day are, from left to right, the Air Force Association president, James H. Doolittle; Lt. Gen. Hoyt Vandenberg; Maj. Gen. Lauris Norstad; and Assistant Secretary of War for Air Stuart Symington. General Norstad, as Assistant Chief of Air Staff, Plans, took the lead in crafting the July 1947 legislation that in September 1947 established a separate Department of the Air Force in the National Military Establishment.

Arnold, Eisenhower, and Norstad: The Fight for Air Independence

From the retrospective of half a century, events and currents, some more definable than others, have converged to make the institution we know today as the United States Air Force. The immediate post–World War II years saw a confluence of advocates, circumstance, politics, and technology that led to the successful drive for a separate air force. The antecedents of the contentious postwar campaign for an independent air force first came to public notice in the interwar years, which were marked by the convening of congressional committees to consider how to organize the Army air arm, and more important, in World War II when the airmen's long drive for a separate air force culminated.

Support for independence spread throughout the Army in the early postwar years. Besides Gen. Henry H. "Hap" Arnold, no other advocates were more influential than Gen. Dwight D. Eisenhower and Maj. Gen. Lauris Norstad. Not surprisingly, the earliest push for independence came from airmen, and Arnold's support for independence predated the war. Shortly after the Japanese attack on Pearl Harbor, General Arnold, now Commanding General, Army Air Forces and living with the day-to-day pressures of the war, nonetheless began formal planning for a postwar independent air force. At war's end, Eisenhower and Norstad joined him and other supporters of air independence as part of the move to redefine the national security establishment.

By 1945, the Army air arm had taken several important organizational steps toward autonomy. In 1926, the Army Air Corps was formed from the Air

Arnold, Eisenhower and Norstad: The Fight for Air Independence initially appeared as "Arnold, Eisenhower and Norstad: The Fight for Air Independence" in *Golden Legacy, Boundless Future: Essays on the United States Air Force and the Rise of Aerospace Power,* eds. Rebecca H. Cameron and Barbara Wittig, Washington, D.C.: Air Force History and Museums Program, pp 59–68.

Service, giving military aviation the status of a combat arm of the U.S. Army. With the establishment of the General Headquarters Air Force in 1935, airmen assumed operational control of tactical air units. During World War II the so-called Marshall reorganization of March 1942 made the Army Air Forces coequal to the Army Ground Forces and the Services of Supply. The AAF thereby achieved a degree of autonomy within the War Department, a move that Maj. Gen. Otto L. Nelson Jr. of the War Department General Staff called "the most drastic and fundamental change which the War Department had experienced since the establishment of the General Staff by Elihu Root in 1903."

Because of General Arnold's presence on the Joint Chiefs of Staff and the Anglo-American Combined Chiefs of Staff, the AAF held representation on JCS committees during the war. The AAF's position in the highest joint planning and strategy councils amounted to an acceptance of the Army air element as a military service virtually equal to the Army and the Navy.

The independent character of AAF wartime planning extended to worldwide strategic operations. General Arnold had long advocated "independent" strategic bombing operations, exempt from control by theater commanders. Centralized control of air forces by airmen became a reality in April 1944 with formation of the Twentieth Air Force, a strategic bombing force directly under Arnold's command as executive agent of the JCS. In effect, the Twentieth, whose B–29s conducted the bombing campaign against the Japanese home islands, gave the AAF equality with the ground and naval forces in the Pacific. Arnold had long viewed the B–29 as the means of defeating Japan without the necessity of an invasion. As he wrote in one of his final reports after the war, Japan was forced to surrender because "air attacks, actual and potential, had made possible the destruction of their capability and will for further resistance…those…attacks had as a primary objective the defeat of Japan without invasion." Arnold also insisted on keeping the B–29s out of the hands of theater commanders, because he was convinced that a successful long-range campaign by the Superfortresses would cement the case for a postwar independent air force. It is not an exaggeration to describe Arnold's commitment to the B–29 as his great wartime obsession. His view was shared by Gen. George C. Kenney, MacArthur's air commander in the Pacific, who wrote to Arnold in 1943 that the B–29 was "the plane with which we will win the war."

At the same time that the Joint Chiefs approved the Twentieth Air Force arrangement, Congress turned to the question of how to structure the postwar military. The Woodrum Committee hearings elicited Army and AAF support for postwar reorganization that would include a separate air force. Naval leaders, on the other hand, testified against creation of a single department of national defense and concluded that the entire subject of postwar organization required additional study.



The formation of the Twentieth Air Force, with its B–29s (above) directly under General Arnold's command as executive agent of the JCS, set the precedent for SAC as a specified JCS command.

The JCS, however, wanted to have a postwar plan in hand when the war ended. The next month, in May 1944, the Joint Chiefs therefore appointed a Special Committee for Reorganization of National Defense. After ten months of study, the committee's report, with a dissent by Adm. James O. Richardson, recommended formation of an independent air force coequal with the Army and the Navy. Richardson and the Navy's leadership — Admirals Leahy, King, and Nimitz — opposed a single department, arguing it would produce neither economy nor efficiency. The Navy would suffer, they emphasized, in that its requirements would be subject to review by officials who had no responsibility for initiating them. The Navy would be weakened by people who failed to understand its needs. But in the wartime committee's review, the Navy was overruled.

World War II having ended over Hiroshima and Nagasaki with the dropping of atom bombs by B–29 Superfortresses of the Army Air Forces, General Arnold now looked ahead. There had been two Hap Arnolds during the war: the first, a military officer who built and commanded the Army Air Forces; the second, a thoughtful man of foresight who, in the midst of war, planned for the organization and force structure of the postwar independent air force. Early in the war, he had formed several groups in AAF headquarters to consider a peacetime organization. With the Japanese surrender, planning assumed a

sense of urgency. Arnold's major objective was to establish a separate air force as part of the postwar national security setup. Intertwined with this overriding goal, he advocated unified command and provision for a proper research and development organization. "Each new crisis in our history," Arnold emphasized, "has found our armed services far from effectively, efficiently, or economically organized. With each crisis, modernization and coordination have been hammered out under war pressure at great waste of resources, to be allowed in large measure to lapse when the crisis is over." The lessons of the war demanded "coordinate organization" of ground, air, and naval forces, each under its own commander, and each responsible to a supreme commander.

Arnold distinguished between "fundamental" air power and what he considered "manifestations" of air power as "auxiliaries of land and sea power." When the Japanese attacked the United States at Pearl Harbor, Arnold pointed out, "there was no air force with the complete air mission. No one had single, basic responsibility for the air." In the postwar world, the United States required an independent service with total responsibility for the development and employment of fundamental air power.

Although the postwar revolution in national security thinking and organization had deep roots in the experience of World War II, the idea of an independent air force as a ready force, a force in-being, would be unprecedented in peacetime twentieth-century America. This new entity would be a standing military force, alert to retaliate against an aggressor's capacity to wage war. Air power would become the primary instrument of American foreign policy.

General Arnold's concept of air power, evolving as it had from his familiarity with American military aviation from its earliest days, was linked in his mind with certain basic "principles of American democracy." Most important, "personnel casualties are distasteful. We will continue to fight mechanical rather than manpower wars." World War II demonstrated that the cost of war in lives and resources had become prohibitive. The United States required a new postwar military establishment featuring the most modern weapons with minimum cost to the American taxpayer. General Arnold believed in the consummate ability of the American people to understand the issues of national security and to act upon this understanding. "Air power," he emphasized, "will always be the business of every American citizen." The American people "would decide whether this nation will continue to hold its air supremacy. In the final analysis, our air striking force belongs to those who come from the ranks of labor, management, the farms, the stores, the professions, the schools and colleges, and the legislative halls."

Besides airmen, no uniformed officer backed the idea of an independent air force more forcefully than the Supreme Commander, General Eisenhower, whose experience in World War II convinced him of the equality of ground, sea, and air arms under unified command. "No system of joint command," Eisenhower stated, "could possibly have brought victory to our cause." The

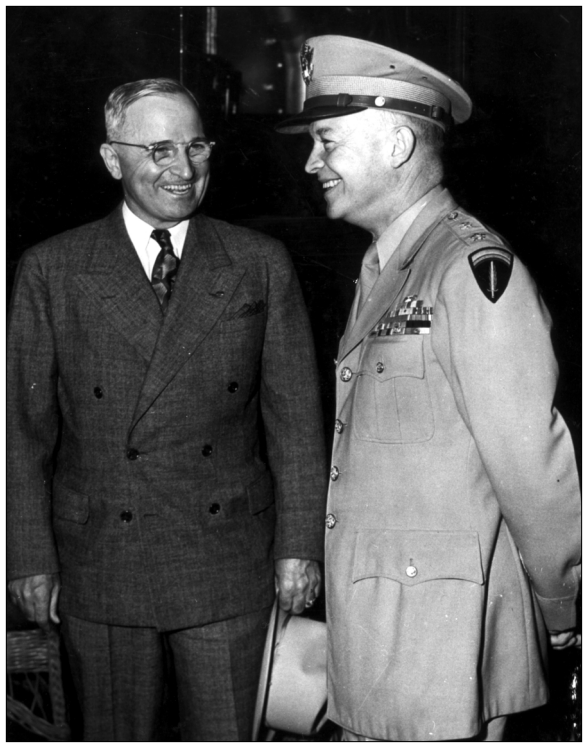
military services comprised a single fighting team, according to Eisenhower, each supportive of the other. "We believe," he said, "that the fighting forces should rest on a three-legged stool with each leg equally important — Army, Navy, Air Forces." In the several months after the end of the war, when the Navy unilaterally pursued its own postwar requirements, Eisenhower reiterated that no single service could be considered independently. The services were mutually supporting.

Eisenhower observed that the postwar environment demanded strict economy and that three coequal military departments under a single overall defense establishment would deliver the most for the taxpayer's dollar. Whether or not the proper legislation was passed by the Congress, Eisenhower directed his War Department staff in December 1945 to proceed as if the law would be forthcoming. "My idea," he said, is "to go as far as we can within the legal limits imposed on us to carry out the basic idea…the Air Commander and his staff are an organization coordinate with and coequal to the land forces and the Navy. I realize that there can be other opinions…but that seems to me to be so logical from all our experiences in this war, such an inescapable conclusion that I, for one, can't even entertain any longer any doubt as to its wisdom."

General Eisenhower's predecessor as President, Harry S. Truman, also strongly supported formation of an independent air force. In retrospect, their advocacy sealed the verdict. After the war, as a U.S. Senator, Truman had been determined to reorganize the defense establishment. "One of the strongest convictions which I brought to the Presidency," Truman recalled in his memoirs, "was that the antiquated defense setup…had to be reorganized quickly as a step toward insuring our future safety and preserving world peace." Truman had been especially critical of the Pearl Harbor failure, which he attributed to inadequate command organization and faulty communications. "We came to the conclusion," he said, "that any extended military effort required overall coordinated control in order to get the most out of the three armed forces. Had we not early in the war adopted this principle of a unified command for operations, our efforts, no matter how heroic, might have failed."

It was time for a unified defense establishment, the new President emphasized. The military services could no longer go their separate ways. He proposed a Department of National Defense headed by a civilian with three "coordinated" branches representing the land, sea, and air forces. Thus, an independent air force would take its place alongside the Army and the Navy: "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 as great." In Truman's view, unification became evolutionary, with creation of a Department of National Defense being a first step. "Unification is much more than a matter of organization," the President maintained: "It will require new viewpoints, new doctrine, and new habits of thinking throughout the departmental structure."

Fulcrum of Power: Part II



General Dwight D. Eisenhower's predecessor as President, Harry S. Truman, strongly supported the formation of an independent air force.

The Navy vehemently opposed the plan. "As the President knows," Secretary of the Navy Forrestal angrily responded, "I am so opposed to the fundamental concept expressed in the message that I do not believe there is any very helpful observation that I could make." The naval leadership remained fearful that an independent air force would grab naval aviation and that the Army might even attempt to take over the Marine Corps. Secretary of the Navy Forrestal favored coordination through joint committees, as opposed to formation of a single Department of National Defense and a separate air force.

Despite the Navy's reluctance to join the War Department in supporting unification legislation, including the formation of a separate air force, the Senate Military Affairs Committee established a subcommittee to draft the legislation. Maj. Gen. Lauris Norstad, Assistant Chief of Air Staff, Plans, and Vice Adm. Arthur W. Radford, Deputy Chief of Naval Operations (Air) were appointed as advisers to the subcommittee. Norstad brought impressive credentials to this task. He had come to Arnold's attention before America entered the war, and in March 1942 the AAF Chief selected the young officer to

become a member of his advisory council, a small, select group that advised Arnold on any number of matters. General Arnold then gave the 35-year-old officer needed operational experience in England and the Mediterranean in 1943–44 before bringing him back to Washington as Chief of Staff of Twentieth Air Force, and then in the two-star position as Assistant Chief of Air Staff, Plans.

In the latter post Norstad took the lead in crafting the AAF's positions on postwar reorganization and unification. "I was intensely interested in this," he later recalled, "and I got an extra office in the Pentagon and I put up, paragraph by paragraph, all of the proposals that had been made on every one of the pertinent subjects, on organizational relationships…this did not require a hell of a lot of staff work. It required a little leg and arm work."

In early 1946, Norstad and Radford sat in on the subcommittee's deliberations, and a bill (S. 2044) was reported to the Military Affairs Committee in April that combined features of the Eberstadt report (given to Forrestal) and the War Department's Collins plan. In May, the Military Affairs Committee recommended to the Senate that S. 2044 be passed. This Common Defense Act of 1946 called for formation of a Department of Common Defense with coequal military services, and a Chief of Staff of Common Defense who would also serve as military adviser to the President.

Although the Navy continued to stonewall, Truman made clear to Secretary Forrestal and Secretary of War Robert Patterson that he wanted quick action to resolve the major issues. In late May, Forrestal and Patterson found agreement on eight points, but they failed to resolve basic questions of a single defense department, establishment of an independent air force, land-based aviation, and the status of the Marine Corps. Continuing to oppose a single department, the Navy argued that its own officers should make decisions regarding naval resources. The Navy remained fearful that a Secretary of National Defense might ultimately emasculate the naval forces. However, Eisenhower, Norstad, and Commanding General of the AAF Gen. Carl A. Spaatz believed that in the postwar world the country could not afford a system that permitted unnecessary duplication. The services should be mutually supporting.

Truman welcomed agreement on the eight points but, disappointed with the lack of progress, directed Patterson and Forrestal to craft legislation for a Department of National Defense to include a separate air force. The Navy would keep aircraft integral to the fleet, and the Marine Corps would continue to be part of the Navy Department. "The internal administration of the services," Truman asserted, "should be preserved in order that the high morale and esprit de corps of each service be retained."

Forrestal then replaced Radford with Vice Adm. Forrest Sherman, Deputy Chief of Naval Operations (Operations), for the ongoing unification negotiations. The Joint Chiefs directed Norstad (now Director of Plans and Operations in the War Department General Staff) and Sherman in July 1946 to draft a uni-

fication plan. Norstad's move to the General Staff, specifically at General Eisenhower's request, indicated Eisenhower's confidence in Norstad and signaled the War Department's recognition of the air arm's maturity.

In the summer of 1946, Norstad and Sherman confronted the issue of how to organize unified commands in the overseas theaters. During the war in the Pacific the question of unified command had never been resolved. The Navy wanted command structured according to geographic areas, whereas Norstad argued that commands should be organized functionally. In December, President Truman approved the Outline Command Plan as negotiated between Norstad and Sherman. It called for a system of unified command in which a single commander would control land, naval, and air forces within a specific geographic area. Norstad called it "an idea whose time had come."

Norstad and Sherman then worked out the details of a draft agreement on functions and organization. Patterson and Forrestal informed Truman that the proposed legislation would create an Office of the Secretary of National Defense and three civilian service secretaries. The Departments of the Army, Navy, and Air Force would be under the overall direction of the Secretary of National Defense, but they would be administered as separate entities, each with its own military chief. The Joint Chiefs of Staff would comprise the military heads of the three services, subject to the direction of the Secretary of National Defense and supported by a Joint Staff.

Some issues remained unresolved. The Navy wanted roles and missions written into the unification act. General Eisenhower, however, stressed that the unification bill should only chart basic principles and not become sidetracked in an effort to describe how each service would operate: "I believe that intelligent men can make almost any organization work as time goes on, if your law isn't too rigid." Eisenhower and the AAF won this point; in February 1947 Truman sent Congress the draft of the National Security Act of 1947. After Senate and House approval, on July 26, 1947, President Truman signed the legislation. On the same day, Truman signed Executive Order 9877, describing the functions of the armed services.

The National Security Act created a National Military Establishment to include the Departments of the Army, the Navy, and the Air Force. The act stipulated that the Secretary of Defense would be a civilian appointed by the President as his principal assistant for national security. The act specified that the Navy retain the Marine Corps and naval aviation, which would comprise combat, service, and training elements and "land-based naval aviation, air transport essential for naval operations, all air weapons and air techniques involved in the operations and activities of the Navy." The Navy would also be responsible for naval reconnaissance, antisubmarine warfare, and protection of shipping. Like the Army and the Navy, the Marine Corps would be allowed "such aviation as may be organic therein." The act stipulated that "the Air Force shall include aviation forces both combat and service not otherwise

assigned. It shall be organized, trained, and equipped primarily for prompt and sustained offensive and defensive air operations. The Air Force shall be responsible for the preparation of the air forces necessary for the effective prosecution of war except as otherwise assigned and, in accordance with integrated joint mobilization plans, for the expansion of the peacetime components of the Air Force to meet the needs of war." The Air Force would be constituted as an executive department headed by a civilian secretary; the President would appoint the Chief of Staff, USAF, for a four-year term.

Stuart Symington, the first Secretary of the Air Force, correctly stated that promulgation of the National Security Act of 1947 amounted to a first step in the evolution of the postwar military establishment. The act charted the fundamental national security organization for the second half of the twentieth century. It did not settle contentious roles and missions issues — these continued to flare up like alleged dying embers. James V. Forrestal, the first Secretary of Defense, perhaps put it best: "The mere passage of the National Security Act did not mean the accomplishment of its objective overnight. It is not strange that professional military men should think in terms of the service to which they have devoted their entire adult lives; it is to be expected. But unification calls for…a broader vision."

The legislation was only a starting point in creating a truly integrated military establishment. Its passage had taken a long time, a great deal of effort, and much give-and-take by all concerned. Symington differed with those critics who believed that the Navy had succeeded in structuring the unification bill expressly to suit its own purposes. Nor did he share the resentment of those who thought that Norstad had capitulated to the Navy's demands in structuring the post of Secretary of Defense as a coordinator. The first Secretary of the Air Force argued that under the circumstances Norstad had done an outstanding job. His task had not been easy. Of all the Air Force participants, Symington said, "Norstad should get the most credit for unification. In the days when it looked grim, he stuck to it."

In their deliberations on functions and organization, Norstad and Sherman faced some difficult compromises. They realized that President Truman had laid out the major tenets of unification organization, namely a single department of national defense and three coequal services including a separate air force. The Navy lost on the issue of air force independence but won its point of having individual services and administration. Under the National Security Act, the Secretary of Defense would be a coordinator as the Navy wanted, not a strong administrator as desired by the Army and the Air Force.

After appointing Forrestal, Truman named Symington as Secretary of the Air Force, John L. Sullivan as Secretary of the Navy, and Kenneth C. Royall as Secretary of the Army. Having been Assistant Secretary of War for Air since January 1946, Symington brought top-flight management credentials to his new post. He had also shown uncommon ability to work effectively with Con-

gress and had nurtured an excellent working relationship with General Spaatz. The Symington-Spaatz combination held the promise of unusually fine leadership for the newly independent Air Force.

The men who made the Air Force are sometimes criticized for parochialism, for being obsessed with technology. They were not thinkers, so the argument goes. However, a consideration of the record indicates that, as I noted on the twenty-fifth anniversary of the Air Force, they were idealistic as well as practical, visionaries as well as technologists. They supported the new United Nations organization, for example, and believed that it deserved a chance to build an institutional framework for a peaceful world order. In 1946, Gen. George C. Kenney became the AAF representative on the United Nations Military Staff Committee. Although a U.N. military force, including an international air force, was never established, the founders of the U.S. Air Force believed that air power could keep the peace, deter war, and make the United Nations a credible institution.

They were, as a former editor of *Air University Quarterly Review* Col. Kenneth F. Gantz remarked, "the revolutionists of their time." As we look back half a century, it is instructive to note their optimism, clear thinking, determination, and integrity. These men painted a large canvas and set a high standard.

We owe them a great debt.



General Carl A. "Tooey" Spaatz succeeded General Henry H. "Hap" Arnold as the Commanding General, Army Air Forces in February 1946.

Men Who Made the Air Force

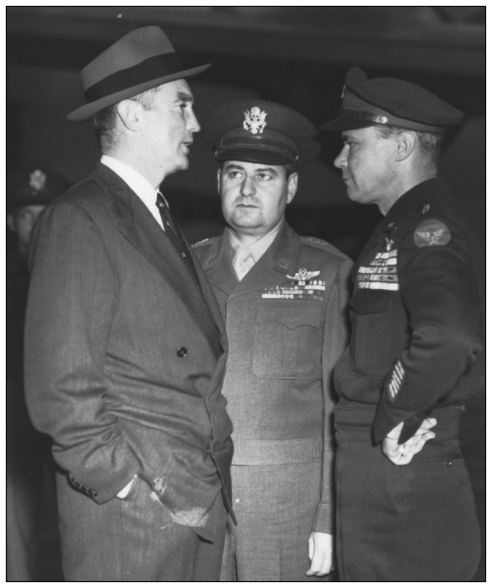
September 18, 1947. For so long, it had all been directed toward that ultimate aim, to that one act signifying single identity, separation — and triumph. Why? To the air leaders — some had been active in World War I — an independent air force was what they had dreamed, planned, and aimed at for decades. Above all, it had been an act of faith.

To airmen who had participated in the long struggle, autonomy meant *recognition.* It meant that their vision and hard work had mattered, had paid dividends. Above all, air had a mission distinct from ground support. Autonomy equaled legitimacy for the strategic bombing mission. It was long-range bombing of the enemy's vitals that set air apart. The European and Pacific bombing offensives of World War II made a powerful case for independence, and now strategic bombing held the promise of capturing the power of decision in modern conflict.

The air leaders also recognized the atom bomb was the crucial new element. Others, military and civilian, disagreed, and the American public was not certain. Leading airmen thought the bomb solidified the hold of the strategic bomber as the major delivery instrument. War had become total. This was the awesome fact. Even before the war ended, Gen. Henry H. "Hap" Arnold, Commanding General, Army Air Forces, was convinced that a force in-being was necessary because no longer would there be sufficient time to mobilize. The era of come-from-behind victories was over. World War II was the last of its kind.

Arnold, Gen. Carl A. "Tooey" Spaatz (who would become Commanding General, Army Air Forces in February 1946), and Stuart Symington (to become Assistant Secretary of War for Air in January 1946) were largely confident that citizens and politicians would agree and lend their support. This meant — based on recommendations by Maj. Gen. Curtis E. LeMay and oth-

Men Who Made the Air Force initially appeared as "Men Who Made the Air Force" in *Air University Review,* September–October 1972, Vol. 23, No. 6, pp 9–23.



Secretary of the Air Force Stuart Symington, Lt. Gen. Curtis E. LeMay, and Gen. Hoyt Vandenberg, Chief of Staff, left to right, confer while in Germany in 1948

ers — structuring an atomic strike force. It would not be easy. Involved was a combination of public understanding and support along with technical, organizational, and command skills. Despite the atomic warfare experience of the 509th Composite Group against Japan, at war's end the AAF was far short of having the requisite atomic weapons expertise required to train large numbers of personnel and build major facilities. In addition, few B–29s had been modified to deliver the bomb.

There was also the Navy. The AAF would have to fight for independence and its seventy-group program — approved by Lt. Gen. Ira C. Eaker, Deputy Commanding General, AAF on August 29, 1945, and by the Joint Chiefs on September 27, 1945 — for the resources needed for the nuclear-capable force, and for preeminence in the strategic mission. Anticipating the end of the war, Robert A. Lovett, Assistant Secretary of War for Air, had observed in March 1945, "Our planning has been well done on the whole, but we must be prepared for a. bitter struggle with the High Command and particularly with the Navy in getting the postwar setup properly made so that air power is recognized as a coequal arm." The Navy had come out of World War II convinced that in large measure its future was tied to the carrier task force. This called for larger carriers — flush-deck supercarriers — capable of accommodating heavier planes able to carry the atomic weapon.

Meanwhile, with the war in its final, decisive phase. President Truman supported unification and an independent air service. He therefore performed a role not unlike that of Winston Churchill, who as Secretary for War and Air backed Maj. Gen. Hugh "Boom" Trenchard after World War I when the Royal Air Force's independence was threatened by Army and Navy leaders. Truman strongly supported creation of a separate American air service; Churchill acted to save the RAF.

The President had long before been persuaded of the merits of unification and the necessity for air "parity" with the other services. Pearl Harbor was yet another indication, an especially direct and tragic example, that the American government had been stricken by organizational stenosis, causing debilitation of command and control arteries.



Maj. Gen. Ira C. Eaker shares a moment of relaxation with Col. Harris B. Hull.

Planning for a postwar air organization began even before the end of the war. Army Chief of Staff Gen. George C. Marshall believed the AAF's performance had earned it a place as a separate service, and he and Arnold agreed that plans for the postwar air arm should be based on a force in-being. The initial postwar air force plan, completed in February 1944, called for 105 air groups (87 to be bomber and fighter escort) and one million men. Marshall considered this plan to be unrealistic, so a second postwar plan described a 75-group force to be ready three years after Japan's defeat. In the spring of 1945, another plan formulated an interim air force of 78 groups and 638,286 men. That summer, the size of the interim air force was reduced, but an air force consisting of 75 groups remained the AAF objective until 1948. In July 1945, yet another plan, called the V-J Plan, specified 78 groups at the end of demobilization.

In August 1945, Truman directed the services to present their postwar organizational plans. Lt. Gen. Ira C. Eaker, Deputy Commanding General, AAF, Lt. Gen. Hoyt S. Vandenberg, and Maj. Gen. Lauris Norstad directed AAF planning, and on August 29, 1945, Eaker approved 70 air groups as the permanent force objective. In September, the Joint Chiefs approved this figure, to be reached by July 1, 1946. On March 21, 1946, on the basis of planning done by the Air Staff and discussions between Spaatz (who had replaced Arnold as Commanding General in February) and Gen. Dwight D. Eisenhower (who had replaced Marshall as Chief of Staff of the Army), the AAF was organized into the Strategic, Tactical, and Air Defense Commands, Eisenhower having made the point that the postwar air organization include a separate Tactical Air Command.

Fulcrum of Power: Part II

Arnold and Spaatz

General Spaatz came naturally to the top post in February 1946. He had flown combat missions in World War I, served under Arnold during the lean decades between the wars, and commanded U.S. strategic air forces in the European and Pacific theaters in World War II. In 1940 Arnold sent Spaatz to London to report on the RAF-Luftwaffe air war. Subsequently, commanding the Northwest African Strategic Air Force, he refined strategy and tactics. In December 1943, when Arnold sent Eaker to command the newly formed Mediterranean Allied Air Forces, he brought Spaatz back to England to command the U.S. Strategic Air Forces in Europe under the Allied air commander, Air Chief Marshal Sir Arthur William Tedder, and the Supreme Commander for Operation Overlord, Gen. Dwight D. Eisenhower.

Arnold appreciated Spaatz's loyalty and competence; he could rely on him. Spaatz vindicated his mentor's judgment. A master of strategic planning, Spaatz directed the decisive phase of the American bombing offensive against Germany. He displayed a knack for getting along with the British, who implicitly trusted him. Churchill had argued that destruction of Germany's industry would not be sufficient to bring victory, and the RAF Bomber Command under Air Chief Marshal Sir Arthur Harris pursued general area bombing without wavering. But Spaatz proved adept at singling out the enemy's vulnerable industries and destroying them. His insistence that German oil production be systematically attacked and that the Luftwaffe's fighters be flushed out paid handsome dividends. Arnold was confident that Spaatz, with his leadership capacity, could direct the air arm to autonomy in the crucial postwar period.

As Chief of Staff and successor to the almost legendary Arnold, Spaatz's first priority was to achieve the long-sought-after autonomy. Arnold had seen Brig. Gen. William Mitchell destroyed and had himself been exiled because of his views. But he had learned well; biding his time, he laid plans, met industrialists, and built forces as best he could during lean, difficult years, and thus had his hands on the levers when in September 1938 President Franklin D. Roosevelt called for substantial air expansion. Then, during the war, Arnold had cooperated with Gen. George C. Marshall, who agreed that the AAF would be given much latitude (semiautonomy, really) in wartime, and independence after the war.

Arnold and Marshall developed a relationship based on mutual respect and confidence. This camaraderie began when they met in the Philippines in 1914. In 1938 after Arnold became Chief of the Air Corps, he set about educating the Army Chief of Staff in the nuances of air power, what it could accomplish under varying circumstances. He later wrote that Marshall had an extraordinary ability to comprehend and "make it part of as strong a body of military genius as I have ever known." General Marshall admired Arnold's loyalty and became a strong backer of their arm. "I tried to give Arnold all the power I

could," said Marshall. "I tried to make him as nearly as I could Chief of Staff of the Air without any restraint although he was very subordinate. And he was very appreciative of this."



The longstanding relationship between Generals Marshall and Arnold was based on mutual respect and confidence.

With his vision now a blend of restraint and flexibility, Gen. Hap Arnold became the architect of modern American air power. When the determination of others flagged, his conviction that the bombing offensive eventually would be decisive spelled the difference. Not an especially acute strategic thinker, he always emphasized the principle of concentrating massive power at the critical point — thus his displeasure when he concluded that commanders, despite perhaps insurmountable problems, were not sending out as many bombers as they should. Fortunately, he had a fair measure of the diplomat's touch and understood politics in the broad sense; consequently the Allied cause had an ideal man for its demanding task.

Arnold was a superb administrative leader, toughened, as Allen Andrews put it, "in the back rooms of war." Deceptively unassuming and lacking creative imagination, he had an extraordinary ability to grasp and clarify an idea and drive it through seemingly interminable channels to fruition. Through the long, unfulfilled prewar years and then during the global conflict, his knowledge of American industry and his rapport with its captains proved invaluable. Ever the consummate manager and unusually competent in the scientific and technical aspects of aviation, Arnold apparently never allowed personalities or sentimentality to muddle his decisions. Despite being in poor health during the war — he suffered several heart attacks — he drove himself, and it can be said that more than any other airman he shaped the air arm and set the example with his faith, determination, and industry.

Spaatz superbly complemented Arnold, who had not seen combat in the First World War and bitterly regretted it. After commanding the 1st Bombardment Wing, GHQ Air Force at March Field, California, Arnold moved to

Washington in 1936, became Chief of the Air Corps in 1938 upon the death of Maj. Gen. Oscar Westover, and did not leave until after the war ended. He was not an innovative strategist and did not pretend to be. By contrast, Spaatz in 1918 had left his command of the Issoudun flying schools in central France and raced to the front, where in three weeks of hard combat flying he downed several planes and won the respect and admiration of young pilots serving under him. Arnold knew Spaatz to have a good grasp of strategy, of what aircraft could do, and of what was required to get a tough job done. Where the Chief was a technician and logistician, Spaatz was a hard-driving operational commander and a strategist; where one was almost irascible, the other was even-tempered.

Over the years the two men cultivated a special rapport, often over long sessions of chess together, Spaatz learning the advantages of adaptability from Arnold. But if he could be tactful, Spaatz had also shown in 1944–45 an uncommon intransigence of purpose when it was badly needed. In 1946, he knew that the times called for extraordinary drive, stamina, and single-mindedness, all to be concentrated on the effort for independence. Arnold had turned over the reins of the Army Air Forces that he himself had largely built. Independence would be gained, and strategic mission, nailed down. Based on wartime "lessons," the two were inseparable.

Although he knew well the crucial importance that the strategic function would play, Spaatz found that Eisenhower's support had been purchased at the price of establishing a tactical command in the postwar air organization. The former Supreme Commander, having replaced Marshall as War Department Chief of Staff, had not wavered in his support for unification. Arnold's old friend, General Marshall, also had been a staunch supporter. So, with the reorganization of March 1946, instead of a single combat command, three functional commands were established — strategic, tactical, and air defense.

The close relationships among the top commanders of World War II were not alone shown by Arnold's closeness to Marshall and Spaatz, but they also appeared between Spaatz and Eisenhower. Having ably served Eisenhower in North Africa and then in the decisive phase of the European war, Spaatz had won the unqualified respect of the War Department chief. Eisenhower had brought Spaatz along, had nurtured his capabilities, had always called for him, and in fact had come to think of him as his air commander.

Although single-mindedly occupied with the autonomy issue, by early 1946 Arnold's successor had come to believe that the strategic atomic warfare–capable force held the nation's best hope for deterring a major war and insuring a peaceful world. Spaatz's views on strategic air followed the historical development of the Trenchard-Mitchell-Arnold school: *Prolonged ground wars of attrition must be avoided at all costs.* "Attritional war," said Spaatz shortly after succeeding Arnold, "might last years…would cost wealth that centuries alone could repay and…would take untold millions of lives."

The lessons of World War II were writ clear:

> Strategic bombing is thus the first war instrument of history capable of stopping the heart mechanism of a great industrialized enemy. It paralyzes his military power at the core. It has a strategy and tactic of mobility and flexibility which are peculiar to its own medium, *the third dimension.*

For the future**,** Spaatz was convinced that another war would be decided by strategic air power before the surface forces came into play. Consequently, we would have to build a strategic striking force in-being that would be ready to go "in the first crucial moment." To Spaatz this was the "supreme military lesson of our period in history."

The Cold War Heats Up

In 1945–47, the airmen's decisive fight for autonomy was set against the beginnings of the Cold War. The roots of Soviet-American suspicion went back to the origins of the Bolshevik Revolution and the concomitant U.S. distrust of the revolutionary regime, to America's refusal to recognize the Soviet government until 1933, and to distrust engendered by wartime relationships and the personal traits of Stalin himself. Before the Allied invasion of the European continent, Stalin had berated the Western Allies, and Churchill personally, for continually postponing the massive assault. Then, despite the successful invasion and $9.5 billion in lend-lease sent to Russia, the Soviet dictator never lost his conviction that the Allies held off the invasion in the hope that Germany and Russia would exhaust, if not finish off, each other.

Subsequently, negotiations at Potsdam and Yalta frayed the wartime alliance. And when the Soviets established control over Eastern Europe, attempted to overthrow the Iranian government, tried to gain control of the Dardanelles, and rejected the Baruch plan for international atomic weapons control, American hopes for a satisfactory relationship with the Soviets — within and outside the United Nations — were dashed. Also in early 1946, the U.S. government became deeply concerned over the revelation that a Soviet spy ring operating in Canada had obtained American atomic research secrets. Further, after the war, civil strife had erupted in China. An interim agreement between the Chinese Nationalists and Communists, worked out by General Marshall, collapsed in April 1946, and by mid-1947 Chiang Kai-shek's governmental structure was in shambles. Too, in Korea the United States and the Soviet Union confronted each other. Japanese troops had been disarmed north of the 38th parallel by the Russians and south of that line by American forces. Neither side was willing to gamble on a unified Korea.

Meanwhile, demobilization continued, and the U.S. military establishment that had triumphed in the war no longer existed. Not only did skilled person-

nel leave, but aircraft and equipment fell into disrepair. Marshall, Secretary of War Henry L. Stimson, and Navy Secretary James V. Forrestal (among others) had warned against a rapid, massive military drawdown, but public and congressional pressures understandably were too great to be resisted.

In 1947 a number of factors indicated to the airmen a historic confluence of events that could catapult the fledgling USAF to a paramount position in the National Military Establishment: formulation of the Truman Doctrine and the Marshall Plan; the President's belief that the Soviets must be dealt with firmly (they respected strength and would take advantage of weakness); acceptance in high governmental echelons of the idea of national commitment to a strategic deterrent (to be formalized with the promulgation NSC–20 in 1948); and the signing of the National Security Act in July 1947. As important to the airmen as was the country's acceptance of the proposition that possession of the atom bomb and its means of delivery provided the best avenue to deter war, the prerequisite was independence: coequal status with the Army and the Navy.

The movement of foreign affairs gave the airmen no breather. They would have to move rapidly to prevent the Navy from encroaching on the strategic mission. Autonomy was an end and a beginning. Although it climaxed the long struggle for independence begun by Mitchell after the First World War, it also marked the beginning of another battle for resources to build a premier air force during a period of retrenchment. Decisions lay ahead that would determine the shape of the Air Force for years to come.

Symington Becomes Secretary of the Air Force

On January 31, 1946, Stuart Symington was appointed Assistant Secretary of War for Air. He had served as an Army second lieutenant in World War I and after the war earned a degree at Yale and began a successful business career. After World War II, President Truman, impressed by Symington's record as a businessman and administrator, offered him a choice of three posts: Assistant Secretary of War for Air, Assistant Secretary of the Navy, or Assistant Secretary of State. He chose the first and aided passage of the unification act through Congress. In September 1947 he became the first Secretary of the Air Force. He had already worked with General Spaatz and had come to admire his ability in technical and strategic matters. To Symington, Spaatz was "a wonderful person."

As Secretary of the Air Force, Symington immediately began an intensive campaign for seventy air groups. The role of chief advocate for the new service fit him well. A deep believer in air power, he was convinced it was the sine qua non of national security. Knowledgeable in air matters, managerial techniques, and congressional relations, he immediately took command of the drive to steer Air Force requirements through Congress. "My theory in functioning as a good Secretary," he recalled, "was for them [the military] to make



Stuart Symington is sworn in as the first Secretary of the Air Force by Chief Justice Fred M. Vinson. The first Secretary of Defense, James V. Forrestal, stands partially obscured at the rear among the onlookers as witnesses to the event. Others present are Secretary of the Army Kenneth C. Royall (second from left), and Secretary of the Navy John L. Sullivan (far right).

the balls and I'd roll them." As an advocate, Symington was determined "to get as much of the pie as I could for the Air Force." The keys were the seventy groups and the strategic mission.

The First Secretary of Defense

James V. Forrestal, the first Secretary of Defense, firmly believed that foreign relations could not be conducted without strong military forces. After World War II, he was one of the first in the United States to recognize the Soviet threat and call for a stronger military. In early 1947 he observed that "if we are going to have a run for our side in the competition between the Soviet system and our own, we shall have to harness all the talent and brains in this country just as we had to do during the war." Forrestal was a former naval officer and Secretary of the Navy who had distinguished himself in these roles and who brought to his new position a predominantly navy-oriented staff. Leading airmen had little doubt that Forrestal and his staff would attempt to block them at every turn. Had not the Secretary of Defense for a long time opposed unification and coequal status for the air service? Symington and Spaatz would

have to marshal all their resources to compete against what they thought basically a "reactionary" view in the Office of the Secretary of Defense.

Having gained independence and with a clear view of their own objectives, the air leaders debated tactics. "As with any rigorous organization freed from onerous restraint," observed Maj. Gen. Hugh J. Knerr, Secretary-General of the Air Board, "there is danger of its feeling its oats and lashing out at all obstacles at the very beginning. Such action would be a great mistake, for we simply do not have the muscle on our bones to carry through with such desires." But the Congress and citizenry had to be convinced that U.S. security depended on the seventy-group program. Congressmen were impressed with the record of air power in World War II. Despite postwar pressure for tax relief, they were reluctant, so soon after Pearl Harbor, to risk not voting for adequate defense.

Support came from the War Department Policies and Programs Review Board, which had been meeting since February 1947. In August, its final report noted that the nation faced an "undeclared emergency" necessitated by the onset of the Cold War, a "situation other than traditional 'peacetime' but short of an immediate threat of war." As a result of this extraordinary situation, a partial mobilization was required. The report concluded:

> …in light of the international situation, the traditional concepts of mobilization or conversion from a "peacetime" army to a "wartime" army were not applicable to the existing military establishment nor to the military establishment we will require in the foreseeable future.

The board's view of the kind of air power required could hardly have been more pleasing to airmen. It noted that the "favorable psychological effect on air power in being and the adverse psychological effect of the lack of air power are factors of much greater importance before the initiation of hostilities than are the state of readiness or the existence of other types of forces."

Nonetheless, despite the evolution of the Cold War along with postwar occupation duties, the military could not expect carte blanche when it came to the budget. After all, a global war had just ended and insistent pressure for stringent economy was therefore not unexpected. Though congressmen did not want to be charged with neglecting national security, they were determined to scrutinize military appropriations carefully. With the possible exception of 1939, according to one observer, congressmen "had never explored the connection between military and foreign policies so extensively in the decade and a half after 1932 as they did in 1947."

Militating against pressure to cut the military completely to the bone was the fact that no agreement had been reached on peace terms for the war that had just been waged. Additionally, a congressional consensus held that the Soviet Union constituted a real threat. Many congressmen thought that the substantial backing that existed for a strong air arm would be decisive in any

war, and some saw this backing as an attractive alternative to a large draft that would be required in support of universal military training.

The Soviet Threat

Increasingly, Russia's menacing behavior reinforced the air leaders' opinion that the Soviet Union was *the* threat. The airmen viewed the Russians through realistic eyes: They had dealt with them during the war. When building shuttle bases, negotiating in Moscow for an Anglo-American air presence in the Caucasus, or arranging for lend-lease shipments, American air leaders found the Russians extremely difficult. After the war they, like most Americans, believed a lasting peace might be achieved based on an amicable relationship between the two nations. Now that relations were disintegrating, pessimism and foreboding increased. Among military and government officials, the talk was of grave differences between America and Russia. Ire had mounted over the Soviets' international intrigues; particularly galling was what appeared to be their unethical action within the United States in attempting to undermine U.S. institutions. The Russians did not play by the rules.

The feeling of betrayal was strong. Had the Soviets ever manifested a spirit of true cooperation during the war? It was doubtful. We had gotten along as a matter of necessity. The Russians were uncompromising. Their policy never deviated. For them, the war had not ended. Since world domination was the Communist objective, a general war was probable sometime in the next ten to fifteen years. Though the Soviets probably were not planning to attack immediately, an incident involving a satellite country might well spread to a general conflagration at any time.

Interestingly, the Soviets had mounted a postwar public relations campaign calling nuclear weapons militarily insignificant. According to the Russians, atom-bombing could not force any government to surrender. Also, this was in line with their view that the Allies' World War II strategic offensives had accomplished little and that the Japanese surrender had been forced by the Soviet entry into the Pacific war. Nevertheless, during the war the USSR asked for B–17s and never returned three B–29s that they interned in Siberia in 1944. Several years later, the Russians went into production with a copy of the B–29.

Meanwhile, what of a Pax Americana? An article by one U.S. air officer mentioned "the mission of manning, training, and deploying our air strength so that it is capable 'of defending the integrity of the United States…and enforcing the United States foreign policy…'" Another airman (this one, a middle-echelon individual) thought this force ought to "guarantee" we could win a war quickly, thus enabling the United States to "impose" terms. Lt. Col. Frank R. Pancake, on the faculty of the Air Command and Staff School, wrote:

> …we have come to the realization that if we are to have peace in our time it will have to be a Pax Americana. There has been further awak-

> ening to the fact that the instrument of Pax Americana must be Air Power, just as the instrument of Pax Britannica a century ago was sea power.

There was talk of destroying Soviet industry and decimating her manpower. How? What price would have to be paid? If ever raised, these questions seem never to have been answered.

Men Who Made the Air Force

What was the cast of mind of these airmen? They were idealists as well as practical men, dreamers as well as technologists. Their idealism was rooted essentially in the belief that there existed rational, structured solutions to the difficult problems of the postwar world. To the charge that their view was self-serving, they might have replied that their belief in air power was not recent, that its contribution to the victory over the Axis was substantial, and that their opinion of its postwar role remained an eminently positive one: peace mainly through air strength.

Nor was this vibrant idealism rooted in a parochialism divorced from global concerns. Forgotten in the mists of the past is their record of support for the United Nations organization and their belief that it could succeed and deserved a chance to structure a feasible framework for a peaceful world order. Among the reasons given in Army Air Forces Letter 47–32 dated June 17, 1946, of why "an adequate Air Force in-being is vital to the future peace and security of the United States" were the following:

- To defend the United States and its territory with an alert force.
- To support the United Nations with adequate and effective air contingents.
- To preserve the peace until the international organization succeeds.
- To stimulate a continuing program of research and development.
- To further public understanding of air power.
- To avoid the cost of war by insuring peace.

Although a United Nations military force, including air units, was never established, this rationale for air power reflected an interesting strain in the American tradition. Throughout our history some have argued that America has a special world mission or destiny. The air leaders were not only convinced that air machines held the power of decision in modern conflict; they believed that with a strong Air Force there need not be war. With their belief in what air power could accomplish — "winning the peace," deterring war, and making the United Nations credible by an international military force — the airmen were undoubtedly among this nation's premier idealists.

Arnold, Spaatz, Symington, Eaker, Vandenberg, LeMay, and all the rest — theirs was "a whole new military philosophy." They were "the revolutionists of their time," as Col. Kenneth F. Gantz, USAF (Ret.), observed in 1972. They lived at a historic crossroads. World War II was unique; it would never be repeated. The period 1945–47 was also singular; it would not recur. The airmen clearly foresaw that the critical mixture of air power was the long-range bomber and the atomic weapon. Were they sure of themselves, their conception of what was required for postwar security? In general, they were, but they also recognized that they would have to contend for missions and money.

Forces in-being would be absolutely necessary, replacing the American peacetime tradition against a standing military force. But capacity to deter aggression was required. Peace through deterrence. Peace through strength.



Col. Noel Parrish addresses a group of airmen at Tuskegee Field.

When the Color Line Ended

The summer of 1998 marked the fiftieth anniversary of President Harry S. Truman's executive order directing the military services to enforce "equality of treatment and opportunity for all persons…without regard to race, color, religion, or national origin." Truman directed that this policy be put into effect as soon as possible, consonant with efficiency and morale. Prior to this presidential action, the fledgling United States Air Force in 1948 had already begun to move toward integration. Secretary of the Air Force Stuart Symington possessed the vision to lead the service in throwing off the shackles of segregation, in effect setting an example for American society.

The story of how the Air Force, in a few short years after World War II, moved from "segregated skies" to fully integrating its forces revolves around several themes: clear recognition of segregation as an inefficient military use of manpower; increased pressure from the African American community; election-year politics in 1948; and farsighted leadership provided by officers and civilians in the Air Force and defense establishment.

The U.S. Army (including the Army Air Corps) before World War II reflected the biases of American society; its members included few blacks (in 1937, only 6,500 in an Army of 360,000) and segregation was the norm. During the military buildup that preceded the Japanese attack on Pearl Harbor, the War Department directed the Air Corps to develop a plan for increased numbers of black Americans. These troops were to be in segregated units, in keeping with long-standing Army policy.

Separate but Equal

The Air Corps decided to establish technical training for African Americans at Chanute Field, Illinois, and pilot training at Tuskegee, Alabama. The Air

When the Color Line Ended initially appeared as "When the Color Line Ended" in *Air Force Magazine,* July 1998, Vol. 81, No. 7, pp. 74–79.

Corps directed that facilities at Tuskegee would be "fully equivalent, with respect to the character of living conditions, facilities, equipment, and training, to that provided for white personnel under similar conditions." In other words, the concept was "separate but equal."

The Army's Chief of Staff, Gen. George C. Marshall, said that, in World War II, society dictated that it was absolutely necessary for the War Department to follow a policy of segregation. The military, he reasoned, should not be on the leading edge of change in this regard. However, after the Pearl Harbor tragedy, with increasing numbers of African Americans entering the service, the Army Air Forces faced the difficult problem of attempting to absorb large numbers of blacks in a relatively short time.

The armed forces thus became a kind of proving ground. The military was forced to confront, within units and in the communities surrounding its bases, the same racial problems that plagued American society as a whole.

By June 1944, almost 150,000 African Americans would be among the more than two million AAF members. Most served in support units like air base defense, quartermaster, ordnance, and transportation. Most were assigned to jobs in aviation squadrons, which did not require high skill-levels. Not surprisingly, employment of these large numbers of Americans in menial tasks resulted in low morale amongst the troops, who protested being relegated to segregated units.

It was the black flying units, however, that attracted the most attention. In January 1941, the War Department announced establishment of the 99th Pursuit Squadron and the Tuskegee training program. Observers noted that the Air Corps decided on pursuit training because bomber training would have required navigators, bombardiers, and gunners, with concomitant great pressure placed on segregated facilities. Subsequently, the AAF formed the 332d Fighter Group, consisting of three additional squadrons.

The 99th arrived in the Mediterranean theater in 1943, and the 332d deployed in early 1944 to the same theater. The AAF did form a black bombardment group, the 477th, which trained in 1944-45 at Selfridge Field, Michigan; Godman Field, Kentucky; and Freeman Field, Indiana. Subsequently, units of the 477th joined returning personnel of the 332d to form the 477th Composite Group, headed by Col. Benjamin O. Davis Jr., a 1936 graduate of West Point and son of Brig. Gen. Benjamin O. Davis Sr., who at that time was the highest ranking African American officer. During the war, the younger Davis commanded the 99th, and then the 332d.

The 99th and the 332d enjoyed success in the Mediterranean theater, and in mid-1944 the 99th joined the 332d. The group, under Davis, participated in campaigns in Italy, France, Romania, Germany, and the Balkans. The 332d Group earned the Distinguished Unit Citation. Lt. Gen. Ira C. Eaker, Commander in Chief, Mediterranean Allied Air Forces, noted that the 332d performed well in combat. The 477th Bombardment Group, however, suffered a



Enlisted Tuskegee airmen received aircraft maintenance instruction at Selfridge Field in Michigan. Flying training was limited to pursuit aircraft because bomber training would have required multiperson crews.

different experience. It began training at Selfridge, moved to Godman Field, then to Freeman Field, and then back to Godman. White officers of the 477th were indifferent to the needs of the unit, and after more than 100 black officers staged a walk-in protest at the segregated officers club at Freeman Field in April 1945, this unit was on the verge of collapse. By the end of the war, it never had an opportunity to perform its mission.

The Role of Parrish

Despite overcrowding at Tuskegee Field, the 99th and the 332d, both units commanded by black officers, were fortunate to have Col. Noel F. Parrish as Tuskegee Field commander from December 1942 to 1946. Parrish was an



Brig. Gen. Benjamin O. Davis Sr. presents a medal to his son, Col. Benjamin O. Davis Jr.

enlightened Kentuckian who worked well with blacks and whites. He understood problems in the South and worked to improve relations with the town of Tuskegee. He addressed local groups and understood white Southerners. Morale at Tuskegee improved, and Parrish earned the respect of blacks. One African American pilot noted: "The only thing that struck me was why have a white in charge of the base when there were qualified blacks, but if there had to be a white, he was the best one."

The AAF's experience with black units during the war indicated that the most important factors were the attitude and competence of the local commander. Parrish was a standout, but unfortunately, other commanders lacked his ability to understand the dynamics of race relations and his sense of how to improve morale. The fact was that African Americans were patriotic. They made outstanding contributions to the war effort at home and abroad, but they were indignant at segregation in society and in the military. The black community during the war fought segregation and kept the pressure on the War Department to change its discriminatory policies. This pressure forced the Army Air Forces to increase opportunities for African Americans.

Thus, in the immediate postwar period, the military realized it would have to formulate new racial policies. Pragmatically, military efficiency demanded it. In the wake of demobilization, the military would consist of a higher percentage of blacks because many, not wishing to reenter a hostile society, preferred the security of a military career. The AAF quickly realized it had to make much more effective use of manpower, and this meant bringing African Americans into skilled jobs.

After the Japanese surrender, on the basis of a recommendation by Assistant Secretary of War John J. McCloy, Secretary of War Robert P. Patterson direct-

ed Marshall to appoint a board to review the Army's racial policy. The board, chaired by Army Lt. Gen. Alvan C. Gillem Jr., was ordered to formulate a policy to more efficiently employ African Americans in the postwar Army.

The Gillem Board noted that the Navy's use of "limited integration" had improved the performance of blacks without attendant race problems. Late in the war, the Navy had integrated vessels in the auxiliary fleet. However, the great majority of black sailors remained in the separate Steward's Branch. The board concluded that the Army must make efficient use of black manpower in a proportion corresponding to civilian society and "must eliminate, at the earliest practicable moment, any special consideration based on race…and should point towards the immediate objective of an evaluation of the Negro on the basis of individual merit and ability."

Not Nearly Enough

Although the board's proposals amounted to a clear advance, critics — including Truman K. Gibson, a notable black American who had advised the War Department on racial policy — emphasized that the report lacked a clear statement on segregation; failed to recommend elimination of the black quota that was based on a percentage (10 percent) of the civilian population; and also failed to articulate specific steps toward integration. The AAF's reaction to the report was perhaps best summed up by Eaker, at the time AAF deputy commander, who concluded the War Department "should never be ahead of popular opinion" in this matter. Eaker, however, also made clear that the AAF should emphasize integrated flying schools and that blacks should be based where community attitudes were favorable.

Gen. Dwight D. Eisenhower, Army Chief of Staff, and Patterson approved the Gillem Board's report, which was published as War Department Circular 124 in April 1946. Nonetheless, the fact remained that the War Department had not yet arrived at the point of ordering integration of its forces. As noted, after the war black civil rights groups in the United States stepped up their campaign to end segregation in the military. Although the Gillem report stopped far short of calling for integration, significant changes were on the horizon. Having achieved independence in September 1947, the United States Air Force was prepared to move in new directions, and this included race relations. Even before becoming the first Secretary of the Air Force, Stuart Symington, as Assistant Secretary of War for Air, recognized the need for equal opportunity for African Americans. His mother had been one of the earliest civil rights advocates in Baltimore. As president of the Emerson Electric Company in St. Louis, Symington made it a point to place blacks in professional positions. He also integrated the cafeterias and the smoking lounges. Symington was not only a tough-minded businessman, he deeply believed in equal opportunity.

Fulcrum of Power: Part II

Symington's first months as Air Force Secretary coincided with initiation of a study ordered by Lt. Gen. Idwal H. Edwards, Deputy Chief of Staff for Personnel, on the impact of segregation in the Air Force. Edwards had been a member of the McCloy Committee, and he believed that the Air Force's policy on the employment of blacks was wasteful and had a negative impact upon effectiveness. In early 1948, Edwards directed Lt. Col. Jack F. Marr to investigate and deliver an in-depth study of segregation in the Air Force.

"Eliminate Segregation"

Marr found waste and inefficiency. The 10-percent quota remained a serious problem; in the all-black 332d, for example, in the event of a combat situation, it would not be possible to find sufficient replacements to maintain the unit. Based on Marr's study, Gen. Carl A. "Tooey" Spaatz, the first Air Force Chief of Staff, emphasized in April 1948 that the Air Force must "eliminate segregation among its personnel by the unrestricted use of Negro personnel in free competition for any duty within the Air Force for which they may qualify." The Army, meanwhile, dragged its feet. Army Secretary Kenneth C. Royall stated that his service would attempt to improve the status of blacks within a segregated Army. Royall seemed perturbed that the Air Force continued, under Symington, to move toward integration.

Difficulties also persisted within the Air Force. In 1948, some amongst the top leadership opposed integration. Assistant Secretary of the Air Force Eugene M. Zuckert, whom Symington had designated as his project officer for integration, noted many still needed to be convinced that integration would work for the Air Force. On the other hand, an important, dynamic coterie took its lead from Symington. During a meeting of the Air Board in early January 1948, Jimmy Doolittle, Air Force Association president, Follett Bradley, a retired USAF major general, and Edwards strongly advocated integration. "I am convinced," emphasized Doolittle, "that the solution to the situation is to forget that they are colored." Industry was in the process of integrating, Doolittle said, "and it is going to be forced on the military. You are merely postponing the inevitable and you might as well take it gracefully." The Air Board noted Army Secretary Royall's reluctance, the problem being the "Army's concept" of moving toward integration.

Symington, Zuckert, and Edwards pressed the issue. In retrospect, it is clear that they made the difference. Symington in effect told the Air Force leadership to get with the program. Then, in mid-1948, the entire landscape of race relations was transformed by President Truman. The subject of civil rights already had been thrust to the forefront in this election year by the work of the President's Committee on Civil Rights — which addressed, among other issues, discrimination in the military — and by Truman's February 2, 1948, message to Congress. Although he noted that progress had been made in the



Secretary of the Air Force Eugene M. Zuckert enjoys the moment with Air Force Chief of Staff Gen. John P. McConnell, second from right, and Maj. Gen. Benjamin O. Davis Jr., far right, at an award ceremony in mid-1965.

armed services, Truman, in his message, declared: "I have instructed the Secretary of Defense to take steps to have the remaining instances of discrimination in the armed services eliminated as rapidly as possible. The personnel policies and practices of all the services in this regard will be made consistent."

Truman's emphasis on civil rights in 1948, and his acceptance of a strong platform in this regard at the Democratic Convention, would lead to a walkout by some Southern states and the birth of the "Dixiecrat revolt." The President persevered, however. Truman had been genuinely outraged at violence perpetrated against blacks in the South.

Truman's Order

Aided by political advisers Clark M. Clifford and Oscar R. Ewing, among others, Truman on July 26, 1948, issued Executive Order 9981 (shown in advance to the reluctant Royall) that stated "there shall be equality of treatment and opportunity for all persons in the armed services without regard to race, color, religion, or national origin. This policy shall be put into effect as rapidly as possible." Truman directed creation of the President's Committee on Equality of Treatment and Opportunity in the Armed Services (known as the Fahy Committee) "to examine into the rules, procedures, and practices in order to determine in what respect such rules, procedures, and practices may be altered or improved with a view to carrying out the policy of this order."

Fulcrum of Power: Part II

It should be noted that Truman's Secretary of Defense, James V. Forrestal, was an advocate of equal opportunity although he believed integration could evolve only through specific actions and educational programs of each of the services. Critics denounced Forrestal's approach as "gradualism."

Truman's executive order lent great impetus to the drive toward integration. The Air Force was already on the move. The President's committee would monitor the progress of the services. Symington declared that integration was "the right thing to do" morally, legally, and militarily. Edwards noted in early 1949 that black officers and airmen could now be assigned anywhere in the Air Force according to their qualifications "and the needs of the service." African Americans would no longer be assigned solely to black units. They would be assigned according to merit rather than to satisfy quotas. Thus, Benjamin Davis's 332d Fighter Wing would be deactivated and its men reassigned throughout the Air Force. Black service units would also be deactivated.

As to why the Air Force did not instantly integrate, Marr, who wrote the Air Staff's integration study, emphasized to the Fahy Committee: "We are trying to do our best not to tear the Air Force apart and try to reorganize it overnight." Also, the Air Force wanted to reassure its own doubters that the task could be completed efficiently. Some have observed that the Air Force almost had completed integration of its forces before the Army even began.

Although historians have generally concluded that integration was primarily fueled by the strictly pragmatic approach of efficiency and the politics of President Truman, an antiracist philosophy in the administration certainly existed. At the highest levels of government, this was best expressed by Truman and Secretary Symington. The President, along with close associates Ewing, David Niles, and Clifford, was appalled at the treatment that returning black veterans had received, especially in the South. Symington was a believer, an integrationist whose experience with industry preceded him into government. Everyone in the Air Force would be judged on capabilities. It can truthfully be said that Symington's view was simply, "Get the job done," without regard to race.

In mid-1950, the Army finally agreed to abolish its racial quota, and the Navy gave petty-officer status to stewards. At the same time the President's committee pointed to the outstanding success in 1949 of the integration program in the U.S. Air Force, where blacks had clearly demonstrated their ability. By 1952, integration had been completed in the Air Force, and the last segregated unit, deactivated.

Part III

Roles and Missions



After having to make the executive decision to drop the atom bomb in World War II, President Truman decided that the military system had to be reevaluated. He received unqualified support from Dwight Eisenhower in creating a coordinated National Military Establishment consisting of three separate departments.

The Defense Unification Battle, 1947–50

The difficult, divisive political-military issues that erupted into rancorous public debate during 1947–50 were not born solely of the National Security Act of 1947. Their roots could be traced to the years between the world wars when Brig. Gen. William Mitchell — a zealous, foresighted airman — and others argued that the airplane would enable nations to avoid trench carnage. During those years the Army Air Corps had struggled for autonomy, tied to its contention that independent (strategic) air operations had become decisive. It had been a long struggle. The Army airmen had had to proceed by bits and pieces, their claims, termed by some as "military theology," untested until World War II. After the defeat of the Axis, Army Air Forces leaders declared their long-held principles had been proved. But critics charged that strategic bombing had failed to achieve its objectives, that its cost was excessive, and that tactical air power had made the greater contribution to victory.

Nonetheless, the Army Air Forces entered the postwar years convinced that air power was the sine qua non for keeping the peace. Airmen had not forgotten the years between the wars, their perceptions sharpened by rejected claims. Even after World War II they remained sensitive to wounds inflicted in the 1920s and 1930s, and contentious about what they had accomplished in the war. For years considered by many to be visionaries, they had found in the war the test they had long anticipated. The Allied strategic air offensive had been instrumental in Germany's defeat.

When Japan capitulated without an invasion, the proponents of air power saw Gen. Henry H. Arnold's contention that a nation could be defeated primarily by conventional air power vindicated. The conviction that lay behind Arnold's opinion at Potsdam in July 1945 that it was not necessary to drop the

The Defense Unification Battle, 1947–50 originally appeared as "The Defense Unification Battle, 1947–50: The Air Force" in *Prologue: The Journal of the National Archives,* Vol. 7, No. 1 Spring 1975, pp. 18–26.

atom bomb and that Japan, then under intensified attack by B–29s, could be persuaded to surrender before the scheduled November 1, 1945, American invasion of Kyushu. Arnold maintained that Japan could be knocked out of the war by October 1 by conventional B–29 attack.

After the war, Arnold wrote that use of the atom bomb against Japan had merely "provided a way out for the Japanese government" and that Japan could not have held out much longer because her air forces could no longer effectively oppose the B–29 offensive. The Americans' sustained bombing attacks had as their primary objective, Arnold emphasized, "the defeat of Japan without invasion." The Army Air Forces Commanding General wanted it recognized that the atom bomb did not win the war; the decisive factor in Japan's defeat was the B–29 conventional bombing offensive. In the aftermath of victory, Arnold remained much concerned that the role of the powerful B–29 attacks would be neglected by history and future strategists: "I am afraid that from now on," he wrote to Gen. Carl A. Spaatz, Commanding General, U.S. Strategic Air Forces in the Pacific, "there will be certain people who will forget the part we have played."

World War II had demonstrated the American propensity to seek with strategic bombing a technological solution to the problem of warfare. The atom bomb enabled the air force's leadership to make a quantum leap in arguing the case for an independent strategic air force. Army Air Forces leaders, ignoring Arnold's admonitions, thought their weapon had become indispensable, and they held that strategic bombing was the key to lowering the cost of victory. Future wars would be of short duration with no need for massed armies. Thus promising a shortcut to military victory, the advocates of air power maintained that strategic air power should now be preeminent, and strategy and budgets should reflect this new reality.

The Army Air Forces established two major objectives after the war: to gain independence for their service and to nail down the atomic warfare mission. Confident of public and congressional support, air leaders believed an independent air force would be achieved by the passage of a service unification bill. Riding the wave of enthusiasm for the Army Air Forces in the wake of World War II, the air leaders were also confident of strong support for their goal of building an atomic warfare–capable air force. Led by Secretary James V. Forrestal, the Navy resisted unification, anxious about an Air Force–Army coalition. The Navy feared losing its aviation, perhaps also the Marine Corps, and it was generally concerned with retaining its position in the front rank of defense. The Army, desirous of tactical air support and suspicious of the Navy's objectives, favored a strong unification bill featuring a single chief of staff for the services.

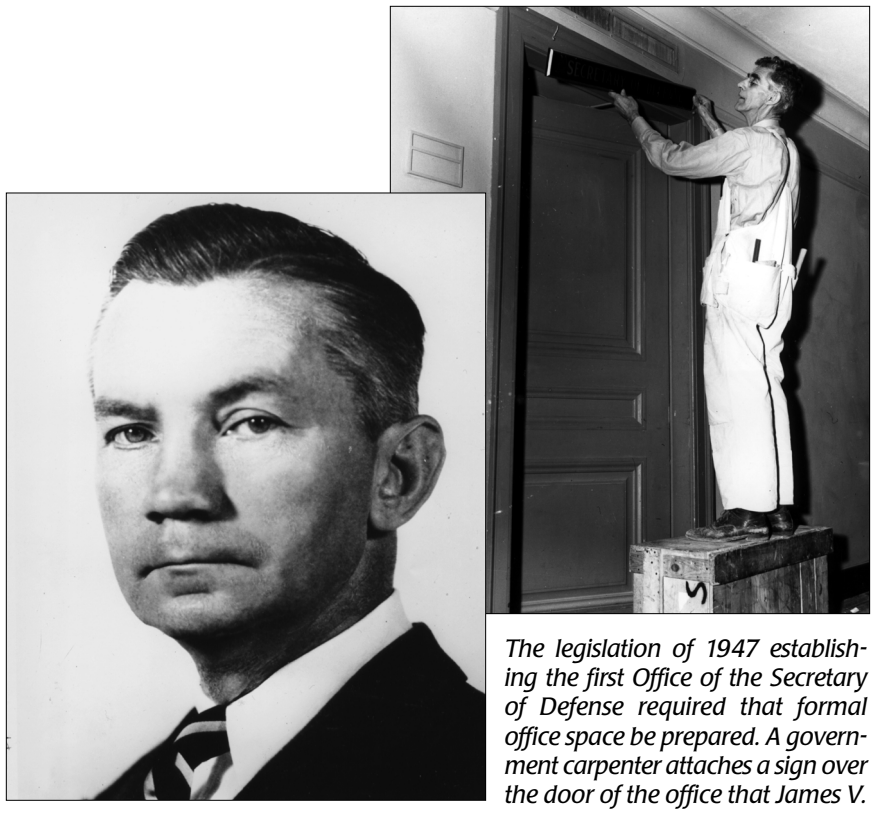
Military planning for postwar organization commenced before the war ended. In their initial planning, the services sought what they thought they might require rather than, as Gen. George C. Marshall, Army Chief of Staff

reminded them, what the Congress would approve in peacetime. Substantial ground forces, Marshall observed, could not be recruited, and "having air power will be the quickest remedy." He told Arnold that the air arm's contribution to winning the war had been crucial and that there would be no insurmountable obstacles to air autonomy. In late 1943, Army Air Forces headquarters began sustained postwar planning, centered in the Air Staff's Post-War Division, which led subsequently to five major postwar plans, culminating in August 1945 with a plan for a seventy-group air force.

Meanwhile, Congress had been wrangling over several unification bills. President Truman was determined that the military would not revert to its prewar organization, that it should be unified, and that the air service should gain parity with land and sea forces. A student of military history, Truman had not come recently to these conclusions. "One of the strongest convictions which I brought to the Presidency," he recalled, "was that the antiquated defense setup…had to be reorganized quickly as a step toward insuring our future safety and preserving world peace." He thought Pearl Harbor suggested "that the tragedy was as much the result of the inadequate military system which provided for no unified military command, either in the field or in Washington, as it was any personal failure of the Amy or Navy commanders." Thus, Truman came to believe strongly that the Commander in Chief should have a coordinated defense department.

President Truman recommended three coordinate branches under a Department of National Defense. In 1947, after negotiations between the Army Air Forces and the Navy, Truman endorsed a compromise National Security Act that created a coordinated, rather than unified, National Military Establishment headed by a civilian secretary bereft of specified directive powers. The National Security Act of 1947 gave the Army Air Forces its independence, but the legislation was not what any of the services really wanted. Gen. Ira C. Eaker, Army Air Forces Deputy Commanding General, noted that the act legitimized four military air forces. The Navy, wishing to retain land-based reconnaissance and antisubmarine missions, wanted each service's role and mission written into the bill, but this idea elicited no support. After approving the legislation, Truman signed Executive Order 9877 that generally delineated the roles and missions of the three services.

Although Forrestal had fought hard against both unification and a single chief of staff, thus successfully directing the Navy's case for a compromise act, Truman named him Secretary of Defense after Secretary of War Robert P. Patterson had turned down the job on the grounds that his financial situation made it imperative that he leave government service. One of the first in the United States after World War II to become alarmed by what he considered the Soviet threat, Forrestal had warned against massive demobilization and called for a strong military posture. He firmly believed that successful conduct of postwar foreign relations depended to a great extent on American military



The legislation of 1947 establishing the first Office of the Secretary of Defense required that formal office space be prepared. A government carpenter attaches a sign over the door of the office that James V. Forrestal, newly appointed Secretary of Defense, will occupy. Forrestal approached his duties as a coordinator rather than as a true administrator.

power. He brought to his new post what air force leaders judged to be a predominantly naval-oriented staff. Secretary of the Air Force Stuart Symington and General Spaatz, the Air Force Chief of Staff, thought they would have to marshal all resources to compete against what they considered a "reactionary" view in the Office of the Secretary of Defense.

The National Security Act did not, however, begin to settle responsibility for the atomic warfare mission. Realizing that having this mission was the key to securing the largest share of the military budget and counting on congressional support, the air leaders determined to press their views publicly. Long before passage of the act, they had prepared for what they knew would be an intense struggle with the Navy over missions and money. Such a fight was considered inevitable, and had been so proclaimed before the end of the war by Assistant Secretary of War for Air Robert A. Lovett, an official known for circumspection.

Under Symington's leadership, the Air Force mounted a heavy effort "to prevent Navy encroachment on the Air Force responsibility for strategic bombing operations." Based on General Spaatz's recommendation, Symington sought to obtain funding for a seventy-group air force. Yet, though he felt keenly the need for a rapid military buildup, primarily of atomic weapons–equipped air forces, Symington recognized that the defense establishment would have to compromise its requirements:

> We must face the constant compromise between what military authority considers necessary on the basis of maximum security and what is finally decided as the minimum requirement on the basis of a calculated risk.
>
> This must be the case, because the maintenance year after year of armed forces certain to be adequate to handle any emergency would be such a constant drain upon the American economy as to destroy the American way of life just as surely as would conquest from without.

Like the Army Air Forces, by the end of the war the Navy had made plans for the postwar period that emphasized air and undersea forces. Naval air had become the most important combat element of the fleet, and the Navy's leadership would soon be dominated by airmen intent on commanding forces that could deliver the bomb. In 1947 the Navy began to design carriers that could launch atom bomb–carrying aircraft.

Meanwhile, in May and June 1947, in executive sessions of the Air Board, the air leaders discussed the necessity of getting their views into the administration's foreign policy. Their plan was to persuade President Truman to establish a group similar to the Universal Military Training Commission "to consider the long-range air policy of the United States." This desire to establish a presidential commission grew from their conviction that air power was the prime instrument of American foreign policy. The air leaders agreed that a committee of highly respected civilians — not directly connected to the air force — appointed by the President "could exercise a tremendous effect and probably could result in achievement of a long-range air policy as part of the U.S. foreign policy."

At the same time, the Air Coordinating Committee, which included officials from the Departments of State and Commerce, reported that 3,000 planes representing 30 million pounds of airframe was the minimum required to keep the aircraft industry functioning (but not necessarily the minimum required to maintain a modern air force). This amount of airframe weight was not being provided. Therefore, the Air Coordinating Committee recommended to Truman that a commission be established to promulgate a national air policy.

This proposal was enthusiastically supported by Robert A. Lovett, who in July 1947 would become Under Secretary of State, and also by Kenneth C. Royall, Under Secretary of War, who would become Secretary of the Army in

September 1947. Additional impetus for a national air policy was generated by the National Advisory Committee for Aeronautics which, concerned that substantial money should be provided for aircraft research and development over the next ten years, recommended immediate formulation of such a policy.

Thus, acting on the recommendations of the Air Coordinating Committee, of the National Advisory Commission for Aeronautics, and of Lovett and Royall, Truman established the President's Air Policy Commission headed by Thomas K. Finletter in July 1947. The air force meant to use this opportunity to gain support for its seventy-group strategic force. The world view that Symington brought to his testimony before the Air Policy Commission in December 1947 had been expressed by him just weeks after he became Secretary of the Air Force. As for the chances of peace, he said:

> The lack of progress is discouraging but we must not give way to despair. We must realize that the building and the maintenance of peace, requires [*sic*] more patience, more perseverance, and perhaps even more moral courage than does the conduct of war itself, for the issues involved are less clearly defined, and less dramatic than the objectives of war.

In December 1947, Symington told the Finletter Commission that, although the Air Force required an "exceedingly high priority" budget, restrictions would limit his service to a fifty-five-group force. The commission's report endorsed the Air Force's objective and predicted the Soviet Union probably would have an atomic weapons capability by January 1953. Consequently, the report urged that national security be redefined and a new strategic concept featuring the seventy-group force be promulgated. However, the commission's report failed to confront issues that would soon plague the military establishment. The Navy–Air Force conflict worsened — the Navy charging the commission had ignored naval aviation—and those advocating balanced forces, as opposed to the seventy-group concept, increased their attacks.

On February 5, 1948, Secretary of the Navy John L. Sullivan announced plans to build a supercarrier. He gave assurances that the Navy had no intention of taking over Air Force bombing responsibilities, but Symington and Spaatz remained convinced the Navy was intent on building a strategic air force that would rival or usurp the Air Force's strategic mission. When the Navy responded that it needed long-range, land-based patrol bombers for antisubmarine warfare, Spaatz replied that the Air Force's bombers were "capable of performing the long-range sea search mission, including antisubmarine discovery and attack."

Truman's fiscal year 1949 budget specified defense spending of $11 billion and a fifty-five-group Air Force, thereby ignoring both the Finletter Commission and the Congressional Aviation Policy Board which had recommended the seventy groups. "We are more shocked," Symington wrote Forrestal, "than

at anything that has happened since we came in Government." He cited rising congressional pressure in favor of the Air Force and a "common sense strategic concept as to how to get at Russia."

Forrestal, thinking this controversy was nearly out of control, insisted that the Joint Chiefs promulgate an agreement "about who does what with what weapons." In March at Key West, Florida, the Chiefs agreed that strategic bombing was the Air Force's major responsibility but that the Navy could attack inland targets and also would not be denied the use of atom bombs. The Navy was authorized to develop weapons it considered essential, but it was not to build a strategic air force. Forrestal told the chiefs at Key West that he and the President had approved construction of the supercarrier that the Navy had been counting on. The Joint Chiefs concurred primarily because Forrestal had presented them with a fait accompli. Was this a Joint Chiefs' endorsement? Forrestal and Adm. Louis E. Denfeld thought so. Spaatz and Gen. Hoyt S. Vandenberg, the new Air Force Chief of Staff, did not. Vandenberg subsequently declared that the question of the supercarrier had not been discussed at the meeting for this reason.



Secretary of the Navy John L. Sullivan congratulates Adm. Louis E. Denfeld at his swearing in. Adm. Forrest Sherman looks on from the rear.

Though a new Executive Order (9950 of April 21, 1948) was promulgated, the dispute was exacerbated because the Navy thought its future depended on the carrier while the Air Force believed the supercarrier and the Navy's long-range patrol bombers threatened its primacy in strategic operations. Both services recognized that possession of the atomic warfare mission would ultimately mean a larger share of the defense budget, but the Key West meeting seemed to reinforce the "balanced force" concept based on an almost equal distribution of the defense budget.

Symington's public speaking forays, advocating a seventy-group Air Force, disturbed Forrestal, who believed the controversy was undermining the

Fulcrum of Power: Part III



The first Chief of Staff of the United States Air Force, Gen. Carl A. Spaatz, is seated before his successor, Gen. Hoyt S. Vandenberg, who assumed his position in April 1948, just as the Congress appropriated funds for a seventy-group Air Force.

defense establishment's programs and morale. He emphasized balance between the services and frequently said that, in modern war, any one segment could not be separated from the other two. The missions and operations of the services would have to mesh. The fifty-five groups, he said, provided a basis for strategic defense. However, Symington emphasized to the Congress that air power should be in balance, not among the services but with the Soviet air force. In April 1948, the House Appropriations Committee agreed sufficiently and voted an $822 million supplemental appropriation to the fiscal 1948 budget as a step toward a seventy-group Air Force. But the administration refused to spend this money.

Symington also told the House Armed Services Committee in April that a seventy-group Air Force was more important than universal military training, which Truman had favored but which many congressmen thought costly and unacceptable in an election year. Upset, Forrestal wondered whether Symington was planning a confrontation with the President, who by this time had become disappointed with the Navy, the Air Force, and with Forrestal. Truman thought his secretary of defense, a conciliator rather than tough administrator, had lost control: "Forrestal can't take it. He wants to compromise with the opposition!" Meanwhile, Symington wrote to Forrestal that he had been put in an "impossible position" because he had to be consistent with his testimony to the Finletter group, and, moreover, international crises had developed—especially the Czechoslovakian coup — investing the Air Force's requirements with even greater urgency. Then, turning to something that had long bothered him, he reminded Forrestal that "nobody who ever served a day in the Air Force was…a member of your permanent top staff." The Air Force, Symington also noted, "has great admiration and respect for the U.S. Navy. It has nothing but regret, however, for the present regime which has condoned these continuous

attacks on its sister services." By the spring of 1948 Symington had concluded that the National Security Act should be changed. He thought the secretary of defense was overburdened and needed a civilian deputy, more staff, and also a military chief of staff to break deadlocks among the joint chiefs.

Key West, Forrestal now realized, had not solved much of anything. According to Secretary Sullivan, the Navy was willing to acknowledge the Air Force's primary responsibility for the strategic atomic warfare mission while also insisting on its prerogative to use the bomb on targets of its own choosing. In July 1948 Forrestal met with General Vandenberg, who emphasized the Air Force should "be the sole source of authority on missions involving use of the A-bomb." He noted the nation could not afford "duplicative" programs. Forrestal held that both services were behaving psychotically: the Navy, convinced the Air Force wanted to control all aviation; the Air Force, thinking the Navy was attempting to grab the strategic nuclear mission. Both men agreed that the issue required immediate resolution.

The next step toward a resolution was the Newport Conference held in August 1948. For the interim, Forrestal and the chiefs agreed that the chief of the Armed Forces Special Weapons Project would report to the Air Force Chief of Staff, something the Air Force had long desired, giving it operational control of the bomb. The term "primary mission" was clarified to mean each service in its major mission area would retain exclusive responsibility for planning, but for mission execution all service resources would be used. Thus, the Air Force was given primary planning responsibility for strategic bombing, but in wartime it would also call on the Navy. To Forrestal, "the difficulty stems mainly from money…Each service knows the magnitude of its own responsibilities…The economy simply cannot stand fulfillment of all the requirements without the nation accepting very substantial deficit financing." He believed that the immediate controversy had been ameliorated; worse was to come.

Worse came, and it focused on the B–36 bomber, the means for delivering the atom bomb.The B–36 had a checkered past. Development began in January 1941, was pursued on low priority during the war, and subsequently continued on General Arnold's authority, despite setbacks and even though the Strategic Air Command's first commander, Gen. George C. Kenney, had criticized the plane's performance and potential. Kenney had believed the B–36 would never develop into a first-class bomber because it was slow and lacked protection for its huge fuel load. He preferred that money be spent to develop a jet bomber. Until a satisfactory jet was built, Kenney wanted to rely on air-refueled B–50s and B–29s. In May 1948 he recommended that B–36 production be halted. Symington, however, stood by the project, and Spaatz and then Vandenberg supported its development, agreeing that the B–36 was the best bet as an intercontinental bomber.

The onset of the Berlin blockade coincided with the administration's adoption of a policy giving high priority to building an atomic weapons–capable

deterrent force and made Kenney's position on the B–36 untenable. Symington and Vandenberg, much alarmed by Soviet action in Berlin and determined to build up SAC rapidly as the nation's major instrument of strategic deterrence, turned to Lt. Gen. Curtis E. LeMay. A driver and master tactician who held premier credentials as a bomber expert, LeMay was knowledgeable on atomic warfare matters and had backed the B–36. In October 1948 he replaced Kenney as head of the Strategic Air Command.

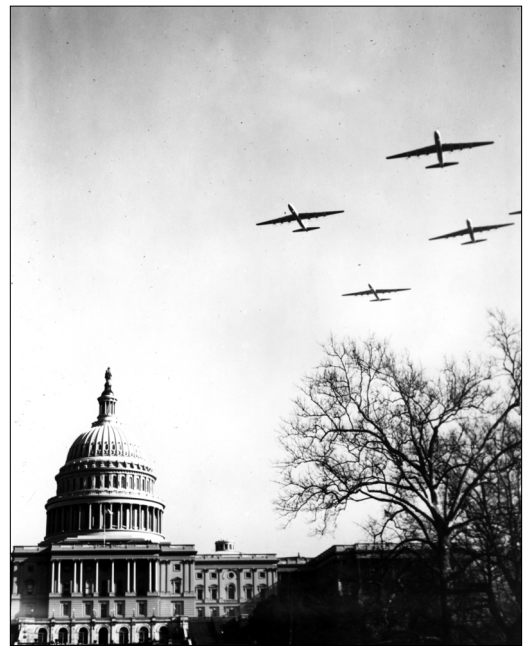
In December 1948, Vandenberg convened his top commanders and they decided that SAC's atomic weapons–equipped force, which LeMay considered ill-trained, had to receive first priority. In early 1949, after LeMay called creation of an atomic force "the fundamental goal of the Air Force," a board of senior officers approved his proposal for more B–36 groups and canceled the purchase of other bomber, fighter, and transport aircraft. The Air Force made this decision knowing that Truman in January 1949 had decided to hold the defense budget to an approximately $14 billion ceiling, thereby further limiting the Air Force to forty-eight groups. This fiscal year 1950 budget, divided almost equally among the services, prompted Symington to compare it to throwing a piece of meat into a lion's den and letting the animals fight over it.

Though Forrestal, tired and frustrated, was apparently prepared to resign in May, Truman requested his immediate resignation in March 1949. He was replaced by Louis Johnson, who had served as fundraiser for the president's 1948 presidential campaign. Forrestal, the man in the middle of the services' conflict, had been under severe stress, and his friends and colleagues finally realized he had become afflicted with deep mental distress. After being hospitalized, he took his own life, the victim of an office that held great responsibility without commensurate power — a situation for which he had been partly responsible during the postwar reorganization that led to the creation of a National Military Establishment.

In April 1949 Secretary Johnson obtained the President's permission to stop construction of the supercarrier. The Joint Chiefs had voted two to one against construction, on the grounds that the carrier's main function would duplicate the Air Force's primary role: strategic bombing. Accepting this argument, Johnson, who thought the major Soviet goal was to provoke the United States to spend itself into bankruptcy, also decided against the carrier. Sullivan then resigned, alleging Johnson had not consulted either him or the Chief of Naval Operations. The Navy secretary thought a "renewed effort" would now evolve "to abolish the Marine Corps and to transfer all naval and marine aviation elsewhere."

In the meantime, the Navy had leaked material detrimental about the B–36 and its procurement that resulted in congressional hearings on B–36 procurement and defense strategy. In the strategy phase of these hearings, held in October 1949, the Navy directed its main thrust against the Air Force's bomb-

ing effectiveness. Strategic bombing, Navy spokesmen argued, could not in itself win a war. The Air Force, said Adm. Arthur W. Radford, Commander of the Pacific Fleet, "paints a solution to the pressing problem of…national security as simple, plausible, and economical in lives and dollars. The real and complicated nature of the issues involved has been obscured…They say in effect — do you as a taxpayer want a quick, cheap, easy war, or a long-drawn-out, expensive war?" Attempting to strike a sensitive nerve in the American polity, Navy witnesses alleged strategic bombing to be immoral. Radford termed the B–36 a billion-dollar blunder and said it could not bomb accurately and could therefore be used only for city bombing. "If you are in favor of the B–36," he said, "You are in favor of mass bombing." It was also charged that the B–36 was vulnerable and thus not able to bomb Soviet targets. It had not been properly evaluated, whereas the Navy had been denied the opportunity to develop a supercarrier that could strengthen the nation's strategic capability.



B–36 bombers fly over the U.S. Capitol during the January 20, 1949, inaugural ceremonies for the thirty-third President, Harry S. Truman.

At the hearings, Symington countered that bombing was no more immoral than other forms of warfare. Vandenberg drove home the idea that general war could be deterred if the United States built credible strategic air forces. He emphasized that the Air Force had never claimed the B–36 to be invulnerable, only that it could reach targets without suffering unacceptable losses. And though the Navy argued that strategic bombing was immoral, Symington observed that it wanted carriers able to accommodate aircraft capable of delivering the atom bomb.

These events of 1949 — the famous Revolt of the Admirals — failed to settle the problem of service roles and missions. It would take the Korean War, and the consequent expansion of all military forces, temporarily to paper over interservice disputes and also to expose the fallacy that a military budget in excess of $14 billion would put the nation in economic jeopardy. This contro-



Secretary of Defense Forrestal, attempting to mediate between the Air Force and the Navy, inspects a TF–80 jet trainer in February 1949, during the period of the Revolt of the Admirals.

versy demonstrated how volatile the fundamental clash of interests had become and the lengths to which those who were deeply involved were prepared to go when their own conceptions of their major service missions were threatened.

Subsequently, the Hoover Commission proposed to strengthen the National Security Act. Forrestal's tragic death and the protracted Navy–Air Force struggle prompted the passage of amendments to the National Security Act in August 1949. These amendments enlarged and strengthened the Office of the Secretary of Defense and substantially downgraded the service secretaries' authority. Meanwhile, increasingly frustrated, Symington resigned, convinced that under Truman and Louis Johnson the Air Force (stymied with forty-eight groups) could not hope for an increase in its share of the budget. Even the Soviet atom bomb test in August 1949 which had shattered America's atomic monopoly had not made a difference in Truman's attitude. However, the Air Force was to expand substantially during the Korean War. Thereafter, with Eisenhower's New Look, the Air Force became acknowledged as the major instrument of nuclear deterrence. And, symbolic of this more quiescent time marked by larger defense budgets than were seen in 1947–50, on April 11, 1955, Admiral Radford, as chairman of the Joint Chiefs, received the William

Mitchell Award from New York's Aviator Post 743 of the American Legion.

World War II, when each service had been covetous of the other's missions and responsibilities, had made the National Security Act all but inevitable. Many Americans, mindful of Pearl Harbor, agreed with President Truman that the "antiquated defense setup" had to be reorganized. Technological advance and what the services interpreted as penurious postwar budgets predetermined there would be disagreement over roles and missions. The Key West and Newport Conferences changed little and can even be said to have intensified the struggle. Weapons could not always be neatly packaged and shoved into clearly marked mission compartments, thereby making defense a business devoid of duplication and free of competition.

The Air Force had never been satisfied with a coordinated military establishment and pressed for even greater unification. Air leaders thought a more powerful Secretary of Defense would, in former Secretary of the Air Force Eugene M. Zuckert's words, "institutionalize what they regarded as the Air Force's justifiable domination of the defense structure."

But human affairs are complex and unpredictable, often beyond the control of the most dedicated and determined of men. Seemingly obvious victories do not always remain so and in time, become less than triumphant. Battles once thought finished are often resurrected, to be fought again. In this case, institutionally the Air Force eventually got what it wanted — independence and a strong Office of the Secretary of Defense — but considering the tremendous erosion in the services' ability to influence major military decisions, and the Navy's securing a major share of the nuclear mission, few historians would now claim that the Air Force gained a permanent victory over its service rivals.



The immensity of the B–36 intercontinental bomber becomes apparent as a B–24 of an earlier era flies beneath it.

The Battle of the B–36

The 1949 Revolt of the Admirals, which initially focused on the Air Force's B–36 intercontinental bomber, was one of the most bitter public feuds in American military history. This controversy over strategy and weapons began with the 1945–47 struggle over unification, when the U.S. Army Air Forces was fighting to become an independent service.

After World War II, General of the Army Henry H. Arnold, Commanding General, U.S. Army Air Forces; Gen. Carl A. Spaatz; and Lt. Gen. James H. Doolittle emphasized that the demonstrated effectiveness of all forms of air power made the AAF the lead service in the American defense phalanx. General Doolittle, testifying before the Senate Military Affairs Committee, pointed out that the Navy was no longer the first line of defense for the United States. The United States required an independent air force featuring an in-being strategic atomic weapons–capable force that could deter any aggressor from initiating conflict. This would be the country's strategic concept in the postwar era, and it was supported by President Harry S. Truman and Army Chief of Staff Gen. Dwight D. Eisenhower, among others.

After the war, the Navy feared it might lose its air element to an independent air force, and that even the Marine Corps might be lost. Moreover, the naval leadership, convinced that the Navy required everything to make it self-supporting in pursuit of its mission, opposed Truman's and Eisenhower's concept of mutually supporting services under unified command. In the congressional hearings on unification, General Eisenhower emphasized that economy would be a driving force in postwar defense matters and that the nation simply could not afford the Navy's concept of self-sustaining forces in the World War II mold.

The Battle of the B–36 originally appeared as "The Battle of the B–36" in *Air Force Magazine,* Vol. 79, No. 7, July 1996, pp. 60–65.

Fulcrum of Power: Part III

The centerpiece of the Navy's vision was the carrier task force that, during the war, became central to its Pacific strategy. In the postwar period, Navy Secretary James V. Forrestal took the lead in promoting the maritime strategy of depending on larger and faster carriers and opposing the creation of an independent air force.

Compromise and Conflict

The National Security Act of 1947, which established the United States Air Force, clearly was a compromise. The act, as well as the so-called functions paper (actually, Truman's Executive Order), failed to resolve roles-and-missions disputes among the services. The new Air Force and the Navy — at conferences at Key West, Florida, and at Newport, Rhode Island, in the spring and summer of 1948 — could not work out their differences over the strategic atomic warfare mission and other functions questions.

The Air Force relied on the B–36 intercontinental-range bomber to accomplish the strategic mission supporting the Truman administration's policy of deterrence. In August 1941, Robert A. Lovett, Assistant Secretary of War for Air, and Maj. Gen. George H. Brett, Chief of the Army Air Corps, determined that the potential loss of bases in the United Kingdom called for development of a long-range bomber that could fly a round trip from the United States to Europe. Until that time, no aircraft had even approached this proposed range of 10,000 miles.

Immediately after the creation of the USAF in September 1947, criticism of the B–36 began appearing in newspapers and journals. Some of this criticism came from Hugh L. Hanson, a Navy employee with the Bureau of Aeronautics, who had also contacted Forrestal, now Defense Secretary, and several congressmen. Secretary of the Air Force Stuart Symington complained about this to the Secretary of the Navy, John L. Sullivan. Nevertheless, the attacks continued.

In 1948 and 1949 the Air Force made several decisions that led to Strategic Air Command's reliance on the B–36 for the SAC nuclear deterrent mission until the B–52 long-range bomber could enter the operational inventory. In 1948, after the Soviet-inspired Communist coup in Czechoslovakia and the Soviet Union's blockade of Berlin, the possibility of war increased. The Air Force emphasized that the B–36 was the only aircraft capable of delivering the atom bomb from bases in the United States.

In early 1949, SAC Commander in Chief Gen. Curtis E. LeMay recommended to Gen. Hoyt S. Vandenberg, USAF Chief of Staff, that the board of senior officers review the B–54 program because B–36 tests with jet pods had been outstanding. Compared to the B–54, the B–36 with jet pods was faster, operated at higher altitude, and had greater range and bomb-carrying capacity. Subsequently, the B–54 was canceled. Symington informed Secretary Forres-



These B–52s are in the final stages of assembly in May 1954.

tal that the B–36 could fly from the United States and could, "because of its speed and altitude,…penetrate enemy country without fighter escort, destroy the strategic target, and return nonstop to its base on this continent."

Stress and Suicide

Ironically, given the nature of the struggle then brewing between the Air Force and the Navy over the B–36 and the atomic warfare mission, Truman had named Forrestal as Secretary of Defense after Secretary of War Robert P. Patterson had turned down the post, pleading that his finances forced him to return to the private sector. Forrestal had led the campaign against a strong National Security Act and an independent Air Force. When he became the Defense Secretary, Forrestal showed himself to be a weak coordinator, unable under the new law to step in and resolve the many differences among the services.

Having failed to provide strong support to Truman's 1948 political campaign, Forrestal's influence waned significantly. At the same time, his health began to fail. He resigned in March 1949, in deep mental distress, and in May jumped to his death from a window on the sixteenth floor of the National Naval Medical Center in Bethesda, Maryland.

To replace Forrestal, Truman named Louis A. Johnson, a former Assistant Secretary of War (1937–40) who had served as the President's chief fundraiser during the 1948 campaign. Secretary Johnson began by reviewing military procurement programs and quickly focused on the Navy's flush-deck super-

carrier *United States* on which construction was to begin in April 1949. The Navy estimated the cost of the carrier at $190 million, but this figure failed to include the thirty-nine additional ships required to complete the task force. Total construction cost was $1.265 billion, a staggering sum in 1949. Johnson immediately asked the Joint Chiefs of Staff as well as retired General Eisenhower for their opinions.

Adm. Louis E. Denfeld, Chief of Naval Operations, defended the supercarrier, calling it necessary "in the interest of national security." Gen. Omar N. Bradley, Army Chief of Staff, and General Vandenberg, Air Force Chief of Staff, strongly opposed construction, arguing that the supercarrier would duplicate the function of the Air Force's land-based bombers. Eisenhower also opposed building the carrier.

In late April 1949, after informing President Truman, Johnson abruptly directed that construction of the carrier stop immediately. Navy officials were outraged at not being informed of the decision. Navy Secretary Sullivan resigned in protest, emphasizing that the decision could have "far-reaching and tragic consequences." Rumors immediately surfaced within the Navy's high command that Johnson was pro-USAF and was determined to cut the Navy down to size.

The stage was now set. This bitter confrontation, precipitated by the Navy and its advocates, had been foreseen by General Eisenhower. "Someday we're going to have a blowup," he predicted in January 1949. "God help us if ever we go before a Congressional committee to argue our professional fights as each service struggles to get the lion's share…Public airing of grievances…someday…will go far beyond the bounds of decency and reason, and someone will say, 'Who's the boss? The civilians or the military?'"

High-ranking naval officers, determined to make the case for the supercarrier and against the B–36, took action. The Navy's Op–23 "research and policy" office had been formed in December 1948. Capt. Arleigh A. Burke, a World War II destroyer commander and future Chief of Naval Operations, took charge of this office in early 1949. He placed Op–23 under tight security (causing the press to speculate that it was involved in shady business) and directed his people to collect detrimental data on the B–36 while amassing positive information on the supercarrier.

Going public, naval officers criticized the B–36 as being too slow and vulnerable to enemy defenses. This, however, was only the beginning of what became a vicious campaign to discredit not only the B–36 but also the top leadership of the fledgling Air Force. In April and May 1949, an "anonymous document" made its way around Washington, D.C., charging that Symington, Johnson, and Floyd B. Odlum, chairman of the board of Convair, had put the heat on the Air Force to buy B–36s, in spite of the bomber's deficiencies.

Brig. Gen. Joseph F. Carroll, director of Air Force Special Investigations, traced the anonymous document to Cedric R. Worth, a former Hollywood

scriptwriter who had served with the Navy during the war and now was an assistant to Dan A. Kimball, Under Secretary of the Navy. Glenn L. Martin, an aircraft manufacturer whose bombers had lost out to the B–36, had provided Worth with considerable data. A Navy court of inquiry subsequently determined that Cmdr. Thomas D. Davies, Op–23 deputy to Captain Burke, had also fed material to Worth.

The charges in the Worth document became public and reached the floor of the House of Representatives when Rep. James E. Van Zandt (R–Pa.), a Navy advocate with wartime naval service, called for an investigation of the allegations. Secretary Symington denied the charges and also requested an immediate investigation. Rep. Carl Vinson (D–Ga.), chairman of the House Armed Services Committee, agreed to hold hearings. In June, the full committee consented to hear the B–36 procurement case and to hold an inquiry into strategy and unification issues. Thus began one of the most fractious public confrontations in U.S. military history.

The Navy's supporters in the press held back nothing. Hanson Baldwin, military editor of the *New York Times* and a graduate of the Naval Academy, described Symington as one of the "nastiest" politicians in Washington, someone who had "ganged up on Forrestal." Baldwin charged that Symington had played "dirty pool and dirty politics,…[was] a two-faced goad who was not respected by most of the people in the Air Force." Baldwin even went so far as to claim that Symington was the only service secretary not asked to be a pallbearer at Forrestal's funeral because the family actually believed that he had contributed to Forrestal's death.

The Air Force Case

Vinson's committee held hearings on B–36 procurement in August 1949 and on strategy and unification in October. In the preceding June, Symington had appointed W. Barton Leach, an Air Force Reserve officer and Harvard Law School professor, to coordinate and direct the Air Force case for the B–36. Leach had served with Army Air Forces and earned a reputation for incisive analysis of AAF operations in Europe. He proceeded to organize the Air Force case by analyzing the charges, preparing replies to the allegations, making a study of the aircraft industry, preparing a memo on Symington's policies relative to the aircraft industry, collecting all Air Force statements chronologically on the heavy-bomber program, analyzing all Inspector General reports on the B–36, and preparing an explanation of Air Force action on the B–36.

The result of Leach's massive effort was "A History of B–36 Procurement," which Vinson had requested and which formed the foundation for the Air Force's presentation to the committee. In early July 1949, the Air Force Association's third annual national convention held in Chicago also helped



This B–36 flew from Carswell AFB, Fort Worth, Texas, to an exhibition and air show in Cleveland, advertising the message, "Death from Above."

counter the Navy's charges by disseminating material on the B–36 Peacemaker's mission and operational characteristics. At 45,000 feet, this intercontinental bomber was anything but vulnerable. Each day during the AFA meeting, seven B–36s flew up from Fort Worth, Texas, circled the fair area at low level, and returned nonstop to Carswell AFB, also in Texas

In regard to B–36 procurement, Symington informed the committee that "at no time since I have been Secretary has any higher authority attempted to recommend in any way the purchase of any airplane…Every aircraft that was purchased by the Air Force during my tenure was recommended to me by the Chief of Staff of the Air Force and his staff." Modifications in the B–36 program were approved by Symington only after recommendations had been made by General Vandenberg, Lt. Gen. Lauris Norstad, and Gen. Joseph T. McNarney. Symington also strongly denied that he had ever discussed formation of a large aircraft combine with Floyd Odlum or any aircraft manufacturer.

Gen. George C. Kenney, a former SAC Commander in Chief, testified to the committee that, although he initially opposed production of the B–36, the bomber had been modified to be "the fastest, longest-range, best altitude-performing, and heaviest load-carrying bomber in the world." Had he changed his view under political pressure? No, replied Kenney. "If the bomber had the performance and would do the job that I was charged with carrying out, I would buy it."

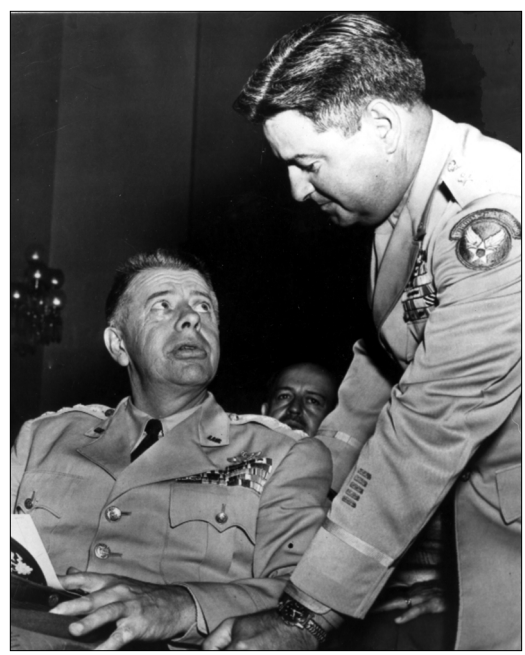
General LeMay also took the stand, saying "I expect that, if I am called upon to fight, I will order my crews out in those airplanes, and I expect to be

in the first one myself." Van Zandt questioned LeMay closely, but the SAC commander in chief insisted that the B–36 was the only bomber that could accomplish the intercontinental mission.

An extensive case study of the B–36 hearings prepared by Professor Paul Y. Hammond of Johns Hopkins University and published in 1963 concluded that, "because of the careful preparation of the Air Force, no inconsistencies or contradictions capable of exploitation appeared in the testimony. The result was an impressive showing for the Air Force." In contrast, according to Hammond, the Navy's Op–23 office failed to provide much help to the Navy's witnesses. Moreover, Hammond noted, "most of the hostility that developed towards Op-23 was of the Navy's own making…Op–23 was treated by the Navy from the beginning like dirty business; and the press had soon drawn the same conclusion. Upon its establishment, it was located next to the Office of Naval Intelligence, and its activities from the beginning were subject to an unusual degree of secrecy."

The Vinson committee subsequently exonerated Symington and Johnson and stated that it found "not one scintilla of evidence [to] support charges that collusion, fraud, corruption, influence, or favoritism played any part whatsoever in the procurement of the B–36 bomber." According to the committee, Symington, the Air Force leadership, and Secretary of Defense Johnson made it through the hearings with "unblemished, impeccable reputations."

After the procurement hearings, the Navy immediately convened a board of inquiry to investigate the origin and release of the anonymous document supposedly written by Worth. Worth had, under oath, "recanted and repudiated" the allegations contained in the documents and was dismissed. The Navy's court of inquiry, however — although it found "distorted propaganda" against the Air Force —



Both Gen. George C. Kenney (who is seated) and his successor as Commander in Chief of Strategic Air Command, Gen. Curtis E. LeMay, argued persuasively in congressional hearings for production of the B–36 bomber.



Secretary of the Air Force Stuart Symington, at the right, receives congratulations from the Chairman of the House Armed Services Committee, Carl Vinson, after the committee vindicated the Department of Defense and the Air Force with respect to their management of the B–36 bomber program.

found no cause for disciplinary action against any of the Op–23 personnel, including Captain Burke and Commander Davies.

The twelve days of unification and strategy hearings which convened in October 1949 revealed a somewhat less definitive outcome than the procurement sessions had. The Navy's witnesses before the House Armed Services Committee took their cue from Adm. Arthur W. Radford who stated that he did not believe the threat of an "atomic blitz" provided a deterrent to war. He focused his guns on the B–36, calling it "a billion-dollar blunder" and claiming, in his view, its poor performance made it a "bad gamble." He went along with the Joint Chiefs to the extent that he agreed that strategic bombing should be the primary role of the Air Force. However, Radford emphasized that the Air Force and the nation had placed excessive reliance on this concept.

Strange Tales

Other Navy witnesses made similar arguments. Admiral Denfeld, the Chief of Naval Operations (who was relieved of his post at completion of the hearings), stressed the way in which the flush-deck carrier was canceled. Navy Cmdr. Eugene Tatom, head of research and development for aviation ordnance, made the stunning claim that "you could stand in the open at one end of the north-south runway at the Washington National Airport, with no more protection than the clothes you have on, and have an atom bomb explode at the

other end of the runway without serious injury to you." Tatom's statement was labeled absurd by Secretary of Defense Johnson, Sen. Brien McMahon (D–Conn.), and Rep. Chet Holifield (D–Calif.) of the Joint Committee on Atomic Energy, and other members of Congress.

The strongest counterattack on the Navy's position was launched by Secretary Symington and General Vandenberg. Replying to the charge that the Air Force placed too much reliance on the B–36, Symington showed that, in fiscal years 1949 through 1951, the B–36 accounted for only 2.9 percent of the number of aircraft and 16.3 percent of the cost of all airplanes purchased by the Air Force.

This was telling testimony, but Radford, aware of these figures, chose to ignore them. Symington then zeroed in on the effectiveness of strategic bombing. He reminded the committee that strategic bombing had been approved and assigned to the Air Force by the Joint Chiefs of Staff. "The most disturbing feature of the attacks against the Air Force," Symington said, "is what they have done and are doing to imperil the security of the United States. It was bad enough to have given a possible aggressor technical and operating details of our newest and latest equipment…It is far worse to have opened up to him in such detail the military doctrines of how this country would be defended."

Vandenberg reiterated Symington's points, reinforcing them with technical details and adding that, so far as the flush-deck carrier was concerned, "my opposition to building it comes from the fact that I can see no necessity for a ship with those capabilities in any strategic plan against the one possible enemy."

Following Vandenberg, General Bradley, now Chairman of the Joint Chiefs of Staff, unleashed heavy fire against the Navy. He said that the Navy's "careless detractions of the power of this [atomic] weapon have done national security no good and may have done our collective security, in these precarious times, untold harm." He wished that the Navy's testimony had never been delivered. he added. "This is no time," emphasized the usually mild-mannered Bradley, "for 'fancy dans' who won't hit the line with all they have on every play unless they can call the signals." The gut problem, according to General Bradley, was that the Navy had opposed unification from the start and had never completely accepted it.

This was a point *Air Force Magazine* made in a December 1949 retrospective on the strategy and unification hearings. It noted that the investigation left a great deal to be desired because it could not proceed in a logical manner; to be complete and comprehensive, the hearings would have to start with a consideration of the nation's classified war plans. This would have torpedoed the Navy's arguments. The magazine emphasized, however, that "the Admirals found, as a by-product of the hearing, that civilians still run the defense establishment as the provisions of the Constitution intended, and their reeducation in this particular was most timely."

Fulcrum of Power: Part III

Unreconstructed Admirals

This struggle, ignited by unreconstructed, high-ranking naval officers, had deep roots in the 1945–47 period, when the Army Air Forces won the battle to establish an independent air force. The Navy all along had been reluctant to cede the atomic warfare mission to the AAF in a period of stringent budgetary cutbacks. This became especially critical when the Truman administration made strategic deterrence the centerpiece of its postwar national security policy. The Air Force, with the B–36, was front and center in the nation's defense establishment, hence the Navy's unbridled attack on the B–36 bomber.

Years later, Stephen F. Leo, Symington's director of public relations, described the Navy during this era as being "out of control." The Navy had been dragged, kicking and screaming, into the National Security Act of 1947, and its opposition to a strong Secretary of Defense reflected a reluctance to join the unification team. General Bradley emphasized that the Navy had refused to accept unification "in spirit as well as deed."

Army Chief of Staff Eisenhower showed his frustration with the Navy when he stressed to the Congress that the postwar national security establishment had to be structured like a three-legged stool, each military service mutually supportive of the whole. This was the great lesson of World War II — mutually supporting services under unified theater command.



President Truman signs HR 1726, an act "to provide for the organization of the Air Force," a technicality in making the Department of the Air Force official. Witnessing the occasion are Gen. Hoyt S. Vandenberg, Chief of Staff of the Air Force, Representative Overton Brooks, a member of the Armed Services Committee, and Thomas K. Finletter, Secretary of the Air Force.

The Quiet Coup of 1949

The passage of the National Security Act of 1947 was a landmark in the organization of America's military establishment. However, it was a series of little-known 1949 amendments to the act that decisively shaped the character and organization of the military for the next half century.

August 1999 marks the fiftieth anniversary of the creation of those amendments, which took power from the military services and vested it in the Office of the Secretary of Defense. Moreover, the amendments started a series of legislative initiatives in the 1950s that subsequently turned America's defense establishment into a massive, highly centralized bureaucracy.

The drive to amend the National Security Act of 1947 occurred in the wake of James V. Forrestal's first stormy months as Secretary of Defense, months that were distinguished by a bitter roles-and-missions struggle between the Air Force and the Navy. During the contentious years 1946–47, with the debate over national security legislation raging, Forrestal succeeded in achieving the Navy's goal of making the Secretary of Defense a coordinator rather than a true administrator.

The l947 act gave the United States Air Force its long-sought independence, but it failed to give the Defense Secretary sufficient authority over the National Military Establishment. The fledgling Air Force had fought for more authority for its Secretary because it believed he would be ineffectual without it. Moreover, the USAF judged that a strong Secretary would support its claim to the strategic atom-bombing mission.

Third, Third, Third

Two factors caused tempers to flare. First, the Truman administration was determined to hold the defense budget to about $13 billion a year, a relatively

The Quiet Coup of 1949 originally appeared as "The Quiet Coup of 1949" in *Air Force Magazine,* Vol. 82, No. 7, July 1999, pp. 76–81.

low amount. Second, Forrestal believed that sustaining a "balanced" force of land, air, and sea components required the United States to split the tight budget into three nearly equal portions. This intensified the roles-and-missions struggle. The Navy thought it was in danger of losing its air arm to the Air Force; the Air Force was convinced that the Navy was attempting to build a strategic air force of its own.

This rancorous battle was played out in the context of deepening cold war tensions. The Soviet Union had set up puppet governments in Eastern and Central Europe, prompting former British Prime Minister Winston Churchill's famous 1946 comment that an "Iron Curtain" had fallen across the European continent. And in June 1948, provocative Soviet moves forced the Western Allies to mount the Berlin Airlift to keep the city free and functioning.

Thus, international tensions took center stage. Even so, the first Secretary of the Air Force, Stuart Symington, had been perturbed from the start that Forrestal had simply moved his staff from the Navy Department into the Office of the Secretary of Defense. In a letter to Forrestal, Symington charged that "nobody who ever served a day in the Air Force was…a member of your permanent top staff."

Another criticism came from Air Force Reserve Brig. Gen. W. Barton Leach, the Harvard Law School faculty member who, in 1949, would organize the case for the Air Force during the congressional B–36 investigation. Leach noted:

> These [OSD] civilian officials, are not prejudiced against the Air Force, nor are they unwilling to learn. But an instinctive understanding of Air Force problems is not in their blood; they do not naturally seek the association of Air Force people; and when the chips are down it too often happens that the Air Force gets the short end of these very important decisions that are controlled by the staff of the Secretary of Defense…For the most part, OSD has been staffed with able men. But ability is not enough. A Supreme Court comprising the nine ablest lawyers in the country would not be acceptable if it turned out that all nine came from Wall Street firms.

Symington had thought all along that the 1947 act should only be the first step in reorganizing the nation's military, and he thought that ultimately a price would have to be paid for having a Secretary of Defense who was merely a coordinator rather than a strong administrator. In the summer of 1948, he informed Clark Clifford, Truman's assistant, that "it is now my considered opinion that the present National Security Act must be changed in order [for it] to work."

Forrestal thought he could operate effectively as a coordinator. However, he now found himself unable to deal with interservice disagreements over allocation of resources and the assignment of responsibility for numerous programs.

He lacked decision-making authority and had badly misjudged the intensely divisive character of the issues. In addition, he and his staff found themselves overwhelmed by the sheer magnitude of the work before them.

"Dead Cats"

In a moment of grim humor, Forrestal predicted, "This office will probably be the greatest cemetery for dead cats in history." The official OSD history concludes that "one of the most painful experiences of Forrestal's public career was reluctantly concluding that the statute he had done so much to engineer contained serious defects."

In early 1949, Gen. Dwight D. Eisenhower noted that Forrestal was "obviously most unhappy." Eisenhower stated, "At one time, he accepted unequivocally and supported vigorously the Navy 'party line,' given him by the admirals." Now, Eisenhower judged, Forrestal trusted the Army's leadership more than the Navy's.

As early as February 1948, Forrestal expressed serious reservations about the National Security Act. In a report to Truman, he indicated a need for a deputy and emphasized the debilitating effects of interservice rivalry. He also tried to act through former President Hoover's Commission on Reorganization of the Executive Branch, of which he was a member. In May 1948, he arranged for close friend Ferdinand Eberstadt to head the commission's National Security Task Force. Symington informed Eberstadt in October 1948 that

> we have had a year of unification directed toward obtaining "more security for less money" and are more convinced than ever of the importance of putting more authority in the hands of the civilian head of the National Military Establishment, the Secretary of Defense, and also streamlining and concentrating the military authority under him.

Forrestal told Eberstadt's group that the truly enormous workload was swamping OSD's ability to cope. In December, in his first annual report, Forrestal recommended appointment of an under secretary of defense and augmentation of the Joint Staff. Moreover, he called for removing the service secretaries from the National Security Council. Finally, he asked that his office be given more authority; specifically, he asked Congress to drop the word "general" in describing the nature of his control over the three military departments.

Gen. Carl A. "Tooey" Spaatz, the first Chief of Staff of the Air Force, contended that the National Security Act needed fixing to enable the Defense Secretary to be "in control of the Department of National Defense and the component parts thereof." Spaatz argued:

> The safeguards placed by law to protect an individual service are an anachronism that dates from the days of sailing vessels. Any attempt



Gen. Carl A. "Tooey" Spaatz, who retired as the first Chief of Staff of the Air Force on April 29, 1948, argued for a strengthened Office of the Secretary of Defense. Spaatz stands here with Lt. Gen. Curtis E. LeMay, who himself would become the Air Force Chief of Staff under a supremely strong Secretary of Defense.

> to temporize with this situation by further adherence to outworn and overworked traditions will not only pyramid the costs of our national defense establishment but will be disastrous in the event of war.

Spaatz believed that Forrestal was, in fact, overburdened. The remedy, he maintained, would be to provide the Secretary with assistant secretaries. The right of appeal of the service secretaries to the President and the Bureau of the Budget should be abolished, he went on. Moreover, Spaatz argued that the Pentagon leader should have a military chief of staff as a top adviser and that the Joint Chiefs of Staff should be abolished along with the service secretaries. The military heads of the services would be designated as commanders, and the Secretary of Defense would serve as the only military representative on the National Security Council.

Vandenberg and Norstad Weigh In

Gen. Hoyt S. Vandenberg succeeded Spaatz as Chief of Staff of the Air Force in April 1948. Several months later, in June 1948, the new Air Force leader testified before the Eberstadt group, which had been chartered to determine how to make the defense establishment more efficient. Vandenberg, like others, emphasized that Forrestal possessed neither sufficient authority nor adequate staff.

Lt. Gen. Lauris Norstad, USAF Deputy Chief of Staff for Operations, agreed with Vandenberg and noted that the Secretary of Defense simply did not have the staff to properly discharge his duties. Norstad said, "The Secre-



Gen. Hoyt S. Vandenberg, Spaatz's successor as Chief of Staff, confers here with Lt. Gen. Lauris Norstad, his Deputy Chief of Staff for Operations, and General Muir Fairchild, his Vice Chief of Staff, in October 1948. Earlier that year, in June, Vandenberg and Norstad had petitioned the National Security Task Force to increase the number of staff members assigned to the Office of the Secretary of Defense.

tary needs high-caliber assistant secretaries who are important all-around-capable people, not just experts along narrow lines." He also proposed a military staff for the Secretary, one that would be headed by "a top military man who would sit on the JCS and carry its decisions to the Secretary of Defense." Moreover, according to Norstad, the right of appeal of the department secretaries up to the President — over the head of the Secretary of Defense — "should be struck out since it tends to destroy the Secretary's authority."

Both Vandenberg and Norstad favored abolishing the position of the President's chief of staff (held during the war by Adm. William D. Leahy) in favor of giving the Secretary a top military person to resolve differences between the services. With a weak Secretary and an ineffective JCS, it was also difficult to break deadlocks within the Joint Chiefs. The Chief of Staff charged,

> The Joint Chiefs of Staff is not effective as a top level military authority. The reason is that this body does not have at its head an officer who has the authority and responsibility of decision — and can arrive at decisions only by unanimous vote — which is another way of saying that each service has an absolute veto power such as exists in the Security Council of the U.N. No other agency of American government is expected to exercise authority under the handicap of such a system.

Vandenberg noted that the Joint Chiefs were under substantial pressure to reach agreement — "some agreement, any agreement." He did not believe this approach to be sound. "The country," he said, "is entitled to expect from its military leaders right decisions in the national interest, not merely agreements which represent the best deal that can be made among the three armed services."

"Man on Horseback"

Meanwhile Navy leaders continued to emphasize that they feared excessive power in the hands of the Secretary of Defense, claiming it could produce the much-feared "man on horseback" style of leadership. John J. McCloy, president of the World Bank and adviser to Eberstadt, noted that the man-on-horseback argument usually was advanced by "those who themselves seek unfettered power."

McCloy asserted, "I doubt whether we need fear the man in uniform in this regard any more than the man or men in civilian clothes to whom we have given far greater authority." As to the argument that change should proceed gradually, McCloy told Eberstadt that "the condition of the world today demands that our military establishment be put in order right away."

In its final report to the Hoover Commission, Eberstadt's task force recommended strengthening the Defense Secretary's authority, increasing his staff, and appointing a full Chairman of the Joint Chiefs of Staff. Truman got behind the drive to revise the National Security Act, and the commission in early 1949 went on record in support of placing power in the Office of the Secretary of Defense. Within the administration, there were voices, some in the Bureau of the Budget, calling for Congress to go much further to downgrade the military services; however, they did not prevail.

Meanwhile, Forrestal had begun suffering deep mental distress, with clinical implications. He had resigned under pressure in March 1949 and was replaced by Louis A. Johnson, a former assistant secretary of war and fundraiser for Truman's campaign. Forrestal had wanted to remain at his post for a few more months, but Truman asked for his resignation, having become aware that Forrestal had turned increasingly indecisive and appeared to be racked with tension and fatigue.

Forrestal, in fact, was suffering mental breakdown. Some maintain that he was victimized by the combination of holding an office with great responsibility and insufficient authority. After relinquishing his post, Forrestal entered Bethesda Naval Hospital, where, on May 22, 1949, he plunged to his death through a window on the hospital's sixteenth floor.

Johnson strongly supported the administration's position on amending the National Security Act, as did the Army and the Air Force. The Navy and Marine Corps remained reluctant, however, with Gen. Clifton Cates, the



Louis A. Johnson (standing at the right), President Truman's choice to succeed Forrestal as Secretary of Defense, administers the oath of office to Thomas K. Finletter, Secretary of the Air Force. His predecessor, Stuart Symington, looks on, as does Truman's Secretary of State Dean Acheson.

Marine Commandant, arguing that the legislation would confer "entirely too much power" on the Secretary of Defense.

In the summer of 1949, during hearings on the amendments, Johnson clashed with Rep. Carl Vinson, the powerful Georgia Democrat who chaired the House Armed Services Committee. Vinson emphasized that, in his opinion, the position of the Secretary was sufficiently strong already. Johnson retorted: "I think, the security of the nation can't be adequately protected without having this additional authority. I think secondly that it is going to cost the defense establishment more than our economy can bear unless we have this law." Vinson attempted to delay the legislation by suspending hearings — his committee was gearing up to investigate procurement of the B–36 bomber — but Truman reacted by transmitting his plan (Reorganization Plan No. 8) to Congress first. It passed both houses, and Truman signed it into law on August 10, 1949.

Total Authority

The National Security Act Amendments of 1949 converted the National Military Establishment into the Department of Defense, making it an executive, or cabinet-level, department, and downgrading the services from executive to military departments. In addition, the Secretary of Defense gained total "direction, authority, and control" over the entire department and became the

"principal assistant to the President in all matters relating to the Department of Defense."

Although the service secretaries would still administer their respective departments, they would be under the complete direction and control of the Secretary of Defense. Departmental secretaries also lost their previous statutory right to make recommendations directly to the President or budget director. However, the secretaries could make recommendations to Congress. Also importantly, the secretaries would no longer be allowed to represent their departments on the National Security Council.

The under secretary of defense was given the rank of a true deputy secretary with the authority, when required, to act for the Secretary of Defense. The three special assistants to the Secretary were elevated to assistant secretaries.

Several changes were made in the composition of the Joint Chiefs of Staff. Leahy's position as chief of staff to the President, a holdover post from World War II, was abolished, and Congress authorized the appointment of a full-time Chairman of the Joint Chiefs. The JCS Chairman would hold rank senior to all other officers and advise the President and the Secretary of Defense. However, Truman's recommendation to allow the JCS a joint staff of indeterminate number was rejected. Congress agreed only to increase the staff from 100 to 210. The 1949 amendments also gave the Secretary more control over the Munitions Board and Research and Development Board.

"Crybabies in the Niches"

This 1949 legislation marked a critical turning point in U.S. military organization away from decentralization toward a highly centralized national defense bureaucracy. "We finally succeeded," Truman noted, "in getting a unification act that will enable us to have unification, and as soon as we get the crybabies in the niches where they belong, we will have no more trouble." At the time, many interpreted the President's comment as a slap at Navy and Marine Corps leaders who had opposed unification and remained unreconstructed.

The Air Force and the Army understood that Forrestal's concept of the Secretary as coordinator had failed and resulted in confusion if not chaos in the defense establishment. The Secretary, bereft of requisite authority, could not make decisions.

Just ahead lay stunning events that would test the new defense setup. Truman announced on September 23, 1949, that the Soviet Union had detonated an atomic device; the American monopoly was broken, with great emotional and political effect in the United States. Symington became increasingly disturbed at what he viewed as the administration's inaction in the wake of the Soviet nuclear explosion. "It is the psychological tendency of humans," he wrote to Johnson, "to become used to danger. So far as this reduces the effects

of fear, it is good. So far as it leads to discounting danger and failing to provide against it, it can lead to disaster."

Frustrated by his inability to convince the administration to build up the Air Force, Symington resigned to take the helm at the National Security Resources Board, just two months before the Korean War erupted in June 1950.

The passage of the amendments did not resolve deep-seated issues between the services. However, the outbreak of war in Korea led to a great expansion of the defense budget and relief from the funding pressure that had stoked interservice rivalry.

The 1949 amendments brought a measure of stability to the defense establishment. The structure has always been imperfect. Today, the challenge to U.S. leadership is to keep the military establishment fine-tuned in a period in which the United States has undertaken vast new international responsibilities.

Part IV

The Korean War



Gen. Hoyt S. Vandenberg, left, Air Force Chief of Staff, and Lt. Gen. George E. Stratemeyer, Commanding General of the Far East Air Forces, leave FEAF Headquarters after concluding a discussion of the Korean situation.

Truman's War

In late November 1950, Chinese Communist troops entered the Korean War in force, driving South Korean forces into retreat. This attack by 250,000 Chinese troops transformed the conflict and precipitated a massive U.S. military buildup. General of the Army Douglas MacArthur, Commander of U.S. forces in the Far East and Commander in Chief of the United Nations Command, emphasized, "We face an entirely new war." Although it may be known as the Forgotten War, the Korean conflict in many ways shaped the American military-political landscape for half a century. China's bold entry into the war forced decisions and generated consequences that remain part of today's military, political, and geographic picture. Korea remains divided between north and south at the 38th parallel, and U.S. forces still stand guard.

The Korean War, though close to World War II in time, was far different. It was an undeclared war, a "police action" that triggered a national emergency and a military buildup. The American military fought the war under restrictions, the first major American war, as one historian observed, that was not fought as a crusade. The conflict resulted in the firing of an American Secretary of Defense and the relief of a popular and powerful military commander; brought the term "limited war" into military usage; and produced the "never-again" school of U.S. officers, military leaders, and government officials committed to the proposition that the United States should not ever again become embroiled in a land war in Asia.

This experience of the Korean War brought about a significant emphasis on the nuclear deterrent and transformed the Air Force's Strategic Air Command into a major pillar of U.S. foreign policy.

Truman's War initially appeared as "Truman's War" in *Air Force Magazine,* November 2000, Vol. 83. No. 11, pp. 54–58.

Fulcrum of Power: Part IV

"Stop the SOBs"

Korea was Harry Truman's war. Under a severe time constraint, the President acted without seeking the consent of Congress or the American people. Truman admonished Dean Acheson, his Secretary of State, with these words: "Dean, we've got to stop the sons of bitches, no matter what, and that's all there is to it."

In his memoirs, Truman recalled his decision to intervene in Korea as the "toughest" decision of his presidency. He took this action without convening the National Security Council. This was ironic in that, once the United States entered the war, Truman placed heavy reliance on the NSC and regularly participated in its deliberations.

His failure to seek congressional approval flowed from Acheson's advice that he should base the military intervention on the President's constitutional authority as Commander in Chief of the armed forces. Truman, it will be recalled, had also decided in 1948 to confront the Soviets with the Berlin Airlift without calling upon the NSC, which had been established by the National Security Act of 1947.

Once Washington had intervened, Truman formed a system through which he held tight control over the conduct of the war. In this regard, he set a precedent as Commander in Chief that would be followed by Presidents for the remainder of the twentieth century. He received daily briefings either from Army Gen. Omar N. Bradley, the Chairman of the Joint Chiefs of Staff, or from a member of the Joint Staff. Truman directed that he give his own approval to all substantive orders concerning the conflict before anyone transmitted them to the Far East Command.

Even though the military chiefs carried out the daily strategic direction of the war, Truman gave increased importance to the recommendations of the National Security Council. He directed that the NSC convene weekly, and he regularly attended these meetings. The President insisted that recommendations requiring his approval be staffed through the NSC. Policy was formulated through this institutionalized structure.

Truman maintained a clear picture of what being Commander in Chief required. Although he wanted all but routine military issues to receive his personal approval before being implemented, he trusted his military advisers, especially Bradley. Moreover, he allowed a theater commander flexibility as long as he followed established policy.

He believed firmly that the Commander in Chief should not meddle in tactical situations. "I am not a desk strategist," Truman emphasized, "and I don't intend to be one." Strategy and tactics were best left to the military, and "I don't expect to interfere in it now."

At the outbreak of war in Korea, Far East Air Forces was commanded by Lt. Gen. George E. Stratemeyer. FEAF was suffering from what Air Force his-



Lt. Gen. George E. Stratemeyer, as Commanding General of Far East Air Forces, addresses a group of new arrivals to the theater in November 1950

torian Robert F. Futrell, with tongue in cheek, described as "an overdose of economy." Its major combat element, Fifth Air Force in Japan, had been trained primarily for defensive operations such as the protection of Japan, Okinawa, and the Philippines. MacArthur protested in early 1950 that his air units were inadequate even to perform the strictly defensive mission as laid down by Washington.

Punishing Interdiction

Nonetheless, Fifth Air Force commanded by Maj. Gen. Earle E. Partridge quickly gained air superiority over the North Koreans and launched punishing interdiction attacks from bases in Japan. Maj. Gen. William F. Dean, commanding the 24th Infantry Division, reported that "without question FEAF's close support sorties had definitely blunted the initial North Korean thrust to the southward." Dean continued, "Without this continuing air effort, it is doubtful if the courageous combat soldiers, spread thinly along the line, could have withstood the onslaught of the vastly numerically superior enemy."

Truman saw right away that the U.S. military required an immediate infusion of funds and resources. As a result, Secretary of Defense Louis A. Johnson knew he was in trouble. Although he claimed to be trimming fat from the defense budget, he and the administration actually had cut deeply into the military's capabilities. In September 1950, Truman decided to replace him with



Secretary of Defense Louis A. Johnson confers with Gen. Omar N. Bradley, the Chairman of the JCS, during a visit to Elmendorf Air Force Base in Alaska in June 1950. The austerity program that Johnson was delegated to execute finally collapsed with the onslaught of the Korean War.

retired Gen. George C. Marshall. Truman described Johnson as an "egomaniac," the biggest he'd ever encountered, "and I've seen a lot." Truman added, "He offended every member of the Cabinet."

Although Johnson initially had been stunned by Truman's request for his resignation, he left full of praise for the President and Marshall. In order to appoint Marshall, Truman requested congressional legislation, since the National Security Act of 1947 prohibited a military officer from becoming Secretary of Defense within ten years of being on active duty. The legislation was drafted, the House and Senate quickly approved, and on September 21, 1950, Marshall became Secretary of Defense.

Meanwhile, MacArthur's stunningly successful landing at Inchon, followed by the Eighth Army's breakout from the Pusan Perimeter and the subsequent drive northward, convinced Truman and Acheson that the North Korean army must be pursued above the 38th parallel and destroyed. Thus, instead of restoring the status quo, all of Korea was to be unified.

In late September, the President approved a directive to MacArthur, stating: "Your military objective is the destruction of the North Korean armed forces. In attaining this objective, you are authorized to conduct military operations, including amphibious and airborne or ground operations north of the 38th parallel in Korea." A U.N. resolution passed in early October gave approval for this decision to unify Korea. It authorized all necessary steps to ensure conditions of peace throughout the whole of Korea.

However, Truman emphasized that MacArthur would not be allowed to cross the borders of North Korea into Manchuria or the Soviet Union. MacArthur was also instructed to use only South Korean ground troops in provinces bordering China and the USSR.



Lt. Gen. George E. Stratemeyer presents the United Nations flag to Brig. Gen. Delmar T. Spivey, Vice Commander of Fifth Air Force, in an October 1950 ceremony.

Troubling Indications

Supported by FEAF, the Allied forces in October 1950 drove northward, and the campaign seemed everywhere successful. In October, however, Allied military leaders picked up indications of Chinese intervention. To better understand this fast-moving military situation and to gain a personal assessment of his Far East commander, Truman traveled to Wake Island in mid-October to meet with MacArthur. Truman later wrote in his memoirs that MacArthur assured him that victory in Korea was around the corner and that Chinese intervention was unlikely. MacArthur looked forward to the end of enemy resistance by Thanksgiving and to the withdrawal of the U.S. Eighth Army to Japan by Christmas.

"No commander in the history of war," emphasized the Far East commander, "has ever had more complete and adequate support from all agencies in Washington than I have." MacArthur again insisted that there was "very little" chance that the Chinese Communists would enter the war, saying, "Had they interfered in the first or second months it would have been decisive. We are no longer fearful of their intervention."

Nonetheless, after the success of the Inchon landings, the Chinese had intensified their threats to intervene in the conflict. The Indian government reported that if U.N. or U.S. forces crossed the 38th parallel, China would send troops into North Korea. Even as the CIA provided evidence that Chinese troops were already in North Korea, Washington discounted the Chinese

threats as no more credible than the numerous other threats made by China over the years against "American imperialists."

Truman's NSC met in early November 1950, and its members noted that China's objectives might include forcing the United States to fight a war of attrition or even driving the United Nations Command from Korea. The point was also made that the Yalu would soon freeze over and become passable without bridges.

The fact is, however, that the U.S. government could not fathom China's intentions, and it did not know, as officials attempted to solve the puzzle, that China was completing a massive infiltration of North Korea, under way since October. It had moved some 250,000 troops at night into the mountains of North Korea, where they awaited combat.

By November 11, 1950, Eighth Army, as it advanced northward, had run into stiff resistance just above the Chongchon River. Eighth's commander, Gen. Walton H. Walker, informed MacArthur that the enemy's resistance included "fresh, well-organized, and well-trained units, some of which were Chinese Communist Forces."

MacArthur decided to launch an offensive on November 24. For nearly two days it went well, but late on November 25, more than 200,000 Chinese troops attacked, driving through the South Korean Army's II Corps and pulverizing the right flank of Eighth Army. In an instant, the war had been transformed.



Lt. Gen. Walton H. Walker, Eighth Army Commanding General, and Maj. Gen. Earle E. Partridge, Fifth Air Force Commanding General, confer in July 1950.

Truman, now deeply concerned, convened the NSC again, emphasizing that the United States had to avoid being sucked into a general war against China. He reaffirmed the prohibitions against bombing Manchuria and Yalu dams and hydroelectric stations.

MacArthur's late November offensive — he called it "a reconnaissance in force" — had brought a massive Chinese response, and critics claimed the United States had suffered a defeat. Truman, though he continued to give MacArthur his strong support, stuck to his conviction that the conflict had to remain "limited." "My decisions had to be made on the basis of not just one theater of operations but of a much more comprehensive picture of our nation's place in the world," Truman explained. "Neither [MacArthur] nor I would have been justified if we had gone beyond the mission that the United Nations General Assembly had given us. There was no doubt in my mind that we should not allow the action in Korea to extend into a general war. All-out military action against China had to be avoided, if for no other reason than because it was a gigantic booby trap."

Heading off General War

The Chinese onslaught left the armed services and the Washington establishment deeply shaken. Gen. Hoyt S. Vandenberg, Air Force Chief of Staff, had all along been concerned that, with the United States preoccupied in Korea, the Soviet Union might make a move westward in Europe. With the move by China into Korea, Vandenberg recommended to the chiefs that the United States attack targets in Manchuria. He also directed Gen. Curtis E. LeMay, head of USAF's Strategic Air Command, to bring his forces to alert status.

At the same time, the chiefs forwarded to the theater commanders a communiqué of warning that read, in part: "The JCS consider that the current situation in Korea has greatly increased the possibility of general war. Commanders should take such action as feasible to increase readiness without creating an atmosphere of alarm." It seemed that major war might soon break out.

This precarious military situation held both dangers and possibilities for the USAF. Tactical Air Command's Ninth and Twelfth Air Forces only a few years earlier had distinguished themselves in Europe during World War II. However, in the short interval between the end of World War II and the start of the Korean War, both had been significantly reduced in size. TAC could put into the air only 11 fighter groups and fewer than 32,000 men. The Air Force had placed top priority on SAC, its nuclear deterrent force. Moreover, in December 1948, the Air Force had reduced TAC to an operational and planning headquarters under Continental Air Command. Ninth and Twelfth Air Forces, in addition to being separate TAC units, became CONAC subordinate units. Consequently, TAC was forced to relinquish administrative and logistic control over its forces, with CONAC allocating them for specific missions or training assignments.

The outbreak of war in Korea immediately caused the Air Force to begin rebuilding TAC. On December 1, 1950, just a few days after China entered the war, TAC was separated from CONAC and restored to its status as a major command. Gen. John K. Cannon, one of the greatest tactical air commanders of World War II, became its leader.

For all the dangers that China's push into Korea posed, it did not shake Truman's conviction that the West's true enemy was the Soviet Union. The Chinese leaders, Truman noted, were "known to be in close relations with the Kremlin." In a special message to Congress on December 1, the President described the Chinese "act of aggression in Korea" as "serving the ends of Russian colonial policy in Asia." Vandenberg, also suspicious of Soviet motives and fearful that the Kremlin would take advantage of the Asian war to cause trouble in Europe, thought it best to avoid getting bogged down in a war of attrition in Asia.

These factors helped to generate a brief international nuclear flap. At one point, Truman's public statements seemed to suggest that the American leader had not ruled out use of atomic weapons in Korea. Subsequently, he made it clear that he was not giving any consideration to nuclear weapons employment, but was instead pushing for a conventional buildup.



Gen. John K. Cannon, one of the greatest tactical air commanders of World War II, stands at the left as he leaves his position as Commanding General of U.S. Air Forces in Europe to assume command of the newly restored Tactical Air Command in January 1951.

Defense Budget Boost

Truman on December 1, 1950, asked Congress to increase the defense budget by a whopping $129 billion (as calculated in late 1990 dollars, compensated for inflation). This amounted to a one-year 35-percent rise. He emphasized that this funding was required not only to sustain the U.N. action in Korea, but also to increase American military readiness "in other areas of the world."

The budget growth continued for several years, too. The three budgets during the Korean War era were as follows:

1951, $366 billion; 1952, $481 billion; and 1953, $400 billion. By contrast, the last prewar budget (for 1950) was only $141 billion.

To Truman, the Chinese attack was merely part of a global strategy directed from Moscow by Soviet leaders. "The aggressors were armed with Soviet Russian weapons," he noted. "From the early days of the attack, it became clear that the North Korean forces were being supplemented and armed from across the frontier. Men and equipment were coming out of these dark places which lie behind the Iron Curtain."

For the Air Force, Truman's military buildup had a major, long-lasting impact. When war broke out, the USAF comprised 48 wings of varying operational capability. After the Chinese intervention, the Joint Chiefs requested a 95-wing Air Force by mid-1952. The vast Air Force buildup was under way.

Subsequent to China's entry into the war — with Truman's decision to limit the war, restore the status quo at the 38th parallel, and preserve the independence of the Republic of Korea — FEAF again performed a critical role, as it did in the earlier stages of the conflict, pounding the invaders and relieving the pressure on Eighth Army. By mid-1951, Seoul had been recaptured, and the war entered a long stalemate.

End of MacArthur

MacArthur, meanwhile, had become high-strung and somewhat petulant after China entered the war. By early 1951, his calls for widening the conflict struck an increasingly sour note in the ears of the chiefs and the President. In April 1951, Truman, thinking that his Far East commander was attempting to circumvent the nation's official policy, relieved MacArthur, replacing him with Army Lt. Gen. Matthew B. Ridgway.

Military historians still recall the testimony of Army commanders that, had Air Force support not been forthcoming, U.N. forces would have been pushed off the peninsula. As a result, the conflict led to a substantial expansion of the Air Force. Soon, the Joint Chiefs were setting the new requirement at 143 wings.

Truman's conduct of the war set a precedent. He became the first U.S. President to confront the possibility of a major war in the nuclear era. He laid down the principle that, in the age of atomic and thermonuclear weapons, wars would have to be fought for limited and carefully delineated political objectives. The era of fighting a war as a crusade ended with the Second World War, in his view. The age of limited wars had been inaugurated.

As Commander in Chief, Truman held a close rein on the conflict. He steadfastly refused to expand the war after the U.N. drive to the Yalu precipitated Chinese intervention. The war remained a "police action," with Truman settling for a stalemate that proved highly unpopular at home.

Perhaps forgotten by the public at large, the Korean War nonetheless made

an impact on the political and military psyches of the United States. There, the war is still very much alive. Decades after it erupted, the Forgotten War is anything but forgotten.



In June 1950, not yet into the fourth year of the United States Air Force's existence, the USAF Chief of Staff sent two groups of B–29s from the 22d and 92d Bombardment Groups to the Far East. This group of B–29s is from the 92d BG assigned to FEAF in Japan and is conducting bombing raids against targets in Korea.

The First Five Years of the First 50

The situation sounded like something dreamed up by a novelist, not reality. A service finally gains its independence. Then, almost immediately, it confronts an urgent requirement to handle multiple foreign crises, carry out racial desegregation of the force, mount a massive airlift in Europe, fend off dangerous roles and missions challenges, survive major budget battles, take its bomber and fighter forces into the jet age, and then fight a prolonged war in Asia.

All this and more happened to the Air Force. It would be difficult to imagine a more unsettling and precarious situation for USAF than that which existed during its first five years.

Emerging from the triumph of World War II and born as a separate armed service on September 18, 1947, the Air Force had to build new organizational structures, develop and deploy atomic weapons–capable forces, create an independent culture, and fend off die-hard enemies. That the fledgling service was able to accomplish these tasks and also deploy first-rate fighting forces to the Korean peninsula is nothing short of astonishing.

After the establishment of the Air Force, Gen. Hoyt S. Vandenberg noted, "We are now the masters of our own destiny," but the reality was that the Air Force was a long way from being on equal footing with the Army and the Navy. Even the formal transfer of functions from the Army to the Air Force would not be complete until late 1949. Maj. Gen. Hugh J. Knerr, the Secretary-General of the Air Board, remarked: "As with any vigorous organization freed from onerous restraint, there is danger of its feeling its oats and lashing out at all obstacles at the very beginning. Such action would be a great mistake, for we simply do not have the muscle on our bones to carry through with such desires."

The First Five Years of the First 50 originally appeared as "The First Five Years of the First 50" in *Air Force Magazine,* September 1997, Vol, 80, No. 9, pp. 52–58.

Stuart Symington, the first Secretary of the Air Force, maintained a clear vision during the early years. The passage of the National Security Act of 1947, and with it the birth of the United States Air Force, presented an opportunity. To Symington this amounted to a "green light" for further action, rather than an excuse for "resting on our laurels." September 1947 marked a first chapter, but it did not constitute a good book. The USAF needed to build a record of accomplishment. It looked as if, during a period of austerity, building a strong Air Force would be difficult.

Front and Center

Symington wanted the Air Force to step out in front on a range of important issues. Coming from a wartime business background at Emerson Electric Company, he wanted first to plant the service on an absolutely sound fiscal basis according to the tenets of American business. The Air Force had to demonstrate to the taxpayer that it could efficiently run its business.

Symington's job would be made more difficult by the Truman administration's postwar budgets and ominous events overseas. The Soviet Union posed an ever-increasing threat. The Czechoslovakian coup in February 1948 brought the Communists to power in that country. Alarmed, President Truman publicly branded Moscow as the major threat to world peace, yet the administration continued to adhere to its austerity program, seriously affecting the military budget. Truman himself admonished Vandenberg, then the new Air Force Chief of Staff, warning, "There are still some of you who are thinking more of representing interests and objectives of your individual service than of interpreting the broad national program and its requirements to your subordinates and to the Congress."

Gen. Carl A. Spaatz, the first Air Force Chief of Staff, and Symington sought seventy air groups, which had been approved by the Joint Chiefs of Staff, as the "bedrock minimum" in force structure. However, the administration's 1949 budget estimate made it doubtful that the Air Force could mount even fifty-five operational groups. Symington vehemently protested to the administration: "We are more shocked at this decision of the Bureau of the Budget than at anything that has happened since we came into government."

The USAF leadership, desperately attempting to attain seventy groups, especially in light of increasing international tensions, fought to gain more than a one-third share of the defense budget. In that it did not succeed. Secretary of Defense James V. Forrestal continued to advocate splitting the defense budget into three roughly equal parts. By early 1948, the Air Force had managed to man and equip forty-seven groups, not all of which were operationally ready. Attainment of the interim, fifty-five-group goal would prove impossible.

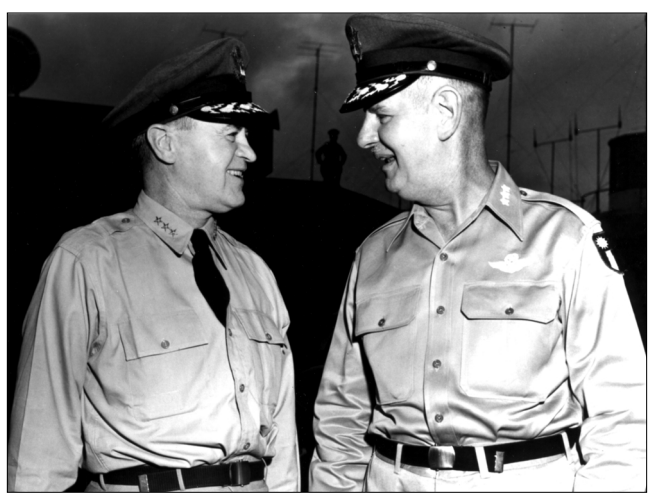
Administration officials, including influential Truman adviser Clark Clifford, believed war in Europe might be imminent, and under the circumstances

Symington thought that Forrestal had not given the Air Force's requirements a fair hearing. "Spaatz and myself never had a chance to present our position to you or even your staff," Symington complained to the Defense chief, "and this is especially unfortunate in that nobody who ever served a day in the Air Force was…a member of your permanent top staff."

The Big Chill

In the spring and summer of 1948, each of the two sides displayed a distinct lack of confidence in the other. A chilly, even contentious, relationship developed between top Air Force leaders and the Forrestal side.

Meanwhile, Symington's desire for the Air Force to step out in front of the other services was realized in mid-1948 when it decided to end racial segregation in its units. In early 1948, Lt. Gen. Idwal H. Edwards, USAF Deputy Chief of Staff, Personnel, began an inquiry into the impact of segregation upon force effectiveness. Edwards's view that segregation in the Air Force was not an efficient use of manpower found an important advocate in Secretary Symington. A pragmatist at heart and in action, Symington had come to the view that it was time to integrate, and he announced his decision well before July 26, 1948, the day that Truman promulgated Executive Order 9981 directing the military to integrate.



Lt. Gen. Idwal H. Edwards (left), when Deputy Chief of Staff for Personnel in 1948, was instrumental in "erasing the color line." In this August 21, 1950, photograph, as Deputy Chief of Staff for Operations, Headquarters USAF, he traveled to Haneda Airfield in Tokyo and is being greeted on his arrival by Lt. Gen. George E. Stratemeyer.

Fulcrum of Power: Part IV

Almost immediately, the newly independent Air Force and the Navy began to clash over roles and missions. Forrestal convened conferences that not only failed to resolve issues, but actually caused the controversy to escalate. The battle raged over who would have responsibility for carrying out the strategic nuclear mission. The Joint Chiefs of Staff had assigned this mission to the Strategic Air Command. The Navy, however, insisted on sharing with SAC the all-important strategic mission, promoting the building of large aircraft carriers.

The issue eventually exploded publicly in 1949 with the Revolt of the Admirals, the Navy calling into question the effectiveness of the B–36 bomber and also anonymously charging that Symington himself was guilty of procurement fraud and malfeasance. Symington and the Air Force were totally cleared by Congress, and the Navy lost the battle in public. Its leadership emerged from the fray looking like a bunch of chastised complainers.

While the Air Force fought bitter budget battles and attempted to build up and establish itself on an equal basis with the Army and Navy, tension in Europe evolved into a direct, potentially hot confrontation in June 1948. The



The controversy over procurement of the B–36, sharing the runway here with an F–80 Shooting Star, led to the extremely rancorous Revolt of the Admirals, with consequences unimaginable at the start.

Soviet Union, seeking to expand its influence in Europe at the expense of the United States, cut off all road, rail, and barge traffic into the American, British, and French zones of Berlin, leaving the city isolated. Army Gen. Lucius D. Clay, the U.S. military governor in Germany, had communicated to Washington in early March that war could come "with dramatic suddenness." Now he ordered a resupply operation that became world-famous as the Berlin Airlift.

Lt. Gen. Curtis E. LeMay, commander of U.S. Air Forces in Europe, organized the initial airlift using C–47 transports. It transported eighty tons of milk, medicine, and flour from Wiesbaden AB near Frankfurt in western Germany to Tempelhof AB in Berlin. C–54s soon joined the operation, and by late July the Air Force had organized Airlift Task Force (Provisional). Maj. Gen. William H. Tunner, who gained fame as commander of the U.S. Air Transport Command "flying the Hump" over the Himalayas in World War II, now assumed command of a redesignated 1st Airlift Task Force. The Americans termed it Operation Vittles; the British called it Operation Plainfare. The overwhelming amount of tonnage was lifted by USAF airplanes.

Heavy Commitment

By the end of September, C–47s had been replaced by rugged C–54s which could carry three times the amount of cargo that a C–47 could transport. At the height of the airlift, the Air Force had committed to action well more than 300 of its total of 400 C–54s. By early 1949, the Berlin Airlift had become highly efficient as a result of the professionalism of the air and ground crews and the traffic controllers. The use of ground-controlled approach meant that the aircraft could be brought in at three-minute intervals. During marginal and instrument conditions, all landing aircraft used GCA equipment. An incoming airplane made one approach; if it failed, the pilot returned home. The stacking of aircraft over Berlin was eliminated.

Tonnage airlifted into Berlin climbed steadily until the daily minimum requirement leveled off at 5,620 tons in October 1948. Coal shipments accounted for two-thirds of all the tonnage, and food accounted for nearly all of the rest. Of other items flown to Berlin, the most publicized was candy dropped by Air Force Lt. Gail S. Halvorsen to German children near Tempelhof in Operation Little Vittles that began in July 1948. The airlift reached a spectacular peak in mid-April 1949 when nearly 1,400 airplanes dropped 13,000 tons in a day. Less than one month later, Moscow announced the end of the blockade.

The Berlin Airlift was a spectacular triumph for the West, and it demonstrated the potency of around-the-clock air transport. It also constituted a warning to American leaders: the danger of war with the USSR was real. During the crisis, Truman even had authorized an open show of force — the movement of some of SAC's conventionally equipped B–29 bombers to



This C–54 Skymaster was used to train pilots for landings at Tempelhof airport during the period of the Berlin Airlift.

England and West Germany. Moscow was expected to draw the appropriate conclusion. The USAF Chief of Staff, General Vandenberg, was under great pressure to deploy all of the Air Force's C–54s to Germany, but he resisted. In the event of general war with the Soviet Union, the Air Force would need to have these aircraft to support SAC's deployment overseas under JCS war plans.

On a Shoestring

The threat of war hanging over Europe during the Berlin Airlift energized the Air Force. Shortcomings, some severe, became evident in what Vandenberg subsequently termed "the shoestring Air Force." In October 1948, Symington and Vandenberg, concerned that SAC was not war-ready, named the no-nonsense LeMay to take immediate charge. In December, the Air Force leadership called a major commanders' conference at Maxwell Field, Alabama, to establish its priorities. The Air Force authorized SAC to rapidly build up its intercontinental nuclear capability. At the same time, the USAF and the administration stepped up their efforts to ensure that bases in Europe would be ready to support SAC's atomic warfare–capable units.

In March 1949, one month before the western allies signed the North Atlantic Treaty founding a defensive alliance, Winston Churchill, while in Boston, remarked, "It is certain that Europe would have been communized like Czechoslovakia…some time ago but for the atom bomb in the hands of the United States."



A SAC B–52 carries a load of conventional (nonnuclear) bombs hanging beneath each wing. All B–52 bombers were capable of carrying nuclear or conventional bombs to any target in the world.

The United States was alarmed by the Soviet threat, concerned about inadequacies in its own military forces, and stung by the USSR's detonation in August 1949 of an atomic device. Truman ordered rearmament planning and directed the State and Defense Departments to conduct a long-range planning study. The result, written for the most part by a young National Security Council expert named Paul Nitze, was called NSC–68. It was the principal blueprint for a proposed rearmament program. Moreover, in January 1950, Truman authorized development of the hydrogen bomb. However, he did not propose major new funding for NSC–68. That would come later.

The next challenge did not come in Europe, but in the Far East. On the Korean peninsula, the Cold War suddenly turned hot. Early on June 25, 1950, Communist North Korean troops attacked South Korea across an improvised boundary separating the nations. The Truman administration had little choice but to intervene, and he did so under the banner of the United Nations. At the same time, the administration, as well as the Air Force, remained gravely concerned about the ever-present Soviet threat in Europe. These pressures finally blew the lid off Truman's "austerity" program. Within a year, Congress had tripled the defense budget, finally providing the wherewithal to carry out Nitze's plans.

The Air Force would have to play catch-up. Washington called upon the USAF during this war to win and hold air superiority, strike strategic North Korean targets, mount air interdiction attacks, support ground forces, and keep in high readiness (and even increase) its atomic striking force, not to mention perform numerous critical airlift missions.

On June 27, Gen. Douglas MacArthur, head of U.S. Far East Command, directed Far East Air Forces, then commanded by Lt. Gen. George E. Stratemeyer, to attack the North Korean ground forces, which it did with F–80s and B–26s. Vandenberg meanwhile sent two groups of B–29s — the 22d and 92d Bombardment Groups — to the Far East to join the war effort. In early July, Stratemeyer organized FEAF Bomber Command (Provisional) under the leadership of Maj. Gen. Emmett O'Donnell Jr., directing him to strike deep interdiction targets and North Korean industries.

On the Attack

The USAF quickly achieved air superiority over the North Koreans with the destruction of more than one hundred enemy airplanes, leaving the North Koreans with almost no air force at all. FEAF Bomber Command destroyed bridges and railways, and Fifth Air Force, headed by Maj. Gen. Earle Partridge, employed its fighters on interdiction missions. Early in the war, however, most of FEAF's sorties were dedicated to close battlefield support of American and allied troops, which had reversed the course of the war on the ground. The Air Force played a major role in stopping the enemy offensive, and by mid-September, Stratemeyer was able to report that the B–29s had taken a heavy toll on North Korean industrial targets. By the end of September, U.N. forces had driven the enemy out of South Korea and were pushing Communist forces northward.

MacArthur then ordered an amphibious landing at Inchon, on Korea's west coast, which cut off enemy forces and paved the way for U.N. troops to move into the North. However, in late October and November 1950, Chinese forces intervened, and a new phase of the war began. The U.S. Eighth Army was driven back, and then recovered, and the war settled into a stalemate that would last until 1953. During the war, Fifth Air Force employed the F–86 Sabre, which more than offset the enemy's Soviet-produced MiG–15. The F–86 proved to be an outstanding fighter, but its great success in the war clearly resulted from the skill of USAF pilots, many of whom were World War II veterans. Led by aces Capt. Joseph McConnell Jr., Col. Francis Gabreski, Col. John Meyer, and Maj. James Jabara, F–86 pilots destroyed 792 MiGs and 18 other enemy airplanes. Of 218 Sabres lost in the war, 76 were downed by MiGs, 19 by ground fire, 15 to unknown enemy action, 13 to operational causes, and the remaining 95 to accidents.

By mid-1952, it was clear that the war held many lessons for the Air Force. In 1948, the Air Force had combined the Air Defense Command and the Tactical Air Command under an entity called the Continental Air Command. Under pressure of war in December 1950, the two original commands were reconstituted and resumed their previous status as major commands. This step, said one air historian, "swept the cobwebs" from the tactical and air defense



F–86 Sabres, pre-1952 vintage

functions, permitting the two major commands once again to report to the Chief of Staff of the Air Force.

The conventional war in Korea, fought for limited objectives, had by 1952 become increasingly unpopular. It spawned a "never-again" school in the United States and ultimately accelerated, on the part of the Eisenhower administration and the Air Force, a drive for an even stronger nuclear force intended to deter the Soviet Union from fomenting such wars in the first place.

With the Cold War having turned hot, the Air Force made every effort to build a truly intercontinental force. USAF's push to acquire overseas bases continued, along with plans to bring the B–47 medium bomber and the B–52 heavy bomber into the operational force. Simultaneously, and of great importance, SAC developed its air refueling capability as a vital range extender. The B–47 test program began in June 1950, but throughout 1951 it encountered difficulties and delays. Not until late 1952 could SAC claim to own an operational B–47 unit.

Appointment in Bar Harbor

In July 1952, with the Korean War at a stalemate and the USAF nearing its five-year mark, the leadership of the Air Force flew to Bar Harbor, Maine, where the then-Secretary of the Air Force, Thomas K. Finletter, maintained a



In this October 1950 photograph, Secretary of the Air Force Thomas K. Finletter administers the oath of office to Lt. Gen. Nathan F. Twining as he is sworn into office as Vice Chief of Staff of the Air Force and given four-star rank. The Air Force Chief of Staff, Gen. Hoyt Vandenberg, in whose stead Twining acted at Bar Harbor, stands between Twining and the Under Secretary of the Air Force, John A. McCone.

summer home. They set out to refine the Air Concept, an air power strategy developed by the Air Staff during the war years. Finletter, Roswell Gilpatric, Gen. Nathan Twining, and Gen. Laurence Kuter (Vandenberg was convalescing from cancer surgery) noted that the war had busted the administration's austerity budget, which had enabled the Air Force to build up to ninety-five wings and prepare to push toward 143 wings. Military appropriations increased rapidly, going beyond specific Korean War requirements to account for the growing direct threat from the Soviet Union. The principal result of this meeting, called the Bar Harbor Memorandum, recommended that the United States rely on a standing intercontinental-range USAF nuclear deterrent force ready immediately to retaliate against any aggressor. The Air Force in 1952 stood positioned to fulfill this national mission, with LeMay's SAC to lead it. In April 1952, the first YB–52 test flight occurred. The 143-wing program called for at least one heavy bombardment wing to be equipped with B–52s.

The Air Force, as it embarked on the creation of a long-range nuclear deterrent in 1952, stood poised and ready to accept the role as the principal military arm of American foreign and defense policy. Behind it lay five years of bud-

get battles, bitter interservice squabbles, international crises requiring herculean efforts, and two years of war. Through this dangerous, contentious, and turbulent period, the Air Force learned a great deal about itself and where it was headed.

The accomplishments of the first five years of USAF stand as a tribute to its leadership and its fighting forces. Even before the end of the Korean War, the Air Force was on the verge of the kind of maturity that in the decade to come would distinguish it as the major military arm of U.S. foreign policy. It faced many complex challenges and suffered some setbacks, but all the while it pressed ahead.

Part V

The Cold War



Stuart Symington resigned as Secretary of the Air Force in April 1950, disappointed that increased funding for more air groups had not materialized after the Soviets demonstrated that they possessed an atomic warfare capability. Accompanying him as he exits the Pentagon from his formal retirement ceremony are Secretary of Defense Louis Johnson at his right and the Chief of Staff of the Air Force Gen. Hoyt Vandenberg at his left. Those standing to the right, on the stairsteps, are, from top to bottom, the Under Secretary of the Navy, Dan Kimball; Chief of Staff of the Army, Gen. J. Lawton Collins; Chief of Naval Operations, Adm. Forrest P. Sherman; Deputy Secretary of Defense, Stephen T. Early; and the Chairman of the Joint Chiefs of Staff, Gen. Omar N. Bradley.

The Blueprint for Cold War Defense

The years between the end of World War II in 1945 and the outbreak of the Korean War in 1950 produced a series of startling international events that forced great responsibility upon the Air Force and resulted, fifty years ago, in a full-scale reassessment of U.S. national security policy. The result of this review was a classified National Security Council document known as NSC–68. It had not been implemented when war broke out in Korea. Indeed, it had not yet even been formally approved. However, NSC–68 marked a milestone in military planning and set the stage for what was to become an enormous U.S. military buildup to counter Communist aggression worldwide,

The creation of Soviet satellite states in Eastern Europe and the blockade of Berlin by the Soviet Union in 1948 led to a decision (NSC–20) by President Harry S. Truman to emphasize atomic strategic deterrence. The same events also led to the April 1949 formation of the North Atlantic Treaty Organization. The Air Force, meanwhile, also reacted to European events. In October 1948, the Secretary of the Air Force, Stuart Symington, and the USAF Chief of Staff, Gen. Hoyt S. Vandenberg, dispatched Lt. Gen. Curtis E. LeMay to Offutt AFB, Nebraska. LeMay's mission: Revitalize the Strategic Air Command and establish it as the major instrument of deterrence and a pillar of U.S. foreign policy.

In 1949, two more stunning international developments convinced officials that the United States had an urgent need to review its national security policy.

"Secretary of Economy"

In September 1949, the United States discovered that the Soviet Union had in August exploded an atomic device; American scientific and military experts had predicted that the Soviets would not have this capability before 1952, and

The Blueprint for Cold War Defense initially appeared as "The Blueprint for Cold War Defense" in *Air Force Magazine,* March 2000, Vol. 83, No. 3, pp. 64–69.

probably, not until later. Secretary of Defense Louis A. Johnson for a while preferred to believe, despite confirming air samples, that the Soviets had not really tested an atomic device at all. He argued that perhaps an accidental laboratory explosion had occurred. (Johnson, known to many as Secretary of Economy, had deeply slashed defense budgets.) Truman, however, accepted as fact that the Soviet Union now possessed atomic warfare capability. The American monopoly was history. Publicly, the administration's response was low-key, but it realized that international politics would never be the same.

Secondly, in October 1949 Mao Tse-tung's Chinese Communists conquered the Nationalists of Chiang Kai-shek and established the People's Republic of China on the Asian mainland. Suddenly, Communist forces were in control of the most populous nation on Earth, one that had until recently been an American ally.

These two events set off alarms throughout the American national security establishment, triggering a reassessment of security policy and military force structure. Symington, for his part, had become deeply concerned — not panicky, but convinced — that business-as-usual was not an option. He strongly pushed for a review of the nation's security posture, and he knew what policies should be changed.

The administration's tight-fisted approach to defense funding had kept the Air Force's force structure at no more than forty-eight groups, well below the seventy groups that Symington thought necessary. Moreover, the Soviets' nuclear explosion had convinced him of the necessity of increased defense spending. The Soviet possession of an atom bomb, said Symington, resulted in "an entirely new and revolutionary factor in strategic planning, which has never before faced U.S. military planners." That factor compelled the Air Force leader to state: "The United States is no longer secure."

Symington argued that, in light of events, it had now become "fundamental" that the United States maintain superiority in strategic atomic weapons–equipped forces. Should the balance shift in favor of the Soviet Union, "disaster could be imminent," he warned.

In late 1949 Symington told Johnson, "It was the judgment of everyone in the government that a reconsideration of military plans and programs should be the result of sober reflection" but that there was "an equal danger" that Washington "may assume a business-as-usual course of inaction." Symington made it clear that, in his, view, the U.S. buildup "will have to be accelerated" because the Soviets had demonstrated that their technical capacity "is much greater than our most pessimistic experts had previously believed."

The Air Force Secretary noted that, should Russia develop the "relatively simple and completely proven process of air refueling," Moscow would have the capacity "to launch atomic attacks against the United States." Thus, the current "increase in groups and modernization of equipment is inadequate in the light of Soviet capabilities," said Symington. The United States required a

retaliatory force in a state of instant readiness that could survive an initial nuclear attack. "These times," noted Symington, "demand the same resolute determination…that this country displayed in war."

"Minimum…Air Force Necessary"

Symington emphasized that, after World War II, Generals Henry H. "Hap" Arnold, Carl A. "Tooey" Spaatz, and Dwight D. Eisenhower, as well as the President's Air Policy Commission, had gone on record as saying that seventy air groups was "the minimum peacetime Air Force necessary for American security," and, on the basis of the present program, "we will have only forty-eight groups in 1955, and only twenty-nine of these will be equipped with modern planes." Consequently, Symington argued that the new situation required a broad, comprehensive review by U.S. planners of the implications of the Soviet possession of the atom bomb.

Truman still wanted to hold down defense spending, reduce wartime debt, and strengthen the postwar economy. Nonetheless, these alarming events of late 1949, along with increasing Soviet intransigence in Europe, convinced administration officials that U.S. military power might now be able to protect American interests in Europe and elsewhere. Congress took action and passed the Mutual Defense Assistance Act basically in the form that Truman had requested. Moreover, the President asked for a review of national security policy.

Adm. Sidney W. Souers, executive secretary of the National Security Council, proposed that the NSC prepare a report to chart American security objectives in peacetime and in the event of war. On January 5, 1950, the NSC directed preparation of a report "assessing and appraising the objectives, commitments, and risks of the United States…in relation to our actual and potential military power."

Shortly before, Truman had established a so-called special committee of the NSC comprising Johnson, Secretary of State Dean Acheson, and Atomic Energy Commission Chairman David E. Lilienthal. The panel was to examine whether or not the United States should develop a hydrogen bomb. Although Johnson opposed a study centered solely on the H-bomb, he agreed to it on the insistence of Acheson and Lilienthal. The special committee recommended that the AEC should determine the technical feasibility of the thermonuclear weapon. On January 31, 1950, Truman ordered development of the H-bomb and a study of its foreign policy and strategic implications.

Truman's decision, in effect, nullified the January 5 NSC directive and gave the task of formulating a major strategic report to a ten-member ad hoc State Department–Defense Department Policy Review Group. Paul H. Nitze, successor to George F. Kennan as director of the State Department's Policy Planning Staff, played the leading part in developing the report, which was to become NSC–68.

Nitze had been a member of the U.S. Strategic Bombing Survey at the end of World War II and was deeply concerned with the need to build up the American strategic deterrent force. Department of Defense representatives on the review group were retired Army Maj. Gen. James H. Burns, Johnson's military assistant, and Air Force Maj. Gen. Truman H. Landon of the Joint Strategic Survey Committee, representing the Joint Chiefs of Staff.

Tricky Dealings with DoD

Acheson and Johnson had joint responsibility to carry out Truman's directive. The State and Defense Departments' review group experienced tough sledding in early 1950, primarily because Johnson thought that Acheson and the armed services were determined to bust his $13 billion defense budget. "Dealing with DoD in those days was tricky," Nitze explained. "Johnson had promised Truman that he would hold the defense budget to $13 billion, a figure that was becoming more unrealistic with each passing day."

Johnson went so far as to issue a directive that all contacts between the State Department and the military services had to go through his office, a practice that everyone knew to be totally unworkable. Roswell L. Gilpatric, Under Secretary of the Air Force from 1951 to 1953, noted in retrospect: "The manner in which Louis Johnson operated was not conducive to getting cooperation and support from the services. You don't accomplish much if you beat the services over the head and make a public spectacle of overruling them."

The report prepared by the State-Defense review group described the world as a place divided into free and totalitarian nations. It painted a grim picture, noting that, should a major war break out, the Soviet Union's forces could roll over most of Western Europe, charge toward the oil-producing lands of the Middle East, launch attacks against Britain, and unleash atomic weapons strikes against targets in North America. The report noted that, according to the CIA, the Soviet Union by mid-1954 would have 200 atom bombs available for combat. It recommended that the United States take steps "as rapidly as possible" to increase its conventional strength and also accelerate production of atomic weapons.

Overall, the NSC–68 document called for "a substantial and rapid" buildup "to support a firm policy intended to check and roll back the Kremlin's drive for world domination." However, from a "military point of view, the actual and potential capabilities of the United States, given a continuation of current and projected programs, will become less and less effective as a war deterrent," said NSC–68.

The NSC report deliberately avoided addressing the issue of cost, although the review group's best estimate indicated that annual funding of about $40 billion (in 1950 dollars) was a proper goal. To have grappled with the funding issue, however, potentially would have damaged acceptance of the report.



Roswell L. Gilpatric receives the oath of office as Assistant Secretary of the Air Force in May 1951 from Secretary of Defense George C. Marshall. General Marshall was Truman's choice to replace Louis Johnson in September of the the previous year. Gilpatric's term as an assistant secretary lasted five months, after which he was selected to become Under Secretary of the Air Force.

Acheson emphasized that the omission of the cost factor "was not an oversight" and that the objective of the paper was to "bludgeon the mass mind of top government."

The Five Major Tasks

The authors of NSC–68 pointed to five major tasks for the military: defend the Western Hemisphere; protect the mobilization base; conduct offensive operations to destroy "vital elements of the Soviet war-making capacity" and blunt the enemy's offensives; protect bases and lines of communication; and provide aid to allied powers. The report concluded that a major buildup provided "the only means short of war which eventually may force the Kremlin…to negotiate acceptable agreements on issues of major importance."

The Joint Chiefs endorsed the report, and on April 7, 1950, the Secretaries of Defense and of State forwarded it to Truman, who on April 12 sent it to the

National Security Council for additional study. Truman wanted more specifics: "I am especially anxious that the council give me a clearer indication of programs that are envisioned in the report, including estimates of the probable cost." This last comment by the President may well have reflected Bureau of the Budget opinion that NSC–68 exaggerated the Soviet threat and oversimplified military solutions to the problem. In addition, Truman directed that the Council of Economic Advisers review the report. "I will not," he emphasized, "buy a pig in a poke."

Symington welcomed NSC–68. "The report is strong," he observed to Johnson, "and we believe that, under current world conditions, this country has gone too far in disarmament." The Air Force Secretary was aware that the report had "serious and far-reaching consequences," but Symington recommended that it be supported and, moreover, acted upon. He had been disappointed that increased funding had not materialized for more air groups following detection of the Soviet nuclear explosion. His frustration had increased in early 1950, and he decided to leave his Secretary's post, informing Truman that he could no longer remain responsible for an underfunded and underequipped Air Force. In April 1950, before war came to Korea, Symington left and accepted the chairmanship of the National Security Resources Board.

Truman, meanwhile, was concerned about the report's conclusions. In April, Pentagon chief Johnson asked Congress for an additional $300 million in authorizations for aircraft procurement. In early May 1950, the House increased the Pentagon budget authority for fiscal 1951 (which was to start on July 1, 1950) by more than $383 million. Subsequently, a Senate appropriations subcommittee proposed additional increases to raise the $13 billion defense budget to $15.6 billion. (All of the figures are in then-year dollars.)

The administration's stringent economy drive was showing signs of cracking. Still, Truman stalled on NSC–68. His delay reflected a desire to give the Bureau of the Budget more time to assess cost estimates.

The Final Push

It took massive Communist military aggression to force a rapid, large-scale military buildup of the type envisioned by the NSC report. On June 25, North Korean Communist forces poured across the 38th parallel in a naked attempt to conquer its free neighbor to the south. The Truman administration determined that the Communists had to be confronted and stopped in Korea, that a failure to do so would lead to more aggression, perhaps in Europe. As Truman put it: "Each time that the democracies failed to act, it encouraged the aggressors to keep going ahead."

Soon came an end to the tight postwar defense budgets. In a sense, Truman's actions vindicated the call by NSC–68 for a sustained buildup of both conventional and nuclear forces. This leaves unanswered the speculative

question of whether or not a major increase in defense spending would have occurred without the Korean conflict. What seems probable is that Truman would have supported an increase based upon NSC–68, but not the huge buildup that eventually came about as a result of the war. Overall, however, the evolution of NSC–68 marked a milestone in postwar defense planning because it set a kind of benchmark between the national economy and the military force structure, and between short- and long-term national interests.

In September 1950, three months after the North Koreans attacked their neighbor, Truman finally approved NSC–68. The administration was forced to reorder its priorities. The Korean War shattered the historic American policy of relying upon a small peacetime military establishment and led to the adoption of a defense budget in excess of $50 billion as well as a 95-wing Air Force by mid-1952. Overall, defense appropriations increased from $14.2 billion for fiscal 1950 to $47.3 billion for fiscal 1951 and to $59.9 billion for fiscal 1952.

NSC–68 formed a bridge between Truman's post–World War II retrenchment policy and the buildup necessitated by the Korean War. It in effect corroborated the charge that the Truman-Johnson defense budget bore little or no relationship to requirements, with a major consequence that Secretary Johnson was forced to resign in September 1950. The conflict in Korea was exactly the kind of war ("piecemeal aggression") anticipated by NSC–68.

The immense increase in the defense budget over the several fiscal years after the outbreak of war followed the path charted by NSC–68. And the world sketched by this report — presented in the grimmest of colors — provided a conceptual and practical framework for the decades-long post-Korea Cold War. The U.S.-Soviet confrontation heated up. The era of nuclear deterrence dawned. Eventually, with the arrival of the Eisenhower administration in 1953 and its "New Look" military policy, the Strategic Air Command under LeMay would become the linchpin of the nation's Cold War, anti-Soviet foreign policy.



Architects of the "New Look" policy, President Dwight D. Eisenhower and his Secretary of State, John Foster Dulles, appear together here in a 1956 photograph. New Look provided the foundation for the Eisenhower administration's national security program.

The New Look in Retrospect

…the only war a nation can really win is the one that never starts. When reason, good will, and the accommodation of competing national interests give assurance of keeping the peace, the maintenance of deterrent forces will be unnecessary. Until that day comes, the striking power of atomic weapons in the hands of this country is a prerequisite of national and world security.

— Gen. Hoyt S. Vandenberg, August 1949

…let us give priority to striking power which, by common consent, has the greatest deterrent influence.

— John Foster Dulles, June 1952

The amassing of Soviet power alerted free nations to a new danger of aggression…It instilled in the free nations — and let none doubt this — the unshakable conviction that, as long as there persists a threat to freedom, they must, at any cost, remain armed, strong, and ready for the risk of war.

— President Dwight D. Eisenhower, April 1953

The summer of 1973 marked twenty years since the United States adopted a defense policy that elevated the strategic nuclear deterrent to a position of uncontested primacy in the American defense establishment. The policy, which came to be known as the New Look, was to have a wide-ranging impact on foreign and defense affairs and military force structures.

Establishment of the New Look in 1953 as the foundation of the Eisenhower administration's national security program was attributable primarily to

The New Look in Retrospect initially appeared as "The New Look in Retrospect" in *Air Force Magazine,* Vol. 57, No. 3, March 1974, pp. 48–51.

technological advance and historical circumstance. Development of nuclear weapons and their means of delivery, together with the experience of the Korean War, a desire for conservative economic policy, and the military-political threat of the Soviet Union combined to make the New Look policy especially compelling. It was not a completely new concept, but rather an amalgam of new and old, based on what officials, at that point in history, judged to be the successes and failures of previous national policies.

Postwar Tensions

World War II had changed many things — not least of all, American attitudes about war and peace. Postwar leaders and many citizens were convinced that the road to World War II might have been avoided had the United States earlier shucked its disinterest in world affairs. Pearl Harbor drove the last nail into the coffin of the prewar brand of isolationism. The mistakes of the past must not be repeated. America would play an assertive world role. There would not be another Pearl Harbor.

Thus, though flushed with a blend of determination and idealism, the United States, its military establishment dismantled, was unprepared for what followed. Crises with the Soviet Union — clashes over Iran, Greece, Turkey, evolution of Soviet satellites in Europe — marked the onset of the Cold War. In June 1948 came the Berlin blockade. The ensuing airlift upset Russia's calculations and expectations; from the Soviet view, the blockade had become counterproductive by May of the following year. Instead of forcing an American and Western pullback, the Berlin confrontation had produced the opposite — resolute American determination, which in April 1949 created the North Atlantic Treaty Organization.

With the Berlin blockade over, tensions eased, and there seemed a chance for respite, if not détente. But meantime, the Chinese Communists were routing Chiang Kai-shek's forces, and in August 1949 the Soviets detonated an atomic device. It was, as SAC Commander Lt. Gen. Curtis E. LeMay observed, a whole new ball game. In early 1950, LeMay said the United States faced a crisis equal to the Second World War. By that time, the Communists had won in China, and Mao Tse-tung and Stalin had begun talks that culminated in February 1950 in the Sino-Soviet Pact, a harbinger of the Korean War.

The Truman administration reacted to the Soviet atomic test with a broad reappraisal of national security policy that resulted in promulgation of NSC–68, the first National Security Council paper to comprehensively analyze national strategy and make appropriate recommendations. Approved by the President in April 1950, this paper — deliberately without specifying cost — called for a substantial long-range military buildup. It belatedly but forcefully reaffirmed what the onset of the Cold War had already set in motion — a determination by the United States to stand firm and help its European allies

in the face of Soviet provocations. It also forecast that the Russians would have a substantial atomic weapons delivery capability by 1954.

However, in June 1950, before recommendations of NSC–68 could be implemented, the Korean War broke out. This event not only transformed the administration's plans overnight, but it was to have a profound effect on American history and public attitudes regarding commitment of U.S. forces to a war overseas. One of its immediate results was a military buildup and, subsequently, a $50 billion defense budget. What NSC–68 had only recommended was brought dramatically to fruition by the North Korean invasion of the Republic of South Korea. Subsequent to the Red Chinese intervention in October 1950, a stalemate ensued, and the war became vastly unpopular with the American people.

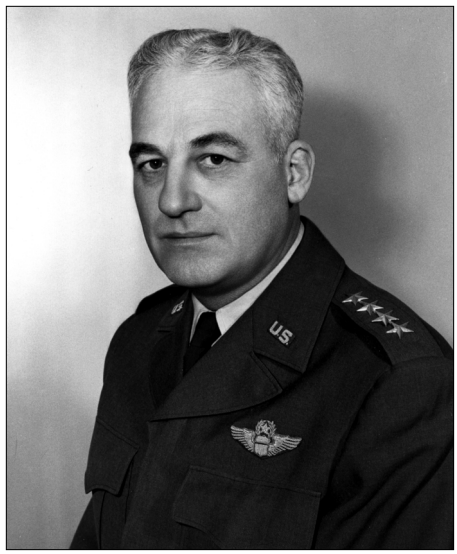


Lt. Gen. Curtis E. LeMay had served as Commander in Chief of SAC for less than a year when the Soviets detonated an atom bomb in 1949.

End of the "Balanced Force"

Meanwhile, the war had broken the Truman administration's "balanced-force" concept and its almost equal three-way split of the defense budget. In October 1951, the Joint Chiefs of Staff authorized a 143-wing Air Force (Congress would authorize the money in the summer of 1952), while it held the Army and Navy approximately to their then-existing levels. The Korean War had come in the wake of a bitter dispute between the Navy and the Air Force over the atomic mission, culminating in 1949 in the B–36 hearings — the Revolt of the Admirals — when the Air Force had successfully presented its case for the bomber and the strategic atomic-warfare mission.

As the war dragged on and 1952 dawned, the air leaders sensed an opportunity. They realized that no matter who won the election in November, a reappraisal of military policy would be high on the agenda. In the summer of 1952, Secretary of the Air Force Thomas K. Finletter, Air Force Under Secretary Roswell Gilpatric, Acting Chief of Staff Gen. Nathan F. Twining (Gen. Hoyt S. Vandenberg was ill with cancer), and Acting Vice Chief Lt. Gen. Laurence S. Kuter (Deputy Chief of Staff, Personnel) laid the foundation for what sub-



Gen. Nathan F. Twining, acting for Gen. Hoyt S. Vandenberg, Chief of Staff of the Air Force, who was ill with cancer, helped draft the Air Force contribution to the New Look policy in the summer of 1952.

sequently became the Air Force's contribution to the New Look of the Eisenhower administration.

They were convinced that the period ahead would be marked by a weapons revolution. (The United States would explode a hydrogen device on November 7, 1952.) They had finally been authorized to create by mid-1955 an Air Force they thought adequate for the nation's needs. Moreover, the public now seemed to accept the idea of a ready force sustained over a long period, provided the cost was acceptable.

The traditional American aversion to a standing military establishment was fading before Korea. The war sealed this historic transformation. What would be the objective of such military forces? As Secretary Finletter emphasized, the nuclear deterrent was being built with the hope that it would never be used. "If it has to be used," he said, "it will have proven to be a failure." The goal was peace.

The Eisenhower Environment

In November 1952, Dwight D. Eisenhower was elected President. His ideas on military policy were shaped by his long experience as a soldier, his understanding of American history, the events of the Cold War, the Korean War, and the influence of the men he would now bring into his administration.

Eisenhower played a larger role in formulating the New Look than has generally been recognized. He was its major architect. He held strong beliefs about the human and material waste of war, grounded in his own deep humanity and life as a soldier. And he realized the American people would not soon tolerate another prolonged war, especially an indecisive stalemate.

Korea, therefore, had made a deep impression. Eisenhower determined to end it, believing the United States should not again become involved in a land war on the Asian mainland. This view undoubtedly reflected the deep desire of the American people. Thus, he would shape his administration's military policy around the strategic nuclear deterrent.

Eisenhower also wanted a balanced budget and reduced taxes. The defense budget would have to be cut. He had been influenced by John Foster Dulles, Secretary of State–designate, who thought that containment was overly defensive. Adm. Arthur W. Radford — chosen by Secretary of Defense–designate Charles E. Wilson to become JCS Chairman — was also persuasive, arguing that U.S. forces were overextended and that a policy of strategic retaliation emphasizing air and naval power best fitted the times.



Adm. Arthur W. Radford argued for a policy of strategic retaliation that included air and naval power.

Finally, George M. Humphrey, to become Secretary of the Treasury, articulated conservative economics and also thought the Strategic Air Command should be afforded top priority as the major instrument of deterrence. Humphrey had been taken by General LeMay's idea of SAC as an elite force, always ready to react. The President-elect believed that the nation's strength should not be allowed to erode by getting sucked into wars overseas, by deploying substantial forces overseas, and by reckless spending. His advisers' views seemed nicely to complement his own.

The way the Korean War ended in late July 1953 — preceded in May by a threat conveyed by Secretary Dulles to the Chinese through Indian diplomats in New Delhi to carry the war, including perhaps atom-bombing, to the Chinese mainland — was a harbinger of what later became known as the massive retaliation strategy of the Eisenhower administration. Subsequently, Korea would be understood as the first triumph of this strategy, initially enunciated by Dulles in February 1952, before the Americans had tested the hydrogen bomb and begun the election campaign. Like Eisenhower, Dulles was sensitive to the nation's mood and to the importance of congressional support.

Contrary to popular conception, Dulles was not a rigid cold warrior who willingly went to "the brink." (He especially disliked the word "brinkmanship.") Until mid-1946 Dulles had believed the Soviet Union would coexist peacefully with the West. He judged the Russians to be shrewd and realistic, devoted to their national interest. The events of 1946–48 then convinced him that dangerous confrontations would precede cooperation. The United States would require deterrent forces. To Dulles, deterrence was political and psychological as well as military. Like most postwar American political and military leaders, he thought that prewar isolationism was a mistake and that World

War II might have been avoided or its course changed had not the United States generally remained aloof from world affairs. War was not inevitable. However, the Korean War reinforced his view that the greatest danger was Soviet miscalculation. The Russians were willing to take risks.

The New Look — A Comprehensive Policy

The New Look was a great deal more than military policy. The President wanted a *national security policy* to mesh his economic program with military and foreign policies. He had determined to develop a long-range program that would avoid reassessments based on each change in international political relationships or in the military balance. The Truman administration had come to this same conclusion just before Korea.

Early in his administration, Eisenhower struck a keynote: "maximum safety at minimum cost." Subsequently, Charles E. Wilson turned this into "A Bigger Bang for a Buck." The problem, the President observed, "is [how] to achieve adequate military strength within the limits of endurable strain upon our economy. To amass military power without regard to our economic capacity would be to defend ourselves against one kind of disaster by inviting another." But the free world, he noted, could not remain impassive, "leaving forever to the aggressor the choice of time and place and means to cause greatest hurt to us at least cost to himself."



Secretary of Defense Charles E. Wilson was charged with meshing President Eisenhower's economic program with military policy.

Meanwhile, in the spring of 1953 the Air Force had published a doctrinal manual emphasizing that air power was synonymous with the strategic deterrent. Wars of attrition had proven tremendously costly. Now the "exploitation of the air medium coupled with the development of new weapons systems" enabled the nation to emphasize "the global aspects of national security." Air forces in-being were the "paramount consideration for the security of the United States" and were likely to be dominant in war. They should be kept ready, able to launch a powerful retaliatory attack. This doctrine meshed almost perfectly with the Eisenhower administration's evolving policy.

In May 1953, President Eisenhower appointed a group to examine

national security and make appropriate recommendations. Called the Solarium Conference (after the White House sun room where the group first convened), it identified three possible strategies: containment; retaliation, should the Soviets move across a specific line; and a policy of liberation to overthrow European satellite governments. Separate task forces then considered each alternative, and in July, reports were sent to Eisenhower.

With the end of the war in Korea following by four months Stalin's death in March 1953, it seemed the administration might be able to plan strategy in a quiescent period. However, on August 12, 1953, the Soviets conducted a hydrogen bomb test, almost precisely four years since their atom bomb test and less than ten months after the American thermonuclear test of November 7, 1952.

Thus, in the late summer of 1953, the National Security Council deliberated on the Solarium reports and the Soviet hydrogen bomb detonation. By October, the administration had decided to emphasize massive retaliatory power as the major deterrent to aggression against the United States and Western Europe. American conventional forces would be reduced, and the Europeans would be encouraged to maintain a minimum feasible defense. Thus, though the New Look's Air Force objective would ultimately be set at 137 wings by June 1957 — slightly lower than the Truman administration's 143 wings, which had been planned for 1955 — with the corresponding reduction in ground forces, the greater overall emphasis would be on air power.

In Harmony with the Times

Always underlying the New Look was the concept that the United States could not be strong everywhere at once. Nothing was more important than the nation's general-war capacity, an idea that Air Force Chief of Staff Gen. Nathan F. Twining (who had replaced Vandenberg on June 30, 1953) articulated to the Joint Chiefs and the administration. Twining had almost immediately assumed an important role, and in the fall of 1953 he was instrumental in the adoption of the 137-wing program, which replaced a 120-wing objective (a concept that had been briefly considered to replace the 143-wing objective). Eisenhower himself recalled that he was, above all, determined not to waste manpower in "costly small wars." The United States would not play into the hands of potential enemies. America, he said, would not be blackmailed "into placing limitations upon the types of weapons we would employ."

The general cast of the New Look was shaped largely by Korea, conservative economics, and advances in technology. Strategic air power was the key, and Dulles approvingly cited Winston Churchill's term, "supreme deterrent," to describe it. To the Secretary of State, strategy should be based on America's "special assets" — air and naval power. "The free world," Dulles emphasized, "must make imaginative use of the deterrent capabilities of these new weapons."

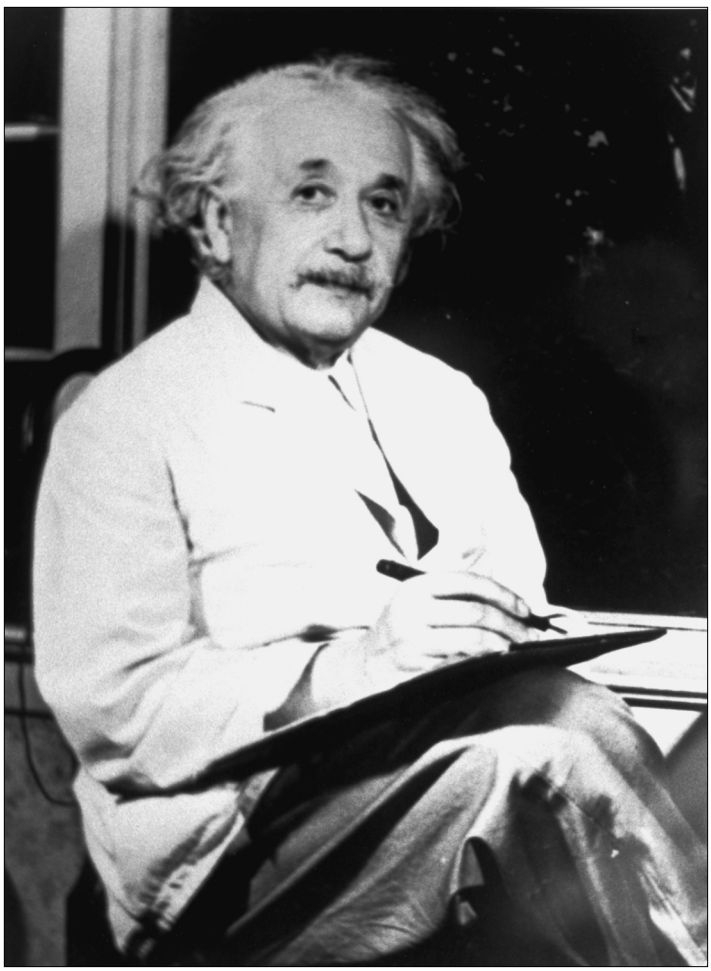
Fulcrum of Power: Part V

Subsequently, the Eisenhower administration (and especially Dulles with his "Massive Retaliation" speech of January 1954) would be criticized for relying too heavily on nuclear retaliation. Much confusion and debate would follow the Dulles address, and shortly thereafter he was forced publicly to explain. Nonetheless, the New Look reflected America's nuclear superiority. *It was thus in harmony with the singularly American view that technology, especially air power, was this nation's best weapon.* In retrospect, the threat of nuclear retaliation probably prevented other Communist-inspired military thrusts.

A myth long sustained has been that President Eisenhower gave Dulles carte blanche to formulate and implement national security policy. Eisenhower thought Dulles unusually competent in foreign affairs, but the Secretary of State, better than anyone, realized he did not have sole responsibility for formulating American policy. The President discussed policy with him, and the Secretary always knew exactly what Eisenhower wanted.

With the perspective that hindsight confers, the New Look seems to have been a policy in harmony with the times. It was not wholly original, having borrowed from the Truman administration. Eisenhower's view of the Soviet threat was similar to Truman's. The general idea of "maximum safety at minimum cost" had been expressed many times before by Secretary of Defense James V. Forrestal and President Truman, among others. Nonetheless, in 1953 it was the Eisenhower administration that grasped the opportunity presented by scientific advance and historic circumstance to proclaim a New Look in defense policy. Technology, not manpower, was this country's strong suit — a view that had been forcefully articulated in November 1944 by Gen. "Hap" Arnold when he had directed establishment of the von Kármán Committee to study scientific and technical options that were, or would become, available to the Air Force.

Increasingly, the New Look will be understood as a remarkably successful national security program. It provided coherence and a sense of national direction. We can appreciate now how strikingly attuned it was to the American psyche and tradition.



Dr. Albert Einstein, concerned that the Nazis were ahead of the democracies in building an atomic weapon, wrote a letter to President Roosevelt in August 1939, urging the United States to become similarly involved.

Scientists, Politics, and the Bomb

…The emergence of scientists into the mainstream of American political life is one of the great events of American history.

— Robert Gilpin, *American Scientists and Nuclear Weapons Policy,* Princeton, 1962

Six days after the atom bomb bad been released over Hiroshima, the U.S. government made public a general administrative and technical history of the secret bomb project. Prepared by Dr. Henry D. Smyth of Princeton University, the report emphasized that the questions posed by the new atomic age were "not technical questions; they are political and social questions, and the answer given to them may affect all mankind for generations…" Subsequent events have proved Dr. Smyth's observation.

The years since Hiroshima have been cataclysmic. The world has witnessed the inception of the Cold War, the Berlin Airlift, the triumph of Chinese communism, the Korean conflict, the transition from the atomic to the hydrogen age, the death of Stalin, the Hungarian Revolution, and the dawn of the space age, along with a new era of weapons technology. Most serious students of mankind agree, however, that central to the world situation today are two overpowering elements: the Cold War between communism and freedom, and the stark weapons reality of the thermonuclear era. It has been the convergence of these two forces that has propelled the scientist to the center of the national and world stages.

The reasons why the scientist finds himself in a peculiarly unique position in American democratic society are not difficult to find. The most obvious and important is that he has made possible the great advances into the cosmos and

Scientists, Politics, and the Bomb initially appeared as "Scientists, Politics, and the Bomb" in *Air Force Magazine,* October 1962, Vol. 45, No. 10, pp. 44–48.

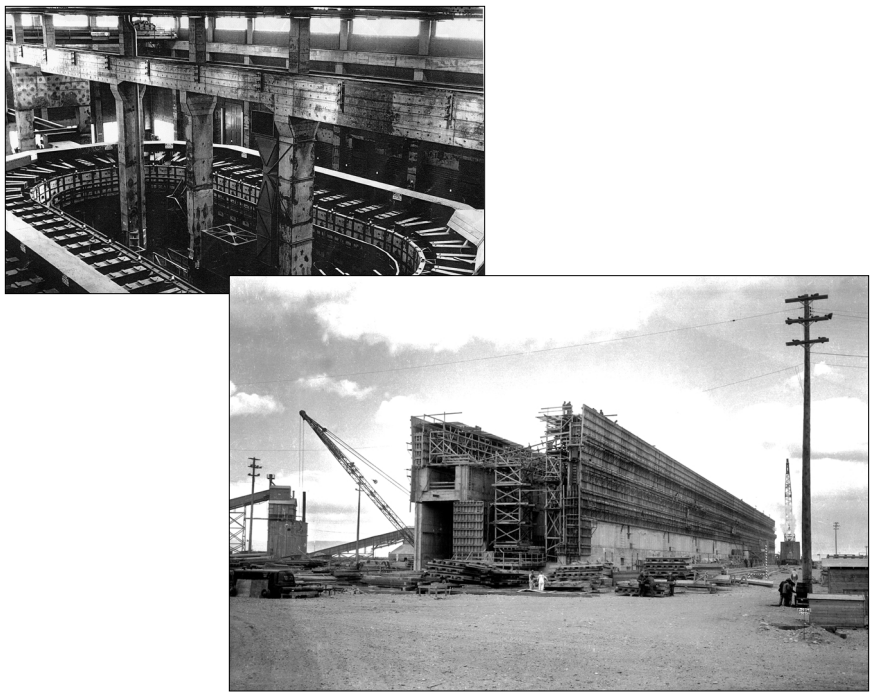
has provided the United States with the tools of strategic deterrence in the age of the Cold War. Thus, he is at once respected and admired for his intelligence, specialized knowledge and training, and leadership in a realm crucially significant to our survival. But this is only the side of the equation that has its roots in the scientific revolution; the other side is political and is a result of the eternal truth about man as a political animal.

The advances made by scientists thrust them into the maelstrom of human events and forces. The discovery of atomic fission three months after Munich; the danger that the Nazis were ahead of the democracies in building an atomic weapon; the now-famous letter signed by Dr. Albert Einstein on August 2, 1939, and addressed to President Franklin Roosevelt; and the decision to build the bomb — these events contained powerful political implications. The work accomplished by scientists on the Manhattan Project in behalf of the United States and the Western democracies culminated in the mushroom clouds over Hiroshima and Nagasaki and brought the war in the Pacific to its fateful conclusion.

In retrospect, however, this was neither a beginning nor an end. It was not the start of world tranquility nor the end of bloodshed and tension. For many scientists, it was a period of agony. While their work had played so important a part in wartime and conferred upon them prominence and power, they were restless and uneasy because of the use made of their scientific research. Dr. J. Robert Oppenheimer declared that "…the physicists have known sin and this is a knowledge which they cannot lose." Guilt and anger were feelings not unknown to some of the scientists. Dr Norbert Wiener of the Massachusetts Institution of Technology refused an Air Force request in 1946 for a reprint of a paper relating to guided-missile technology. Deep feelings brought scientists together in attempts to find common ground and solve mutual problems of social responsibility and moral ethics. The Federation of Atomic Scientists and later the Federation of American Scientists were founded; in 1950 a smaller group entered the pacifist Society for Social Responsibility; and in Chicago, publication of the *Bulletin of the Atomic Scientists* was begun.

The scientists had entered the "techno-political age." The meaning of the new term became more clearly defined in the controversy accompanying the decision to build the hydrogen bomb. The report of the General Advisory Committee to President Truman against a crash program on the hydrogen bomb aggravated the split between those scientists who believed the bomb should be built and those who argued that a negative decision would mirror the U.S. desire to end the arms race. Subsequently, the revocation of Oppenheimer's security clearance by the Atomic Energy Commission and the growing debate within the scientific community over disarmament, arms control, and a nuclear test ban agreement further divided the scientists.

This cleavage has continued — and indeed, has accelerated in some aspects — to the present day. Before considering the highly charged problems of the



The atom-bomb program, a direct result of Einstein's letter to President Roosevelt, became known as the Manhattan Project. An electromagnetic plant utilizing a race-track configuration to separate uranium appeared at Oak Ridge, Tennessee, and the world's first large-scale plutonium separation facility (its appearance resembling an ocean liner) appeared at the Hanford, Washington, site.

present and future, it is pertinent to ask: What have we learned from the past? The following points suggest themselves:

- •American scientists *agree* that the primary goal today is that the United States and the free world continue to live in freedom, that the world be spared a thermonuclear war, and that scientists continue to pursue pure research, free from constraint.
- •Scientists can make large contributions to U.S. national policy formulation.
- •Scientists hold political views as varied and impassioned as other Americans.
- •Scientists have no peculiar gifts that endow them with special political insight.
- •Rapport and understanding must exist between scientists and politicians for the benefit of national security.

- It is impossible — and undesirable — to separate scientific and political elements from the great and crucial problems of today.
- There must be greater awareness of the political context within which scientific advice is given.
- It is as dangerous to generalize about scientists as it is to attempt to categorize the military, journalists, or any other profession.

Within the context of these points, it can be seen that the full-fledged entry of scientists into politics has been on two levels: first, as advisers to the federal government or in ancillary roles as requested by the government; and second, as individuals or in groups lobbying for a specific point of view or legislation. The seventeen years since the United States entered the atomic age have clearly shown that no matter what point of view scientists espouse, they have expressed themselves sincerely and passionately, if not always effectively and wisely.

Scientists have made valuable contributions to national security in the laboratory and within the high advisory councils of government. It has become clear, however, that in many cases scientific opinion, while honestly held, has been based upon political judgment. The now-classic example has become the negotiations with the Soviet Union on a test-ban agreement involving two eminent and highly respected scientists — Dr. Hans Bethe and Dr. Edward Teller. Bethe argued in an article in *The Atlantic* almost exactly one year before the Russians broke the nuclear test moratorium that the Soviets were conducting at Geneva what he considered to be "honest negotiations." It must be remembered that Bethe's point of view was expressed after Dr. Albert Latter's discovery of the decoupling theory which showed it would be possible to muffle or decouple low-yield blasts underground in large holes without being detected by current methods and equipment. Thus, with international controversy raging over the "big hole" theory, Bethe posed *the* question: "Can we really assume that the Russians would go to the trouble of negotiating a test cessation treaty just in order to turn around the next day and violate it?" His own reply, based upon having participated in the talks at Geneva with Soviet scientists, was that "I believe that they are sincere in wanting the test-cessation agreement and do not intend to cheat on it."

Bethe's position — apart from scientific opinion on the big-hole theory which was unanimous in stating that it would be possible to decouple underground test explosions — rested on the political judgment that we could trust the Soviets. He believed that the risks involved were outweighed by political advantages. To Edward Teller, the risks were in fact far too great. It was, and remains, his position that "an inclusive treaty could be neither policed nor enforced. It would place the United States in the untenable position of basing our national security upon Russian truthfulness." Thus, the battle was joined.

Unfortunately, arguments advanced by adherents of these two major protagonists have not always been free from emotionalism, bias, and sensational-

ism. And again, it must be observed that many of these polemics found their rationale in political assumptions. While attacking Teller for "factual error and emotionalism," eight scientists (Jay Orear, William F. Schreiber, Gerald Holton, Salvadore E. Luria, Edwin E. Salpeter, Philip Morrison, Matthew Meselson, and Bernard T. Feld) assailed him in terms such as "madness," "incinerate your hometown," "self-deception," and "arrant nonsense." To this group, Teller's position was "preposterous" and an "escape to an insane world." These scientists, following Dr. Erich Fromm, emphasized that too much of the arms-control dialogue rested on what is *possible* rather than probable. And yet, they declared: "…We see that the real danger is neither inadequate weapons nor unpreparedness to survive, but the *possible* triggering of nuclear war by self-deception, miscalculation, or accident." And further, "the start of…a massive shelter program *might* well trigger nuclear war." (Italics added.)

Recently, several studies (including books by Teller, Lewis Strauss, and Gen. Leslie Groves) and movements by scientists themselves have pointed to even more political activity by segments of the scientific community. Also, the Kennedy administration has clearly indicated its intention to bring more scientists into government. In addition, the Congress of Scientists on Survival held its first national conference on June 17, 1962, and attempted to devise a program for survival in the nuclear age. According to *Washington Post* reporter Howard Simons, "…All attempts to define the basic aims of the organization or to pass substantive resolutions on a wide range of challenges met with emotional debate and counterdebate."

At the same time, Dr. Leo Szilard, an eminent atomic scientist who convinced Einstein that he should write the letter that resulted in the formation of the U.S. atom-bomb program, has proposed a lobby that would bring scholars and scientists to Washington. In an attack on U.S. national policy and



Gen. Leslie Groves and J. Robert Oppenheimer stand among the remains after the plutonium weapon named Trinity was exploded at the Alamogordo Bombing Range, south of Los Alamos, New Mexico, in July 1945.

majority opinion, Szilard stated that people brought to Washington by the lobby should "have sufficient passion for the truth to give the truth a chance to prevail." While a number of U.S. senators possessed insight into the world situation and were concerned about it, "mostly they lack the courage of their convictions," according to Szilard. It was his opinion that since "in Washington, wisdom has no chance to prevail at this point," what was desperately required was "the sweet voice of reason."

Possessed of a fertile imagination, Szilard had earlier proposed — in the form of fiction, but with seriousness, irony, and some sarcasm — a system of "mined cities," whereby fifteen large American and Russian cities would be mined with underground hydrogen bombs. Fortresses located under American cities would be manned by Russians, and vice versa. Scientists' activity in behalf of peace movements, sometimes bordering on the pacifistic, is a direct result of guilt feelings over the use of the bomb and a sincere, idealistic drive to find a way out of the "arms dilemma." Dr. James R. Killian Jr. has suggested an eleven-point program for putting science to work for peace. He stresses international activities, "primarily peaceful and benign…managed by nonpolitical, private, scientific organizations." To Killian, science and peace are inseparable and call for world scientists and engineers "to deploy themselves for peace." Similar peace programs are based on the assumption that international scientific activity can always be counted upon to be nonpolitical.

While political activity and debate by scientists has increased, the government continues its efforts to give science a wider role in policy formulation. The State Department, in July 1962, began a reorganization of its scientific activities designed to incorporate the Office of the Science Advisor into the mainstream of departmental policymaking. The change, according to the State Department, reflected the growing importance of science in foreign policy which received great impetus coincident with the orbiting of *Sputnik I* on October 4, 1957. C. P. Snow, the English novelist with a wide background in government, science, and academe, recently called for greater numbers of scientists in all levels of government. Snow feels that scientists are "future-directed," possessing foresight that our kind of "existential society" badly lacks.

While we may agree with Snow that more scientists are required in government to counter the pull toward a status quo existential society, it would be a serious mistake to suppose that this would solve all our problems. A balance must be maintained. We must be careful not to overweight the scientific.

These many events, ideas, and words point in one direction: The scientist in general, and the nuclear scientist in particular, has come of age politically. We have noted that while scientists often base their opinions and advice on a combination of scientific-political factors, their political acumen and wisdom are not necessarily superior to those of nonscientists. Although Mr. U. Thant, Acting U.N. Secretary General, insisted that scientists objecting to U.S. atmospheric tests had "no axe to grind," evidence indicates that while scientists

should be listened to and respected for their opinions on politics and international affairs, their insights here are not necessarily any more correct than yours or mine.

Despite divisiveness in the scientific world — not all of it undesirable by any means — it would be misleading to rigidly attempt to categorize scientists on every issue. For example, Teller and Szilard — worlds apart on many crucial contemporary questions — agree that mutual deterrence is doomed to failure. Teller believes that mutual deterrence is unworkable and "will fail because the policy does not consider the very different aims of the United States and the Soviet Union." Szilard declares that continued testing, the arms race, and deterrence are leading us to war "and that our chances of getting through the next ten years without war are slim."

One of the ironies of Teller's position is that although he is accused of being a bomb rattler, his position that we should not retaliate even once we have certain unequivocal information that enemy bombs are on the way is even more extreme than the position held by many of those who attack his views. However, Szilard and Teller, reflecting in general the two camps of scientific thought, hold markedly different philosophies on the meaning and direction of nuclear-weapons technology. Szilard states categorically that war is inevitable. Teller holds that "the only absolute likely to defeat us is fear, the persuasion that we cannot escape." To Edward Teller, "the human race, at the end of our century and beyond, will still be here."

The question, therefore, is not so much the control of the physical universe as it is the wisdom of the human being as a political animal. We cannot impede technical progress, nor can we turn back the clock to what is mistakenly referred to as the uncomplicated "good old days." One thing we may be sure of, despite the Cassandras: it most certainly is not inevitable that planet Earth will be incinerated by nuclear war. Those who give us the choice of complete disarmament or all-out thermonuclear war are as guilty of rampant oversimplification as those who envision the choice as either surrender or hitting first with everything we have.

Both viewpoints are products of the mind that fit "the facts" of the contemporary world to rigidly held conclusions, myths, and dogmatisms. The future belongs to those of another persuasion — the people who believe that man was given the power of reasoning to accept challenge, to solve his recurrent problems, and to build a better world in which freedom remains the essential rationale for living.



Military observers have long speculated on how best to use air power in the quest for victory. Giulio Douhet, at the top, and Gen. Peyton March, standing at the right in the bottom photo, concluded that the confluence of weaponry and the people's will to resist would be the determinants of success, whereas Brig. Gen. Billy Mitchell, pictured in the center photo, advocated an independent air offensive to achieve the ultimate war-winning goal.

The Uses of History in the Nuclear Age

History is not obsolete. Not yet, anyway. Despite the fact that "relevance" and all manner of theoretical nonsense are currently the fashion, there are still, fortunately, a few hardy souls around who continue to apply their intelligence to illuminating the past and making it comprehensible, thereby helping us to understand our own age. This has always seemed to me an exhilarating experience, not only because of the excitement of discovery but because we thereby come to realize (as we should have all along) that our own difficulties are not unique after all; they are not, thank heaven, so overpowering.

Michael Howard is a refreshing antidote to the Herman Kahns of our time — historical analogy instead of theory, insight instead of numbers, understanding in place of guesswork, and a facility with language. One has little difficulty seeing the nuclear warfare advocate Kahn, with his imagination, as the Norman Mailer of the defense intellectuals. Despite the estimable contributions of social science over the last twenty years, the obsession of many social scientists with methodology, model building, and inexplicable games has produced an astonishing amount of drivel. Part of this massive overdose of gamesmanship proceeded from the kind of macabre incantation leveled by Max Singer of Kahn's Hudson Institute: "Experience," he said, "won't serve as a guide anymore to practical affairs. The world has become too complicated." When up the creek, throw away the oar.

Apparently without realizing it, the Kahns and Singers greased the way for a movement to do away with history. Experience can no longer be used as a useful guide to human affairs; consequently, radical solutions are required. A number of years ago Walter Lippmann described these self-styled scientific

The Uses of History in the Nuclear Age initially appeared as "The Uses of History in the Nuclear Age" in *Air University Review,* November–December 1971, Vol. 23, No. 1, pp. 73–80.

pooh-bahs as "frightened, irritated, impatient, frustrated and in search of quick and easy solutions."

They are still with us, and the English military historian Michael Howard demonstrates anew, with his essays in *Studies in War and Peace* (1970), that the study of history is still a remarkable cure for the compulsion to look for panaceas. In an essay on the Swiss-born soldier and military strategist Jomini, Howard observes that although abstract strategical thinking has its place, "it is also dangerous, for a theorist to think of a theatre of war in terms of a 'chessboard.'"

Howard fuses the traditional discipline of the military historian with the largely contemporary approach of looking at military history as only *a part* of a political-military-economic-social canvas. From Waterloo and Wellington to William I and the two World Wars and their aftermath, he takes a societal approach. Thus, the First World War still "lies like a dark scar across the history of Europe, an interruption in the development of western society rather than a part of it." But the First World War should not have been a surprise. It was what Europe had been preparing itself for: armies were not really conceived of as deterrents; they were built to fight wars. And the size of these armies was matched only by their grinding inflexibility. *Primarily it was a matter of mobilization.*

Now, a little over half a century since the end of World War I, there is a predictable tendency for historians to forget the character of that conflict when they write of the great campaigns of the Second World War and of high strategy in the nuclear age. But World War I left a powerful legacy. The American air leaders between the wars, in World War II, and in the post-1945 period were aware of it. The character of the First War had not been shaped primarily by air bombardment, although this very point could be used by the air advocates to show that trench warfare was too overwhelmingly costly and even self-defeating to be considered seriously again. The consensus as to the war's lessons could not have been appreciated by far-seeing airmen. The wartime Chief of Staff, General Peyton C. March, pointedly concluded:

> The war had taught many lessons; the principles of warfare, however, remained unchanged. It was not won, as some had predicted it would be, by some new and terrible development of modern science; it was won, as has every other war in history, by men, munitions, and morale.

Nevertheless, there were those who were appalled. Thoughtful airmen pondered what longer-range bombing planes might accomplish if given the chance. Statesmen, stunned by the slaughter in the trenches, began the search for alternatives. The airplane provided the means to circumvent the carnage of the front lines, to attack the enemy deep in his homeland, at the source of his power. The population, Howard writes,

> …must be attacked directly. It must be softened and subverted by propaganda. It must be starved and enfeebled by blockade. It must be remorselessly bombed from the air. Its morale must be undermined to a point where its capacity for armed resistance is fatally weakened.

Consequently, despite the late and limited application of the air weapon, thoughtful observers of the Great War had seen enough to become convinced of the potential of the independent air offensive. American airmen (preeminently Brig. Gen. Billy Mitchell) with the British Independent Air Force as an example and fortified by their own ideas (though little experience) came out of the war persuaded that someday their vision of the air offensive as the fulcrum of military decision would be borne out. Unfortunately, however, their powers of persuasion failed to match their enthusiasm and determination. Mitchell, a prophetic and dynamic airman, led the crusade but like most prophets could not convince his contemporaries. The years between the World Wars were marked by the airmen's battle to secure a separate air mission and an independent air force. The airplane had not demonstrated its effectiveness in combat, and, besides, it couldn't span the oceans that had long protected the United States. The task, therefore, would not be easy, nor would success come rapidly. Almost thirty years and another world war would be required before the air arm would be made an independent service on equal footing with the Army and the Navy.

The struggle for autonomy in the 1920s and 1930s is a fascinating story in itself, marked by paradoxes and nuances in their own way just as interesting as the great bomber offensive of the Second World War. Nevertheless, the bomber campaign understandably captured the attention of historians and the public. Controversy about it still rages. Even with the benefit of hindsight (the realm in which the historian must work), attempts at objectivity have often been shoved aside by the persistence of dogma and the frequency with which purportedly critical analyses have turned out to be obviously self-serving. The fact that these controversies persist stands as a tribute to their continued relevance and to the energy of air bombardment advocates and critics.

Howard points out that the doctrine of the Italian theoretician Giulio Douhet

> overestimated both the destructiveness of high-explosive bombs and the capacity of aircraft to deliver them accurately and in adequate numbers to their targets in the technological conditions then obtaining; while it equally underestimated the capacity of civilian populations to survive prolonged ordeals which previously might have been considered unendurable.

Yet, despite Douhet's shortcomings (understandable in the circumstances of that period), his reputation as the foremost theoretical exponent of the strate-

gic air offensive remains intact. The great paradox is that technology after World War II resurrected Douhet; his doctrine fit the nuclear age peculiarly well. An interesting footnote, not pointed out by Howard, is that recent scholarship posits that Douhet's influence on the Air Corps Tactical School was even greater than Billy Mitchell's. But that is another story and, like most Air Force history, one that has yet to be written fully and with critical perspective.

As far as the Second World War is concerned, it was, says Howard, "like the First—a conflict of attrition between highly organized and politically sophisticated societies, in which economic capacity, scientific and technological expertise, social cohesion and civilian morale proved to be factors of no less significance than the operations of armed forces in the field."

According to Howard, strategic air power did not win World War II. It did not by itself win either the battle for Europe or the war in the Pacific. It was not an unqualified success. To argue that it was destroys any serious attempt to find the truth. Although the Allied high command may have viewed the air offensive as complementary to the invasion of the Continent, the air leaders had other ideas: a belief that the bombing could bring Germany to her knees. Yet in Europe, Howard notes, it took several years, the introduction of new tactics and equipment, and a rebound from near failure until the bomber offensive, together with other crucial factors, brought Germany to a collapse. The "thunderclap" idea, which held that the war could be won with a single all-out blow, proved to be a false theory. Long-held assumptions about strategic bombing tactics proved unworkable in combat — indeed, almost disastrous — and until the bombers were accompanied to the target by long-range escort fighters, the issue was very much in doubt.

In, the Pacific a different situation obtained. By early 1945 the Japanese position was in an advanced state of deterioration. With B–29s the United States overcame in less time and with fewer bombs Japan's will to continue than was true in the case with Germany. Japan was vulnerable to fire-bombing, and its defenses were inadequate to blunt the onslaught. Invasion proved to be unnecessary; the war ended, and lives were saved. And so, ironically, what the airmen hoped for in Europe obtained in the Pacific: the B–29 firebomb offensive crumbled Japan. Even to Gen. H. H. Arnold, the end came unexpectedly soon.

In all of this, one must keep in mind the wartime circumstances attending decisions. It is, of course, easier to judge the situation now, with the knowledge accumulated during a quarter century. Wars are almost never fought according to plan, and the air offensive not only over Europe but also over Japan was conducted under serious operational limitations. Air strategy was governed by feasibility, by the existing conditions and forces available, not by a theoretical litany expounded in some obscure classroom. It could not have been otherwise. It was a dynamic situation fought on a day-by-day, hour-by-hour basis. Decisions, as Michael Howard observes, "had to be made rapidly,

if not hastily, on the basis of evidence known to be inadequate and historians will debate endlessly whether or not they were right." Noble Frankland's observation is apropos and contains more truth than many would care to admit:

> Nor in war, which is not a game of chess, should intellectual reasoning be put at a premium even in the highest operational commanders; intuitive judgment, or, as Napoleon might have put it, luck, is a much more important quality.

The bombing offensive and the results it achieved need not be exaggerated nor tiresomely defended. Did the bombing win the war? Could it have won by itself if even greater resources had been given over to it? To attempt seriously to grapple with these questions is a futile and self-defeating exercise. Better to honor the brave participants with an uncompromising search for the truth. Their uncommon courage and perseverance in the face of uncertainty and great odds deserve no less from us. Perfection in the conduct of war (and in historiography, it might be added), especially in a form of warfare never before tried, is almost always impossible. To say that better planning and a more flexible doctrine might have achieved results earlier should not be interpreted as an indictment or even criticism. It is offered as an explanation. One doesn't look for certainty in an appraisal of the conduct of human affairs. Understanding would seem to be a more modest and attainable goal.

The immediate post–World War II period was marked by demobilization, confusion in the wake of the demonstrated power of the atom bomb, and the enunciation of great — but alas, illusory — hopes for peace, already being dashed by the budding Cold War. Few governmental and military leaders immediately recognized the overarching impact of the atomic weapon. Howard expresses his admiration, however, for two particularly prescient writers: Bernard Brodie and Sir Basil Liddell Hart. Both proved to be remarkably accurate in their assessments of the strategic character of the following two decades.

In *The Absolute Weapon* (1946), Brodie wrote that no longer would the United States have the time to mobilize military power as we had done in the Second World War. In the event of war, we would have to fight with forces in-being. The atomic weapon had revolutionized the concept of warfare. Its tremendous destructive potential meant that we now had to *deter* war. "Thus far the chief purpose of our military establishment has been to win wars," he observed. "From now on its chief purpose must be to avert them. It can have almost no other useful purpose." Brodie was one of the first publicly to outline the doctrine of deterrence. Others were thinking along the same lines, some even before the close of the war, including Generals H. H. Arnold and Carl Spaatz and Assistant Secretary of War for Air W. Stuart Symington.

Howard writes of the evolution of the doctrine of deterrence and then expands on that concept with an insightful essay entitled "Strategy and Policy

in Twentieth-Century Warfare." In the nuclear age, the utility of military power has declined because of the tremendous cost — human and material — associated with its use. But it still plays an important part in world power relationships. Wars, Howard notes, are not simply acts of violence: "They are acts of persuasion or of dissuasion; and although the threat of destruction is normally a necessary part of the persuading process, such destruction is only exceptionally regarded as an end in itself."

The point is that strategy and policy must be orchestrated. "In making war," says Howard, "it is necessary constantly to be thinking how to make peace." For example, with reference to Vietnam,

> …a foreign power fights indigenous guerrillas under disadvantages so great that even the most overwhelming preponderance in military force and weapons may be insufficient to make up for them. In such wars…military operations are therefore only one tool of national policy, and not necessarily the most important. *They have to be coordinated with others by a master hand.* (Italics added.)

Force must be used with precision and restraint. It must be based on carefully considered policy; if not, it will prove to be counterproductive. In the nuclear age, the more powerful the force a nation commands, the more stringent are the restraints on its use.

What wisdom can be derived from *Studies in War and Peace*? Perhaps foremost is that however hard we try to chart our way through the puzzle of human affairs, we somehow always fail to calculate the whole equation. Events remain unpredictable. The very best we can do will remain imperfect, imprecise. History will never be an unbroken string of successes. History is not statistics nor an exercise in piling up facts. Neither is it certitude. History is understanding. It is irony. History is mistakes. It holds no simple lessons.

Part VI

The War in Southeast Asia



President John F. Kennedy and his party watch airborne troops board a Douglas C–47 for participation in an aerial firepower demonstration. The onset of the Kennedy administration accelerated the drive toward tighter and more direct control of the military under high-level civilian leadership.

The New American Military

…I have found the American officer to be…the most competent and unassuming member of the profession. Those who now avow either mistrust of his professional judgment or fear of his designs upon power in the state should recall the oath which he has sworn to the Constitution; the service he has rendered to his fellow citizens in great and little, hot and cold wars; and, last but not least, his long isolation in the midst of the world's richest society which treated him shabbily as long as he was not needed for fighting its wars.

***— Robert Strausz-Hupé,* In My Time,**
Norton, 1965

The war on the Asian rimlands is in many respects contradictory. It is at once subtle and violent; it combines primitive weapons and strategy with modern tools of warfare and the fruit of a fantastic technological revolution; and every day it tests a significant marriage of U.S. political and military strategies.

Vietnam has become the proving ground of a remarkable transformation in the American military. Yet this metamorphosis, in concert with the many paradoxes inherent in the war for Vietnam, is based on an old and honored tradition that has endured since the founding of the American Republic: the principle of civilian control of the military. To be sure, this process of osmosis, which has occurred almost unknown to a large segment of the population, is one of degree.

In simple terms, Vietnam has seen the U.S. military establishment accommodate itself to the precise political aims of war in a radically new era. Military strategy has been enormously subjugated to an overall national strategy that is primarily politically based.

The New American Military initially appeared as "The New American Military" in *Air Force Magazine,* Vol. 49, No. 4, April 1966, pp. 86–88.

Fulcrum of Power: Part VI

It is important to understand the political foundation and the implications of extremely close top-level civilian direction of national strategy. The point at which we have now arrived is a legacy of the immediate post–World War II period. Military influence at the highest levels of government has been in a steady decline since the aftermath of the second World War. During that war the American military was at its zenith in political power and influence. The military carried out operations and made policy in concert with the top-level civilian leadership. Grand strategy was promulgated by the President and the Joint Chiefs of Staff.

The role of the military during World War II became an outstanding example of the American penchant for total prosecution of war, once the machinery for peaceful intercourse and negotiation had collapsed. After Pearl Harbor, the nation turned with complete confidence to its armed forces. The military was given wide latitude. Indeed, Adm. William D. Leahy, then Chief of Staff to President Roosevelt, declared in 1945 that the JCS were under no civilian control at all. Not that the military ran the entire war. President Roosevelt, as Commander in Chief, participated in military planning although certainly not to the degree that Churchill did in Great Britain. The primary task during the early 1940s was to bring together overwhelming strength. This responsibility was one for which the United States was ideally suited.

Since 1945, the position of the U.S. military has changed in several vital respects. The transformation has been one from dominance to subordination; from making policy to strictly policy implementation; from having the primary role in weapons selection to being a secondary partner—in short, a steady deterioration in the political influence of the military during a period in which strategy formulation and the power of decision in defense have gravitated inexorably toward the civilian policymaker.

Behind this change in the making of U.S. national strategy stands one consideration so overpowering as to shape the many secondary reasons for the shift. We are talking about the advent of nuclear weapons, which ruptured the old order and as a consequence radically recast the entire context of strategy. With the constant danger of escalation to the uppermost threshold of nuclear action, one of the major aims of policy understandably became avoidance of escalation. The result was that discrimination was required to orchestrate power with political aims. The drive toward centralization in defense decision-making in concepts, budget preparation, weapons selection, procurement, strategy, and the sensitive field of command and control has flowed from the nuclear revolution.

Once this is understood, one can begin to appreciate the context in which the military transformation has occurred. The Korean War speeded up the process, but it was the onset of the Kennedy administration that accelerated the drive toward tighter and more direct control of the military under high-level

civilian leadership, with the President as Commander in Chief of the armed forces in fact as well as in name.

This progression toward a more integrated and centrally directed defense establishment had been under way long before the 1960s. The National Security Act of 1947, the 1949 amendments to the act, and the important changes made to it in 1958 progressively strengthened the hand of the Secretary of Defense as the primary person responsible only to the President on all defense matters. But organization and lines of authority and responsibility are one thing; to use this apparatus effectively and with sound judgment is another. In any case, it is true, as Charles J. Hitch, former Defense Department Comptroller, has pointed out, that not until 1961 was the complete power and authority of the Office of the Secretary of Defense used. Unification and centralization *in fact* became the operative guidelines.

Such a change in the management and operation of the nation's defense affairs could not evolve successfully without exacting a price. The gain in centralized direction and control has often been lost in dynamism and imagination. Thus, the military underwent an accelerated transformation from the role of prime molder of strategy to a secondary role in shaping strategic policy. What William Kintner of the Foreign Policy Research Institute in Philadelphia has termed the "politicalization of strategy" meant that, *because* of the technological revolution which provided the military with the *tools* of deterrence, the military concurrently lost its predominant role in determining the *strategy* of deterrence. The change was one from being an initiator to having a managerial role. Politics became the core of nuclear strategy.

All of this should not be allowed to mask the difficulties inherent in what is obviously a dynamic progression. As centralized political direction increases, there develops a tendency to shun more active and imaginative military planning, especially during a period in which the fear of escalation is extremely pervasive. This doubtless creates tensions in the military. Yet, overall, the war in Vietnam has seen the U.S. military respond in a remarkably efficient and skillful manner to national policy under difficult and demanding circumstances.

It goes without saying that a successful U.S. effort in Southeast Asia requires the firm support of the great majority of Americans. Ignorance and misunderstanding could be critical. Clearly, bias long held is difficult to dislodge. And it remains true that this quite remarkable evolution in U.S. military affairs has gone unnoticed in some circles. For example, some people insist that the military is controlling American policy, that the military is playing the major role in shaping national security policy, or that our policy is weighted overly toward the military. These views, of course, couldn't be further from the mark. Yet in 1964, Senator J. William Fulbright, the Chairman of the Senate Foreign Relations Committee, declared:

Fulcrum of Power: Part VI

> To a very considerable extent the American people are not now exercising effective control over the armed forces; nor indeed is the Congress, despite its Constitutional responsibilities in this field…We are permitting the vast military establishment largely to run itself, *to determine its own needs,* and to tell us what sacrifices are expected of us to sustain the national arsenal of weapons.

This statement might have been true during World War II, but given the context of today's world and the mechanics of U.S. policymaking, Senator Fulbright's remarks are nothing short of incredible. The irony is that many who admire meticulous scholarship clearly acquire their information from sources that are anything but scholarly. Instead of reading acknowledged scholars in military affairs — Samuel Huntington and Morris Janowitz come to mind — they seem rather to prefer less knowledgeable and more prejudiced sources. These include, within the context of the Vietnam dialogue, those critics who have persisted in rejecting the necessary marriage of force and diplomacy.

Such critics have never accepted Clausewitz's dictum of war as a continuation of politics by force of arms. Yet to buttress the continuing validity of Clausewitz's view—in a nuclear-age context, of course—one has only to look at world history since 1945. For years, the critics have claimed that the new technology made obsolete prenuclear strategy and politics, and that force, rationally deployed, made no sense anymore and was too risky. Yet the fact that the Korean War and the conflict in Vietnam have been limited wars for limited objectives demolishes such arguments that force is obsolete.

The essential fact is that nuclear weapons have permitted a stabilization of world affairs undreamed of (save by a few) in the immediate post–World War II period. Contrary to popular belief, every war fought for precisely limited goals, rather than demonstrating the uselessness of nuclear weapons, proves how essential they are in backstopping conventional warfare and in keeping hostilities at lower levels of the spectrum.

The doctrinaire penchant for thinking of military power as an absolute moral evil lurks behind the argument that the United States is practicing misguided globalism in Vietnam. This charge, most frequently advanced by Walter Lippmann and by Professor Hans Morgenthau of the University of Chicago, rests on the completely unsupported idea that we are playing policeman to the world. But we are not involved in wars all over the globe. The present overt challenge is in Southeast Asia, and the critics know it. And if the cacophony were not over Vietnam, it would be over some other locale. Dissent is praiseworthy in a democracy, but its intellectual *quality* ought to be high. There is a basic inconsistency in inveighing against American "inhumanity" while remaining infamously silent in the face of Viet Cong atrocities. A diplomacy for true peace unsupported by military power is no diplomacy at all.

There was a time in our history, in the not-too-distant past, when the goal was to marshal all the firepower available; *today it is a question of how to relate power to precisely defined objectives.* This point was recently made clear by Gen. John P. McConnell, Air Force Chief of Staff:

> First, our full *nuclear* strategic capability must continue to act as a deterrent, that is, provide us freedom of action in taking whatever military measures are required in Vietnam without risking escalation into nuclear war. Second, our *conventional* strategic capability is being applied, as the President [has] said, with restraint and discrimination until the rulers of North Vietnam become persuaded to agree to negotiations on an equitable basis. That point will be reached when these rulers recognize that the price of continued aggression is higher than they are willing and prepared to pay.
>
> It is evident, therefore, that the principle of "strategic persuasion" is not meant to achieve total military victory, as all-out strategic air power helped to achieve in World War II. Rather, it is designed solely as an instrument of foreign policy for the attainment of a diplomatic objective.

General McConnell's statement (in an address on September 10, 1965, before the Dallas Council on World Affairs) represents the clearest exposition to date by a member of the Joint Chiefs on the integration of political-military goals in the era of cold war. The air power objective is not strategic saturation or obliteration of industry and population (as it was in World War II); rather it is "strategic persuasion," the twisting of the aggressor's arm or, in military terms, precision bombing of carefully selected targets.

No less impressive than the political-military amalgam has been the remarkable degree of interservice teamwork. Morale has remained high in Vietnam despite the special and difficult circumstances of the war both in the field and at home. All of this seems to refute Daniel Bell's notorious contention (in his 1964 Anchor-Doubleday book, *The Radical Right*) that "in sociological fact" the military is "dispossessed." Nor does it support that the military establishment is not equipped to fathom today's sophisticated political philosophies.

It was in the late 1950s and during the beginning of the Kennedy administration that the American military did experience difficulty in adjusting to the new political-military environment. This occurred partly because the political hierarchy had been tardy in meeting the demands of the technological explosion as they related to the national defense. Today the officer corps is rapidly closing the gap in technical expertise as well as in political expertise. If military high command must be distinguished by statesmanship, the exigencies of today's world also demand that the statesman and diplomat possess a firm grasp of basic military tenets and strategy. This reciprocal balance is no longer a luxury; it is in fact a necessity.

Fulcrum of Power: Part VI



Gen. John P. McConnell, Air Force Chief of Staff, visits the theater and presents awards to men of the 355 Tactical Fighter Wing stationed at Takhli RTAFB, Thailand.

More than four years have passed since Senator Fulbright unleashed, in his "Memorandum on Propaganda Activities of Military Personnel Directed at the Public," a savage attack on the U.S. military. In this he said that "there is little in the education, training, or experience of most military officers to equip them with the balance of judgment necessary to put their own ultimate solutions…into proper perspective in the President's total strategy for the nuclear age." The intervening years, rather than supporting this opinion, have indicated that the United States has been singularly fortunate in having a dedicated, dynamic, and efficient military establishment. As James Reston of the *New York Times* has written, the greatest force at work in the world today for sanity and peace is the power of the United States.

The political-military leadership of the nation has recognized that, while superior strategic power is a bedrock necessity, this very fact means that future wars will be wars restricted in aims and frustrated in execution. The credibility of our strategic nuclear force is the single most important element in our defense phalanx because it not only deters cataclysmic nuclear attack, it also backstops, supports, and validates our conventional power. A solely military strategy is no longer valid. Conversely, a political policy that does not accommodate the relevant power equation is not possible. Thus, while superior military strength is *absolutely essential* to our position and our commitments, its indiscriminate use operationally is impractical in today's context.

With these considerations as a rationale, our soldiers, sailors, airmen, and marines are continuing to perform magnificently under trying conditions. It is not a world of their making. They had little to say about where they now happen to be fighting and dying. Yet, there are many who continue to request duty in Vietnam. Without daily fanfare, they are serving their country and the cause of freedom, uncomplainingly with courage and skill. They know there will be other wars in remote lands that will demand the same measure of dedication.

In an age of equivocation, their answer is loud and clear.

In an era that is antihero, America has more than her share of heroes.



Launcher sites for the Air Force's strategic nuclear weapon, the Titan ICBM, were under construction from the late 1950s through the early 1960s at Lowry AFB near Denver, Colorado.

Strategic Superiority and Vietnam

Truly, Vietnam has consumed all of us. Not only has this complex and frustrating conflict preoccupied our thoughts as far as strategy, tactics, operations, weapon systems, and pacification are concerned, but the war has also entered significantly into discussions about taxes, civil rights, poverty, riots, and the right to dissent. It is all-pervasive, and it has torn at our vitals. Anyone who has managed to avoid talking about Vietnam obviously doesn't live in the United States.

Yet, memories are fleeting, and it has actually been only two and a half years since the United States decided to pour substantial military forces into Vietnam. One cannot help observing that as recently as the late 1950s and early 1960s *the* dominant military-political subjects were the credibility of strategic nuclear power and the efficacy of arms control and disarmament. Indeed, the period 1957–63 was marked by a flood tide of books and articles dealing with these topics. These were the years of the so-called great debate on strategic nuclear power and stability. How things have changed within an exceedingly short span of time!

Such is the flow of history that almost the entire military-political milieu has been transformed by Vietnam. Yet, the more things change, the more they remain essentially the same. The recent disclosure that the Soviet Union is testing a fractional orbital bombardment system once again jars us back into the reality of the constant and critical importance, both political and military, of strategic nuclear weapons.

So very much has been written about the war in Vietnam that one hesitates even to begin a consideration of the strategic balance of power by alluding to the conflict in Southeast Asia. But the fact clearly remains that Vietnam daily instructs us about some very fundamental principles that are usually not

Strategic Superiority and Vietnam initially appeared as "Strategic Superiority and Vietnam" in *Air Force Magazine,* January 1968, Vol. 51, No. 1, pp. 51–56.

brought into the open. Although much has been written in the context of Vietnam pertaining to weapons, tactics, and constraints, far too little has been said about Vietnam relative to the fragile global strategic balance of power.

One realizes, of course, that the two major world adversaries, the United States and the Soviet Union, are also the world's only nuclear giants in terms of their ability to bring nuclear force to bear massively in any part of the world. But this remains only part of the continually evolving balance. Both the United States and the Soviet Union retain the great and necessary resources for dynamic conventional, nuclear, and space technology. Since today's global posture has obviously been the result of yesterday's technological development, it naturally follows that the paths which we presently tread will mold the character of our future stance.

Although not always appreciated, what some have called "mutual" nuclear deterrence underlies our position in Vietnam today. Clearly, the American ability to bring its tremendous conventional power to bear in Vietnam, at the end of a 10,000-mile logistical pipeline, has made it possible to abort a Communist takeover of South Vietnam, a takeover that came perilously close to succeeding just two short years ago. But it must also be reiterated that our great overall power — and the mobility and *threat value* that go with it — has made our involvement in Southeast Asia credible.

It has been this credibility of the strategic force that has not only deterred all-out nuclear attack (and made general war much less likely), but which continues today to buttress our limited war forces in Vietnam. Thus, the ongoing and dynamic fact is that our tremendous mobility and firepower across the spectrum of conflict has forced both the Soviets and Chinese to be very circumspect indeed when it comes to weighing various kinds of possible military intervention in Southeast Asia. This central fact should not be forgotten, although it is often lost in the daily headlines announcing escalation, specific battles, and terrorist activities.

Two dangerous misconceptions, however, have again crept into the popular lexicon relating both to strategic nuclear power and to Vietnam. They exist among those myths that have been permitted to retain their authority long after their credibility has been proved nonsense. Both date back to the early 1960s and the days of the great nuclear debate, and both derived impetus by the spurious arguments of Herbert York, Director of Defense Research and Engineering during the Eisenhower administration, and of Jerome Wiesner, science adviser to Presidents Kennedy and Johnson.

The first myth involves the twin assumptions that strategic nuclear weapons are effective only in all-out nuclear war and, therefore, have become obsolete, even useless, in what is obviously thought of as an era of limited war. The second myth holds that each successive increase in the magnitude of our strategic capability has added nothing to American national security. These fallacies

become dangerous to that very security if they are repeated often enough and eventually held to be valid.

As recently as September 19, 1967, Tom Wicker of the *New York Times* declared that nuclear power "is both fearsomely destructive and practically impotent." American nuclear power, he said, is "useless for anything but mutual destruction." Wicker thus conveniently forgot that U.S. nuclear power has been primarily responsible for global strategic stability since the end of World War II. No greater mistake can be made than to think that strategic military power is useless in the age of limited war.

In fact, as the past twenty-two years have proved, the essential paradox is that while the *actual military utility* of nuclear weapons has receded, the probability of some kind of limited war breaking out has increased due to the very destructiveness of nuclear weapons and the very real reluctance to employ them. True, as the power of strategic nuclear weapons has grown, the chance of their ever being used has diminished greatly, but there is a corollary that might be stated as follows: Each limited war of the nuclear age fought for precisely defined objectives is a monument to the restrictive power of nuclear weapons. This means that the very destructiveness of the nuclear weapons revolution has directed conflict into the lower and less-destructive range of the spectrum. *Strategic power is responsible for the era of limited war.* The caution exhibited by the great powers suggests strongly that the mutual strategic balance plays an important restraining role in the world's political-military affairs. Indeed, strategic power today remains an indispensable ingredient in maintaining the international order.

It follows, then, that the notion that each qualitative advance in strategic weaponry has failed to increase our national security is blind to the fact that had we failed to follow through on each rung of the technological ladder, our national security would now be in grave peril. This popular fallacy is rooted in the concept of technological plateau: the assumption that no new strategic developments are possible that might alter the balance and upset stability. It is thought that we can only pile destructiveness upon destructiveness and still achieve no advance in the strategic equation. *Yet, this discounts the consistent Soviet drive for strategic superiority.*

Post–World War II history shows that the United States has blunted Communist threats of a conventional order when we have been able to operate behind a clear strategic superiority. The Cuban missile crisis of October–November 1962 is an instructive case in point. Had our strategic force not been preponderant because we had failed at critical points to advance our technology, the history of the past two decades might have proved far different, and much to our disadvantage. This is particularly true when one reflects upon the events in Korea, Suez, Lebanon, Quemoy and Matsu, Berlin, Cuba, and Vietnam.



At a meeting in the White House, President John F. Kennedy talks with members of the reconnaissance team who uncovered the Soviet missile buildup in Cuba.

In other words, it is a mistake of great magnitude to hold that the war in Vietnam "proves" how useless our strategic nuclear power and general war forces really are. Those who make this charge repeatedly fail to realize that Korea, Cuba, and Vietnam illustrate the very real application of strategic nuclear power in directing conflict into channels a great deal lower than general, all-out war. The existence of the nuclear deterrent has prevented general conflict and meant that the likelihood of lower-magnitude hostilities *has* become far more probable.

On the other hand, while U.S. power has held down the nature of the Southeast Asian war — and, in turn, American power has itself been held under close control — it is nevertheless true that the USSR and Red China are contributing importantly to the North Vietnamese cause. *Circumspection has not meant abstinence.* While acknowledging that both sides have obviously been guided by tacit restraints, it is important to note the continually greater Soviet contribution to the North's firepower. This has made it difficult for those who have consistently claimed that it is in the Soviet interest to end the war in Vietnam. There is no hard evidence at this writing to support this supposition. To the contrary, the Soviet Union has accelerated significantly its deliveries of heavier, more modern equipment to North Vietnam. And the recent and insistent calls by Soviet leaders for even greater efforts to defeat the

United States in Vietnam should not be taken lightly. These words are being backed up by modern and sophisticated hardware. Based on the evidence to date, one ought to go as far as General Sir John Glubb, a pasha of the Arab Legion in a much earlier time, and state baldly that the Soviets are keeping North Vietnam in the war with their deliveries of modern equipment. Any policy predicated on a pivotal Soviet role in assuming the peacemaker is doomed to certain failure.

Clearly, then, since we are fighting in Vietnam with one eye on the Soviets and the Red Chinese, it becomes necessary to assess our thinking on several matters in order to bring the entire range of our interests into focus. Contrary to what was in danger of becoming a prevailing opinion, Soviet and American basic objectives are obviously not only very limited (e.g., the prevention of all-out nuclear war), they are in fact significantly different; therefore the United States should be wary indeed of becoming ensnared in agreements and programs aimed at reducing our overall superiority which, in recent years, has been eroding. Because a movement has been under way, directed toward a mutual reduction in strategic forces, it seems pertinent to observe that no automatic correlation exists between any such move and a reduction of basic international *political* differences between us and the Russians. Such measures do nothing to ameliorate the primary conflicts of interest between the two sides. And since these conflicts exist, and indeed seem to be deepening in some areas, prudence becomes the better part of wisdom. It should always be remembered that those who think that the Soviet military threat has lessened continue to pay more attention to the impressions of Russian *intentions* than to realistic *assessments* of Soviet military power. Our basic disagreement with the aims of Soviet policy has not changed.

Military power remains indispensable despite the overwhelming success of strategic nuclear deterrence, which has obviously induced some people to think that the Cold War is over and that we can now, therefore, reduce our vigilance. Today vigilance must be both political and technological. As Marshall Shulman, a perceptive observer of the USSR, put it: “It is not the revolution of Marx and Lenin that is transforming the world, but the radical effects of modern military technology.” In today’s world, a diplomacy not backed by military strength is a diplomacy certain to fail.

Predictably, many argue that in the age of thermonuclear weapons, politicians can no longer look to the military as an arbiter in international affairs. This charge was appropriately foreseen by Winston Churchill. The premise was that *any* future war would be marked by total destruction of the world’s industrial and population centers. But Churchill, with prescience, spoke of the balance of terror and argued that England would be more secure in the thermonuclear era than in the age of the atom bomb.

Today and in the recent past, the United States has been involved in both cold and hot wars, but the hot war has been limited. It has become axiomatic

that, as Churchill foresaw, nuclear weapons have made for a stabilization of world affairs by directing conflict to lower levels of the spectrum. Obsessive fear of escalation has at times worked to the advantage of the Communists. Walking the political-military-psychological tightrope, they have attempted to gain their ends through the means of wars of national liberation whereby territory and peoples are subjugated by arms, while the nations of the West ostensibly stand by, mesmerized by fear of an escalation into nuclear war.

The advent of nuclear weapons and the technological revolution have not dictated a rupture of military force from diplomacy. Far from it. Rather, in order to prevent nuclear war, force must be applied in remote places like Vietnam. The logic of this apparently contradictory principle has been recognized by many, including the noted French historian and philosopher Raymond Aron, who observed that force on levels below the nuclear may have to be applied at certain places in the world in order that the entire globe be spared a nuclear war.

One of the most interesting of current paradoxes is that despite the vital role that strategic nuclear power plays in Vietnam, the proportionate amount of defense money the strategic force receives has been dwindling for years, even before the war in Vietnam. At the same time, again contrary to much popular belief, technology has moved ahead swiftly. If the United States desires to maintain its strategic lead over the Soviet Union it will be necessary to drive ahead with technological innovation. The basic technology has always been there.

Strategic nuclear superiority can never be taken for granted. When one considers priorities, none other is more important. Although the price is high, the rewards, as post-1945 history shows, are great. The focus now is Vietnam, and it will probably so remain for the indefinite future. Yet Vietnam is a far different war than was Korea, and one cannot evade the suggestion that other wars will undoubtedly be different in character than Vietnam.

The overarching constant is the American strategic lead. This is one technological race that we dare not lose. The international political and military consequences would be swift, far-reaching, and disastrous. The credibility of military power, its success or failure, will inevitably in large measure depend upon a dual foundation of superior force structure and decisive national leadership. The two are inseparable. Not only is the character of our strength determined by the decision or indecision of leadership, but the question of employing that power is likewise contingent upon the apparatus of decision making on the highest levels of government.

In the future, as in the past, there will continue to be no effective substitute for decisive, correct, and timely resolution of international and defense matters by the Chief Executive and his policy aides. To an almost frightening degree, the survival of freedom is dependent on the courage and wisdom of the President of the United States.



Secretary of Defense Robert S. McNamara speaks to the Vietnamese in 1964 during a trip to Tan Son Nhut Air Base in the Republic of Vietnam. Behind him and to his left is Gen. Maxwell Taylor, Chairman of the Joint Chiefs of Staff. At Taylor's left is the U.S. Ambassador to Vietnam, The Honorable Henry Cabot Lodge.

The Vietnam Manipulators

The struggle now within the American body politic is not how best to bring the North Vietnamese to account for their aggression, but rather how to get out of the Vietnamese morass without losing face. This incredibly rapid change of circumstance has been brought about by the failure of the strategy of gradualism. Whether or not another strategy might have worked is now irrelevant, for it is too late in the day politically.

Let us be clear about what we mean when we say that gradualism has failed. If one measures success in this war by the number of men lost; by weapons captured or found; by the numbers of defectors gained; by foodstuffs uncovered in remote areas; by allegedly successful ground sweeps in sometimes contested locales; by hamlets said to be pacified; by the number of tons of ordnance dropped; by the number of sorties flown; or by battles won or lost (themselves measured by the body count), then by these criteria the war was indeed won long ago. But alas, these happen to be all the wrong measurements of success for this strange war. If they were the appropriate yardsticks, we would not be in Paris attempting to negotiate ourselves out; President Johnson would not have fled the American political arena; and Vietnam would not now be the political issue it is, especially for the party that is "out," but also for the party that is "in" and finds itself with a millstone around its neck which threatens to divide it fatally and drag it down out of power.

The crucial measurements all along have been, first, whether or not the North Vietnamese would continue to receive the thousands of tons of critical war materiel from the Soviet Union, bloc countries, and Red China, and second, whether they would be able to continue to pour men and materiel over the infiltration routes to sustain the fight in the South. Obviously, the enemy not only succeeded in doing this, it even accelerated these movements between

The Vietnam Manipulators initially appeared as "The Vietnam Manipulators" by Mark E. Swenson, the nom de plume of Herman S. Wolk, in *Air Force Magazine,* Vol. 51, No. 10, October 1968, pp. 12–15.

1965 and 1968. As long as the flow of supplies and modern, heavy equipment continued, he was prepared to accept the loss in manpower, a price that the United States would find staggering, but one Communist regimes have always seemed willing to pay.

A third, critical factor, dependent on the first two, was the degree to which the enemy forces in the South, once adequately provisioned, could undermine the Saigon government politically, psychologically, and militarily. Here, too, the enemy found fertile ground for successful operations despite the heavy loss in manpower. The Tet offensive, of course, can even now be seen as a major turning point, the impact of which is still being felt in South Vietnam and the United States. These were the primary considerations for the enemy and, in a word, they amounted to the desire and necessity to stay in the war and keep the pressure on the South. The geography of Southeast Asia and the restrained, gradualist strategy played into the enemy's hands, for, as long as we were unable or unwilling to turn off the leakage of men and materiel through Laos and Cambodia, he could obviously stay the course indefinitely, heating up or turning down operations at his will. And so it has been.

Thus, what had all along seemed to many to be valid measurements of our progress in the war were inappropriate because they did not fit a war fought by a small, agrarian country in the 1960s against the strongest nuclear power in the world in a jungle-infested backwater on the Southeast Asian mainland. They did not apply because this war was not being measured either by the men in Hanoi or by the American people in strictly operational terms or with the use of statistics. The body, weapon, and hamlet counts were meaningless to the critical objective of the war, which, as it happened, was political, but political in the sense that the verdict given by the American public will be crucial. And to an overwhelming degree, as President Johnson realized in March 1968, the verdict was already in. Ironically, the judgment has been rendered both by those who opposed the war in almost any form and by those who supported the war but became disenchanted by the inappropriate strategy and the willy-nilly conduct of the conflict. Witness the Vietnam planks of both party platforms.

The situation with regard to Vietnam in which the Administration found itself opposed by both sides — and supported in its *strategy* only by diehard optimists and members of the administration who had to justify themselves and their jobs — obtained because the administration decided upon a *gradual policy of the middle*, which swept under the rug of domestic political expediency the critical political and operational problems of numbers of troops, the Cambodian border situation, the intensification of the air war, and the character of the South Vietnamese governments.

The fact is that *the* hard choice between pouring in more men (perhaps up to one million) or devising a new strategy was never made. The great paradox of President Johnson's tragedy — the tragedy of Vietnam — is that by attempting to fight the war with a business-as-usual policy at home, which the admin-

istration deemed most advantageous, the administration failed simultaneously to impress either the North Vietnamese or the American electorate. As a result, a President was rejected by the American polity in the midst of a war. The most recent and obvious analogy was that of Harry Truman, who announced during the Korean War (that other recent and unpopular war) that he would not seek reelection.

Although the war continues, the outlines of some historical judgments have formed, some of them even already suggested by the men most responsible for the conduct of the war. And, in one way or another, these several participants in the highest councils of government have admitted the key mistakes already made in political and military strategy. President Johnson, of course, by renouncing another attempt at the presidency, acknowledged that the course be had steered in the war had become unacceptable to the public — unacceptable to the degree that the country was badly divided. As a result, Hubert Humphrey now must separate himself, at least to a marked degree, from the Johnson policies on Vietnam if he is to win in November.

Former Secretary of Defense Robert S. McNamara, a key architect of the U.S. strategy for Vietnam *at the beginning,* came to realize during 1967 that the war was beyond his and the administration's ability to control. Just as President Johnson found that the awesome and concentrated power of the presidency could not bring down the enemy in Vietnam or his detractors at home, McNamara found that with all the centralized power at his command he could not win with a diluted strategy of the middle. The truth is that McNamara had lost faith in his own ability to control events.

But it must also be said that the management of U.S. defense policy today is far too much for any one man or group of men. Despite all the words about the revolution in management under McNamara, the former Secretary of Defense spawned a huge defense bureaucracy which, with its obsessive stress on numbers, analyses, and just plain paperwork, fed itself into such a monolithic maze that it could no longer control or orchestrate the details of its own war operations.

The Vietnam War has produced a virtual avalanche of paper, much of it meaningless. Indeed, the deluge has become so staggering that it even threatens to overwhelm the defense bureaucracy. A great deal of this tonnage attempts to "measure" the progress of the war, but most of it only seems to blur what is really happening. Fine-tuning of war in a remote land became impossible with such a cumbersome organization requiring staffing of a thousand details through interminable echelons. And, seemingly, the more sophisticated became the command and control apparatus, the less the control wielded by the very human managers.

And now, Gen. Maxwell D. Taylor, whose strategic concepts heavily influenced both Presidents Kennedy and Johnson and thereby had a marked effect on the conduct of the war in Vietnam, has come forward to appraise candidly

the Vietnamese War. In a Thomas D. White Memorial Lecture delivered at the Air University and published in the July–August 1968 issue of the *Air University Review,* General Taylor declared:

> Because of the tendency to move cautiously to avoid the risk of World War III, as a matter of deliberate policy we have exercised extreme prudence in applying military pressures in Vietnam. But however praiseworthy this restraint may be from some aspects, this slow application of military force is antithetical to the American disposition. It requires too much time and patience to obtain results. And we are finding in Vietnam, as in former episodes of our history, that these are national virtues in short supply.

General Taylor's allusion to "extreme prudence" is perhaps the first public admission by a person closely identified with the administration's gradualist strategy that that strategy was a fatal mistake, given the situation in Vietnam and the character of the American people. Moreover, in his assessment General Taylor went on to say that the difficulty of rallying the nation to the support of a war that does not pose "a clear threat to our homeland or to the vital interests of long-time friends" means that "our views on this subject" must be reexamined. General Taylor's public soul-searching (curiously, conducted by a close adviser to the administration in the midst of the war) included the unmistakable thrust that not only must we be much more selective in the future "in deciding where our true interests lie in the worldwide scene," but that our venture and strategy in Vietnam was most probably a tragic mistake.

Interestingly, General Taylor's views came not long after Gen. William C. Westmoreland unburdened himself on June 11, 1968, just before leaving the Vietnam Command to assume his position as Army Chief of Staff. General Westmoreland at that time made it clear that the United States could not win the war "in a classic sense…because of our national policy of not expanding the war." While he also said that it might be possible to "attrit" the enemy, General Westmoreland noted that national policy forbade American forces from intercepting enemy troops and supplies on the ground in Laos. In other words, the enemy could continue the war as long as he was willing to pay the price.

Thus the action taken by President Johnson and former Secretary McNamara, and the statements of Mr. McNamara (which in 1967 clearly indicated his disenchantment with the way the war was going) and of Generals Taylor and Westmoreland, among others, point clearly to several "lessons" that obviously are becoming more accepted in official circles and by the public:

- The strategy of gradualism or "attrition" has failed Vietnam.
- The centralization of strategy and tactics, to a measurable degree, has also failed.
- Any future war must be openly explained *to* and accepted *by* the American people.

- A great and powerful nation does not place its prestige and power on the line in support of a government that does not effectively control — or command the support of — its own people.

In discussing these points, it must be made clear that we are not talking about generals running the entire war with no consideration for the intrinsic political aspects of conflict; neither are we talking about flinging everything we have so as to make a third world war probable. Beyond the patently obvious and what we have already indicated, it has become clearer now that the practice of running almost completely the strategy and tactics of the war in Vietnam from the desks of the President and the Secretary of Defense and their advisers has not proved wise or successful. We are not suggesting that the President relinquish his constitutional role as Commander in Chief, but rather that more flexibility be given to field commanders within the broad and *appropriate* policy and strategy as formulated by the President and his immediate advisers.

Despite the undistinguished record of centralized manipulation of the war, and despite the power and responsibility placed on the President, central to the democratic process is that the roles of President and Commander in Chief not be separated. Strategy is indeed the servant of policy, and the failure of the new manipulators does not dictate the end of the system but rather dictates changes in organizational structure and strategies *within* the system. It is not the democratic process that has gone haywire; what we have witnessed is a misjudgment of that process by the top U.S. leadership.

For the fact is that after what is already the longest war in our history, in which the world's most powerful nation has been unable to subdue a relatively feeble country, it has become clear even to the zealous proponents of centralized manipulation that a jungle war far from our own shores cannot be won by charts, statistics, and slide rules. Or even, let it be said, by sophisticated logistics and superiority in firepower alone. Wars simply cannot be tuned that precisely. And the responsibility for this misjudgment falls heaviest upon the Executive Branch rather than on those advisers, academicians, and theorists who erroneously believed we could plot and control this war as so many pawns in the war-gaming room.

We became bogged down in a backwater almost without realizing it because with each succeeding step and attendant compromise we thought that we could control forces which, as it turns out, were not within our power to control. Whether or not different steps might have succeeded is now an academic question. The point is that wisdom dictates that, at the least, we now learn some hard and relevant lessons from the Vietnamese experience. And perhaps the first point to be remembered is that the managers and manipulators cannot dictate solutions or control a complicated war without, for example, rethinking their strategic concepts, taking unfavorable border geography into consideration, and drawing the American people into their confidence.

Part VII

Reprise



The controversy between the Air Force and the Navy over control of the strategic nuclear mission centered on whether the Air Force would obtain the B–36 intercontinental bomber or whether the Navy would get the carrier that it wanted to use as the launch pad for intercontinental bombing. The artist's sketch above represents the Navy's desired supercarrier, the USS United States*, which never received funding.*

The USAF in the Defense Establishment

The relationship of the United States Air Force to the other arms of the American military establishment since 1947 is marked by certain constants which in turn created specific reactions and, in the Air Force view, eventually resulted in an ironical twist of circumstance. Constants during most of this period included the progressive increase in firepower and concomitant attempts by the Air Force to enlarge its mission. This produced controversy with the other services, especially the Navy, particularly over the strategic nuclear mission. Ironically, after the USAF gained many of its objectives (independence, responsibility for strategic air operations, approval of a larger force structure, and advanced weapons), the weapons technology that had enabled air leaders to obtain these goals now, in effect, worked to deprive them of their power to decide how the weapons would be used in the event of war. Moreover, after the USAF had supported legislation to give the Office of the Secretary of Defense more power, this office increasingly came to intrude into decisions about weapons development and production, heretofore primarily the Air Force's responsibility. After passage of the 1949 amendments to the National Security Act, the Air Force lost its role as a participant in the formulation of national security policy, the Secretary of the Air Force no longer being a member of the National Security Council.

The Air Force also confronted issues within its own establishment. Controversy with the Army and Navy over roles, missions, and the defense budget generated internal competition as Air Force commands sought to advance their particular and conflicting claims to USAF resources.

The USAF in the Defense Establishment originally appeared as "Independence and Responsibility: USAF in the Defense Establishment" in *Evolution of the American Military Establishment Since World War II,* ed. Paul R. Schratz (Lexington, Va.: George C. Marshall Research Foundation, 1978), pp. 57–72.

Fulcrum of Power: Part VII

On the legislative front, the Air Force also considered it was making progress, although it could not have been expected to foresee the long-term ramifications. Primarily due to Forrestal's frustration about having great responsibility without commensurate authority and also as a result of Symington's recommendations, the National Security Act was amended in August 1949. The military services were downgraded from executive to military departments, and the authority of the Secretary of Defense was increased. This ended the services' role as direct participants in National Security Council deliberations.

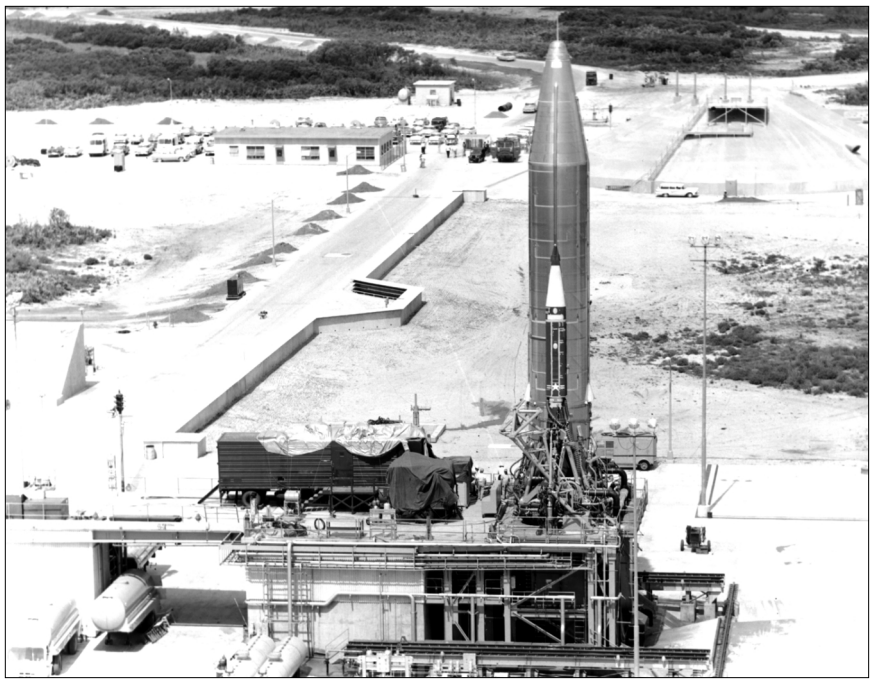
The reorganization of the military establishment in 1953 significantly advanced the trend toward a stronger OSD. Several boards and agencies were abolished, their functions transferred to the Office of the Secretary of Defense, and six additional Assistant Secretaries of Defense were approved. As a result, the Secretary of Defense became in fact the civilian chief of the defense establishment.

The Air Force favored such reorganization, having from the start advocated measures to strengthen OSD. Meanwhile, air leaders had other reasons to feel satisfied. A thermonuclear device had been tested in November 1952, and missile technology was advancing toward the ICBM era. The United States thus stood on the threshold of a weapons revolution. Also, a result of the Korean War was an arms buildup, and airmen now thought that citizens would approve the idea of substantial forces in-being sustained over a long period. The American tradition of being opposed to a large standing military establishment was changed by the Korean War.

The war in Korea paved the way for President Eisenhower's New Look military policy. The Air Force anticipated this change in the summer of 1952 by convening a meeting of air leaders to plan future policy. The consensus was that the Air Force should increase its efforts to gain support for a strategic concept featuring SAC's ability to launch an immediate counterstrike. Behind this strategy of nuclear deterrence lay the conviction that the United States could not afford both deterrence and the ability to fight local wars with large ground armies.

The Air Force favored substantial reductions of conventional forces, emphasizing that overseas deployment of large numbers of troops had kept the United States overextended. This view was also advanced by Adm. Arthur W. Radford, who in 1953 became JCS chairman. The Korean War strengthened the air position by impressing the new administration with the potential consequences of involvement in indeterminate land wars. And many thought that Eisenhower's implied threat to carry atomic war to the Chinese mainland played a large part in bringing the Korean War to an end.

Though the war resulted in a $50 billion defense budget, this did not mean the end of interservice strains nor, for that matter, of conflicting pressures within the Air Force. When Lt. Gen. Curtis E. LeMay took command of SAC,



A Convair SM–65 Atlas ICBM sits on the launch pad on May 20, 1957.

he was able — because of intensification of the Cold War and the force of his own personality — to gain top priority in the Air Force for the strategic mission. During his tenure as SAC commander (1948–57) he argued that insufficient resources were being allocated to SAC, given its priority mission. Between 1948 and the early 1960s, SAC was an almost autonomous air force within the Air Force. It was an elite organization. And it had a mission no other military organization could claim, at least for most of this period.

SAC, the Tactical Air Command, and the Air Defense Command had been established in March 1946. General Eisenhower insisted to Spaatz that a separate tactical air command be created, rather than having tactical forces included as only part of a larger combat command. Eisenhower was adamant on this point, emphasizing that World War II proved that tactical air belongs in the Air Force. "The Army," he declared, "does not belong in the air…Control of the tactical Air Force means responsibility, not merely for fighters and medium bombers, but also for the entire operating establishment required to support these planes." Eisenhower was opposed to creation of "another air establishment."

Subsequently, LeMay contended that TAC was using resources that would better be spent on SAC. Tactical Air Command, he said, could not play a major

role in a strategic counterstrike against the enemy's long-range delivery force. Also, substantial TAC forces were subject to use by theater commanders. To LeMay, who once thought it proper that a significant part of the Air Force should be devoted to support of ground forces, the Soviets' development of a nuclear-delivery capability in the 1950s made a vast difference. "Offensive air power," he emphasized, "must now be aimed at preventing the launching of weapons of mass destruction against the United States or its Allies. This transcends all other considerations…" Consequently, LeMay did not attempt to dissuade the Army from increasing its own ground support capability. LeMay recommended that SAC and TAC should be combined into an "Air Offensive Command" under a single commander. The next step, according to LeMay, would be "unified control of all air offensive forces, regardless of service, under a single air commander." General LeMay's views were of course opposed by Gen. Otto P. Weyland, Commander of Tactical Air Command, who argued that TAC could make an important contribution because in the future, limited war was more likely than general war. SAC, he noted, was dedicated to prosecution of general war; it would not be able to cope with potential conflicts short of all-out war. TAC, with its nuclear capability, could make a contribution.



Gen. Otto P. Weyland had long experience in and firm views on tactical air support that included providing assistance to Army General George Patton during World War II and aiding forces in Korea. Here he observes as Lt. Gen. George E. Stratemeyer, Commanding General of FEAF, receives the Republic of Korea Order of Military Merit with gold Star from the chief of the Korean diplomatic mission in Japan, Kim Yong Joo.

In 1957, this struggle within the Air Force was resolved, at least for the moment, by Chief of Staff Gen. Thomas D. White. Though SAC would continue to claim highest priority, White emphasized that TAC would continue to exist because general war forces would not be used to resolve every conceivable local conflict. White believed that it was not possible to deter all limited wars. Absolute deterrence of all potential wars was a myth. Behind his decision was also the idea that the Air Force did not want to abdicate the tactical mission to the Army.

While General White dealt with Air Force problems, he also had to face the continuing issue of defense reorganization. As with previous changes, the Air Force backed the 1958 reorganization. White told Congress that this reform would provide the Secretary of Defense "unequivocal authority." This might mean that certain of the Air Force's "vested interests" would fail to be approved. Nonetheless, he emphasized that even should this happen "it would be for the good of the overall national defense." Subsequent Air Force chiefs of staff would not always hold General White's sanguine view, the most notable exception being his successor, General LeMay.

The Reorganization Act of 1958, partly in testimony to President Eisenhower's determination to strengthen OSD, was perhaps the most far-reaching reform of the several since 1947. Among other things, it completed the evolution of the position of a service secretary from that of a policymaker holding



Gen. Thomas D. White, as Vice Chief of Staff, stands at the far right, beside the Air Force Chief of Staff, Gen. Nathan F. Twining, whom White succeeded in 1957. Also pictured, from the left, are Under Secretary of the Air Force James H. Douglas and the Air Force Secretary, Donald A Quarles.

cabinet rank to a primarily managerial post. Service secretaries were removed from the operational command line. The military command channel would now run from the Secretary of Defense through the Joint Chiefs of Staff to the unified and specified commands. The administrative channel would stretch from the Secretary of Defense through the service secretaries to each component element within the unified commands. Military departments would organize, train, and equip forces assigned to unified and specified commands.

During the 1950s, concomitant with the differences between SAC and TAC, the Air Force disagreed with the Army about priorities for strategic and limited war forces, and with the Navy about the strategic force and the imminent operational status of the Polaris class of submarines.

The Army and Navy were of course concerned about the Air Force receiving the major share of defense funds. SAC alone, during much of the 1950s, averaged about 18 percent of the total defense budget. Thus, in this sense, the Army and Navy had something in common with TAC and other USAF commands: worry over SAC's share of the budget. Whereas LeMay and his successor at SAC, Gen. Thomas S. Power, argued that evolution of the Soviet long-range nuclear capability dictated a greater SAC effort as a counterforce,



Polaris ballistic missile test launch, July 1960



In 1957 Gen. Curtis E. LeMay left SAC to serve as the Vice Chief of Staff, USAF, in Washington. Succeeding him at SAC was Gen. Thomas S. Power, who, standing at the right, welcomes his predecessor and President John F. Kennedy to SAC headquarters in Nebraska in 1961.

the Army and Navy reasoned that this same Soviet development diminished SAC's role because mutual deterrence now prevailed. Consequently, limited conventional war was more likely to occur than general nuclear war. The Army and Navy posited that nuclear deterrence simply required the ability to destroy the enemy's urban-industrial complexes. This strategy was known as minimum or finite deterrence. In contrast, the Air Force advocated a counterforce strategy of primarily attacking the enemy's long-range delivery vehicles. Counterforce demanded larger strategic forces than those required by finite deterrence.

Meanwhile, the Air Force, having been assigned the responsibility in 1948 for strategic air warfare, attempted to persuade the Navy to provide it with a list of strategic targets so that it could integrate this information into an overall plan. The Navy, fearful that the Air Force was attempting to gain control of all strategic weapons and operations, refused to cooperate.

The 1958 Reorganization Act provided the Eisenhower administration with an opportunity to improve integrated strategic planning. President Eisenhower had told Congress this legislation would enable the Secretary of Defense to increase "unity in our strategic planning and basic operational direction." The Air Force and Army favored the administration's plan; the Navy opposed it. General White, supporting Eisenhower's program before Congress, observed

that it was vital "that our combat forces be organized into truly unified commands and that our strategic and tactical planning be completely unified."

In the late 1950s, the Navy's development of the Polaris ballistic missile and its espousal of finite deterrence ("city-busting") caused the Air Force to accelerate its proposal to integrate strategic planning and targeting. The Navy opposed this, convinced the Air Force was attempting to gain control of all strategic forces and targeting. Vice Chief of Staff LeMay went even further. On April 22, 1959, he told the Senate Committee on Aeronautical and Space Sciences that the Reorganization Act was only a first step toward a single service:

> As our weapon systems improve and become more versatile, it is becoming more and more apparent that the functions and weapons of individual services are beginning to overlap…To meet this changing condition I firmly believe we will need a modification in our military structure. I believe we must eventually progress toward a single service, with a single Chief of Staff, and one staff to operate the armed forces…Combat elements having the same function or mission must be integrated into functional areas under single control.

At the same time, General White favored establishment of a single unified U.S. Strategic Command, including SAC's weapons and Polaris-equipped submarines. The Army, Navy, and Marine Corps opposed this idea.

Then, in early 1960, Secretary of Defense Thomas S. Gates (formerly Secretary of the Navy) confronted the problem of how best to organize the nation's nuclear forces. Though most strategic nuclear delivery forces were part of SAC, significant units would be provided by Polaris submarines and also missiles and aircraft of tactical air units deployed overseas. Obviously, target planning had to be coordinated.

Steering a course between the Air Force's desire for a single Strategic Command and the Navy's support for the status quo, in August 1960 Gates announced creation of the Joint Strategic Target Planning Staff (JSTPS). This organization would comprise personnel from all services and would prepare and maintain a national strategic target list and a single integrated operational plan to commit weapons to specific targets. Using the experience and facilities of SAC, Secretary Gates directed that the commander in chief of SAC would be the director of JSTPS, with the entire planning staff to be located at SAC headquarters. A vice admiral would serve as the deputy director of JSTPS.

Gates's judgment that creation of this joint strategic target group was the most important decision he made as Secretary of Defense was undoubtedly correct. It was a landmark decision. It ended years of targeting strife between the Navy and the Air Force, and it proved to be a harbinger of the kind of thinking and leadership that would be provided by Secretary of Defense Robert S. McNamara.

Formation of JSTPS signaled to the Air Force (and to the Army and the Navy as well) that with burgeoning development of nuclear technology would come firm control of these awesome weapons by the President and the Secretary of Defense. It was not productive to have the Air Force and Navy promulgating two separate strategic targeting plans with their inevitable redundancies.

Robert McNamara was well aware of Forrestal's frustrations as Secretary of Defense, and McNamara wanted to avoid a similar fate. His Secretary of the Air Force, Eugene M. Zuckert, had observed his predecessor Symington's tenure firsthand and would have liked to have had responsibilities equal to Symington's. However, by the end of 1961, Zuckert had become painfully aware of the consequences of the several defense reorganizations and of McNamara's idea of the role of a Secretary of Defense. In fact, in December 1961, Zuckert seriously considered resigning. McNamara vigorously implemented the Reorganization Act of 1958; unlike Forrestal, he would not act as "referee" and, unlike the first Secretary of Defense, he had the statutory power to avoid being caught in the middle. He would make decisions. McNamara would not accept service protestations about how their statutory functions were being usurped.

Although Zuckert stayed on and subsequently came to accept, even to applaud, McNamara's operation, Air Force Chief of Staff Gen. Curtis E. LeMay never accepted the way McNamara ran the Defense Department. LeMay had directed the B–29 offensive against Japan in 1945 (as an Air Force officer, McNamara had worked on B–29 statistical analysis), and he had commanded SAC from 1948 to 1957, building it into the major instrument of U.S. nuclear deterrence. He was not prepared for the Kennedy administration's strategic philosophy and its view toward the manned bomber. To McNamara, the "massive retaliation" strategy of the 1950s was no longer credible since the United States and the Soviet Union could destroy one another. In this situation, the Kennedy administration was determined to revise U.S. strategy away from massive retaliation. The new concept of "flexible response" (influenced by Gen. Maxwell D. Taylor's ideas) emphasized conventional war forces.

Though the Kennedy administration moved to expand the ICBM force, LeMay saw the B–70 bomber, which he supported, terminated, and the Skybolt air-to-ground missile program abruptly canceled. Also, McNamara opposed both the Navy and the Air Force by going ahead with his "commonality" approach to the TFX. The TFX (to become F–111 and FB–111) decision angered LeMay and the Air Staff. They thought the FB–111 was forced upon them. SAC never considered it a strategic bomber because it lacked range and payload. In LeMay's view, it was "no goddamn good as a strategic bomber, it wasn't a strategic bomber and that's a fact." And also despite General LeMay's opinion, McNamara chose General Dynamics's design rather than Boeing's, which the Air Force wanted.



Gen. Curtis E. LeMay is sworn in as Chief of Staff of the Air Force by Secretary of the Air Force Eugene Zuckert, while President John F. Kennedy and Vice President Lyndon B. Johnson observe. Also present at this June 1961 ceremony are three former Chiefs of Staff of the Air Force, Carl A. Spaatz (standing third from left, back row), Nathan F. Twining (far left, back row), and Thomas D. White (far right, back row). Former Secretary of the Air Force Stuart Symington stands at the left behind Majority Whip Carl Albert, while Congressman Overton Brooks, now the Science and Astronautics Committee's first chairman, looks on from his position directly above General LeMay, at the right of the photo.

Secretary McNamara emphasized the Polaris and Minuteman missiles as the strategic weapons of the future. When the last B–52H and B–58 were produced in the fall of 1962, there was no strategic bomber in or near production for the first time since 1945. Yet, bombers played an important role in resolution of the Cuban missile crisis when an executive order for an increased alert and dispersal of SAC bombers clearly showed that President Kennedy meant business. Nonetheless, McNamara did not consider bombers essential.



FB–111



B–58



B–52H with underwing Skybolts



B–70

Much to its dismay, the Air Force establishment saw the B–70 bomber, which it supported, terminated; the Skybolt air-to-ground missile program canceled; B–52 and B–58 production cease; and the FB–111 forced upon them – all decisions originating in a now-powerful Office of the Secretary of Defense.

Fulcrum of Power: Part VII

Evolution of the doctrine of "assured destruction" (retaliatory force primarily targeted against enemy cities and industry) was an important milestone in the role of the bomber in nuclear deterrence. The missile's high probability of survival and its penetration capability made it the ideal assured destruction weapon. The manned bomber was considered less cost-effective and more vulnerable than the missile for the same mission. Critics contended that assured destruction was merely a euphemism for finite deterrence.

LeMay mistrusted McNamara's assumptions and calculations; he preferred a combination of counterforce and assured destruction. LeMay wanted superiority and flexibility, stating it was impossible to know exactly how a war would start and what its character would turn out to be. He favored a mixed force of missiles and bombers. To those like McNamara who denigrated the bomber's ability to penetrate enemy defenses, General LeMay replied that with proper tactics and penetration aids the bombers would be able to attack their targets successfully. "Experience," he noted, "is more important than some of the assumptions that you make."

The onset of the Nixon administration resulted in another change in programmed bomber forces. In March 1969, Secretary of Defense Melvin R. Laird announced that acquisition of the programmed 253 FB–111s would be limited to a token 76 aircraft. The strategic policy of the Nixon administration, and continued by President Ford, emphasized "sufficiency" of the deterrent force to prevent aggression and nuclear war while promoting new relationships with the Soviet Union and China. Opening of the Strategic Arms Limitation Talks (SALT) with the Soviet Union in 1969 marked the beginning of this new period of negotiation and détente.

In sum, the services' relationship with OSD had evolved from Forrestal, the first secretary who had little authority, to the 1960s, when OSD made major operational decisions — for example, during the Vietnam War — relegating the services at best to an ancillary role. Therefore, USAF leaders could not be blamed for thinking that the Air Force had in a sense fallen victim to its own recommendations. From the beginning, the Air Force had advocated a strong unification bill and had supported the idea of a "Super-Secretary" of Defense, i.e., a Secretary with full authority to discharge his responsibilities. Air Force Secretary Symington had played a part in formulating the 1949 amendments to the National Security Act. Air Force officials had strongly backed the 1953 and 1958 reorganizations.

Now that these reforms had been carried out and in fact welcomed by the Air Force — now that the defense establishment was run by a Super-Secretary named McNamara — the Air Force realized that its primary rationale for a powerful OSD had been wrong. Air leaders over the years had argued for a strong Secretary of Defense because they thought (as Zuckert wrote) that he would "institutionalize what they regarded as the Air Force's justifiable domination of the defense structure." It did not turn out that way.



Eugene Zuckert decided to stay on as Air Force Secretary, and in 1965, during the Johnson presidency, he swore in Gen. John P. McConnell to succeed Curtis LeMay as Air Force Chief of Staff. McConnell was left to deal with McNamara as the war in Vietnam ended.

And so reorganizations that evolved under the Eisenhower administration in the 1950s and made way for McNamara in the 1960s have perhaps been played out in the sense that centralization has gone about as far as it is likely to go in the foreseeable future. And the Air Force's proposal of the late 1950s for a single U.S. Strategic Command seems no closer to reality now than it did then. Weapons and missions of course still weigh heavily in the struggle for a larger share of the budget. In the future, the Air Force will continue to be concerned about vulnerability of its land-based ICBMs and the future of the long-range bomber, the weapon that the Air Corps counted on in the 1930s to nail down the "independent mission" as a precursor to autonomy.

Twenty years ago, the Air Force was riding the crest of the wave of the technological revolution in weapons, a revolution that persuaded the civilian leadership of the Defense Department that it must effectively control the power of decision over the use of nuclear weapons. Also, as the complexity and cost of weapons steadily increased, the power of the Air Force (and the other services) to determine which and how many weapons to produce correspondingly declined.

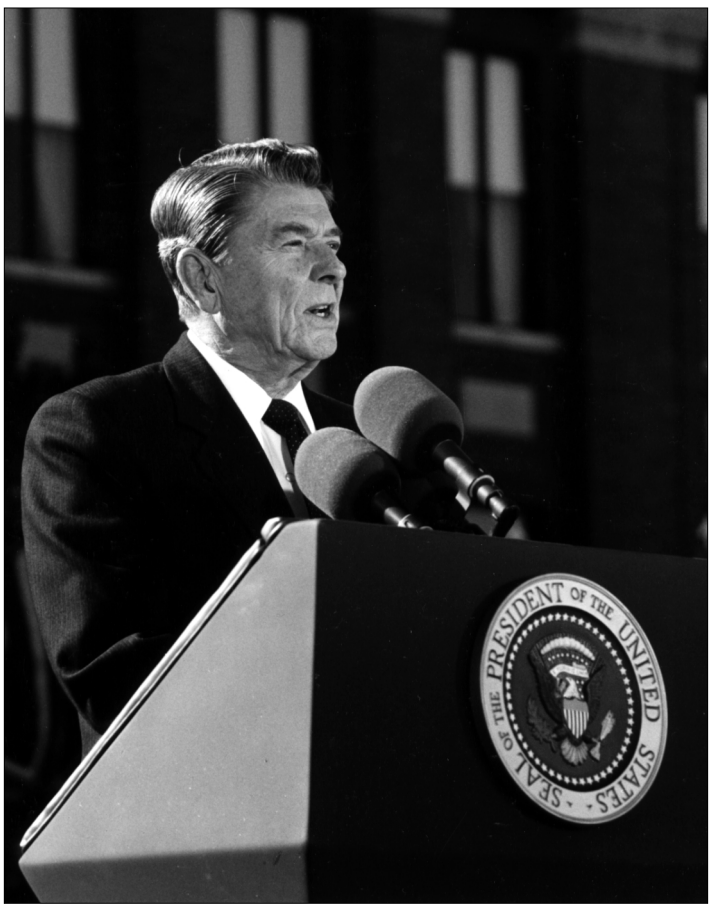
Today the services have learned to live with this evolution of the defense establishment. No responsible official wants to overturn history. Competition for defense funds continues, and new weapons are on the drawing boards and

in research and development. Discussion and disagreement continue, but they are comparatively muted. The chain of command remains intact and strong. In today's milieu, it would be difficult to imagine another Revolt of the Admirals. Three decades of interservice relations have taught some hard lessons.

The fact is that when the chips were down, the services at the least succeeded in compromising most of their differences. The nation has come a long way from Key West and Newport. "Unification" has evolved in ways that Stuart Symington would have found hard to imagine when he described the National Security Act as a good chapter, but certainly not a good book.

Transcending questions of roles, missions, and weapons, the situation in one very fundamental respect has not changed. Successive administrations have determined that the nuclear deterrent must remain, as Bernard Brodie wrote twenty years ago, "the constant monitor"; it is the backstop for everything else. It is the "nuclear umbrella." The integrity of the nuclear arm remains the most important part of the U.S. defense phalanx.

This is something that General Hap Arnold foresaw. And if he were alive today, he would not be displeased — even if the Air Force must share part of the strategic deterrent with the Navy.



President Ronald Reagan signed the Goldwater-Nichols Department of Defense Reorganization Act in October 1986.

American Chieftains

The way the American military is organized to fight the nation's wars has evolved incrementally since World War II. Passage of the National Security Act of 1947 establishing the United States Air Force also created the modern American national security establishment, but the culminating event was the Eisenhower reorganization of 1958 that removed the military departments from the operational chain of command.

An initial reluctance to reorganize ironically centered on the fear of a "man on horseback," an all-powerful Secretary of Defense who would ride roughshod over the military services. As it was, the National Security Act gave insufficient authority to the Secretary of Defense. Politicians and defense officials for decades attempted to revise the 1947 act to strengthen the Secretary of Defense and Joint Chiefs of Staff at the expense of the services.

A number of these efforts—notably those in 1949, 1953, 1958, and 1986—resulted in legislation leading to centralized authority and the creation of a massive defense bureaucracy. This centralization of authority was primarily a response to the evolution of nuclear weapons and to service roles and missions disputes that were seen as affecting the nation's warfighting capability.

Landmark Reorganization

The pivotal reorganization, championed by President Dwight D. Eisenhower in his second term, occurred in 1958 when the military departments were removed from the operational chain of command. Operational direction would run from the President through the Secretary of Defense and the Joint Chiefs, to the unified and specified commands. This landmark defense reorganization was not unexpected from a soldier-statesman with an extraordinarily distinguished military career. It was also true that Eisenhower felt much more con-

American Chieftains originally appeared as "American Chieftains" in *Air Force Magazine,* Vol. 85, No. 9, September 2002, pp. 102–106.

fident of his ability in military affairs than in the civilian policy arena. His experience in World War II convinced him of the absolute necessity of unified command. As Supreme Allied Commander, Eisenhower realized it was time to change the way America fought its wars. The objective, he said, was to "achieve real unity" and end, "once and for all, interservice disputes." Unity of direction was the key, he explained, to victory in World War II.

His ideas on military organization—a fundamental concept of the military services as mutually supporting—and his abhorrence of interservice rivalry or parochialism, as he frequently called it, can be traced directly to his war experience. In November 1945, testifying before Congress about defense unification, Eisenhower observed: "At one time I was an infantryman, but I have long since forgotten that fact, under the responsibility of commanding combined arms. I believe it is honest to say that I have forgotten that I came originally from the ground forces, and I believe that my associates of the Air and of the Navy in that command came to regard me really as one of their own service rather than one of the opposite." He emphasized that "competition is like some of the habits we have — in small amounts they are very desirable; carried too far they are ruinous."

He was also sensitive to the effect on the economy of overemphasizing the military aspects of national security: "We must always retain," he said, " a strong and solvent economy." Thus, in the immediate post–World War II period, Eisenhower emphasized the need "to root out the empire builders [in the military] with a sledgehammer."

Three-Legged Stool

Eisenhower later likened his philosophy of a balanced military to a three-legged stool: "We have learned by hard experience that the nation's security establishment is, in fact, a single fighting team composed of three services each supplementing the other in proper balance. No single service can be independently considered." Gen. Henry H. "Hap" Arnold, commanding general, Army Air Forces, in his testimony on defense unification, echoed Eisenhower's view, noting that a basic pattern emerged from the war: "This pattern is coordinate organization of the principal forces having their respective missions in one of the major elements — land, sea, and air — each under its own commander and each respectively responsible to a supreme commander, i.e., three coordinate forces under unified supreme command."

The framework advocated by Eisenhower and Arnold was created on December 14, 1946, when President Harry S. Truman signed the Outline Command Plan establishing seven unified commands. (The Outline Command Plan was the first of what is now known as the Unified Command Plan.) The first seven unified commands were Alaskan Command, Atlantic Command, Caribbean Command, European Command, Far East Command, Northeast

Command, and Pacific Command. The plan also recognized the existence of Strategic Air Command, a command of the U.S. Army Air Forces, and placed it under the responsibility of the JCS. SAC was the first of what would later be designated specified commands.

The drive toward defense centralization continued. Amendments in 1949 to the 1947 National Security Act removed the service Secretaries from their policy role in the National Security Council. A 1953 reorganization further centralized authority in the Office of the Secretary of Defense. And ever since adoption of the 1947 act, the Air Force had favored a more unified defense establishment. In 1956–57, when Sen. W. Stuart Symington (D–Mo.), who had been the first Secretary of the Air Force, conducted his air power hearings — the most comprehensive ever held on the subject — the Air Force took the position that a defense reorganization was required. Gen. Nathan F. Twining, Air Force Chief of Staff, emphasized that it was a mistake for each service to attempt to attain self-sufficiency.

The Air Force View

Throughout the 1950s, the Air Force continued to press for a more unified defense structure. With evolution of the Strategic Air Command as the fulcrum of U.S. defense policy, air leaders reasoned that a stronger OSD would institutionalize the Air Force's justifiable domination of the defense structure. It was interservice rivalry where critics of the Eisenhower administration lay the blame for the lag in U.S. missile and space technology, in the wake of the Soviets' October 1957 launch of the Sputnik satellite.

In late 1957, a study panel of the Rockefeller Brothers Fund described three significant defects in the organization of the Department of Defense:

- Roles and missions had become competitive rather than complementary.
- The organization and responsibilities of the Joint Chiefs precluded development of a comprehensive and coherent defense doctrine.
- The Secretary of Defense spent too much time arbitrating interservice disputes and could not contribute significantly to evolving military policy.

The Rockefeller panel recommended that the military departments be removed from the chain of operational command and instead support the unified commands. It proposed that "all operational military forces of the United States should be organized into unified commands to perform missions dictated by strategic requirements. The units assigned to each unified commander should be organic to his command not simply placed under his temporary operational control."

In early January 1958, President Eisenhower, in his State of the Union address, emphasized the need for a shakeup in defense organization. In late January, the Senate preparedness investigating subcommittee recommended

action "to reorganize the structure of the defense establishment" and to "accelerate and expand research and development." Secretary of Defense Neil H. McElroy appointed a group to draft the appropriate reorganization legislation, and, based on this report, Eisenhower on April 3, 1958, asked Congress to deploy troops into truly unified commands and to eliminate separate ground, sea, and air warfare forever. As President, he emphasized that future wars would be waged "in all elements, with all services, as one single concentrated effort. ... Strategic and tactical planning must be completely unified, combat forces organized into unified commands, each equipped with the most efficient weapons systems that science can develop, singly led and prepared to fight as one, regardless of service." He expected the unified command "to go far toward realigning our operational plans, weapon systems, and force levels." The nation required, he said, "maximum security at minimum cost," a constant refrain of Eisenhower's since World War II.

Congress incorporated most of Eisenhower's recommendations in the Department of Defense Reorganization Act of 1958. This legislation marked a turning point in American military organization by removing the military departments and their service Secretaries from the operational chain of command.

The New Warrior Chiefs

The 1958 act stipulated that operational command would be directed from the President to the Secretary of Defense through the Joint Chiefs (as an advisory conduit) and then to the unified and specified commands. The JCS would provide a channel of communications from the Secretary of Defense to the unified and specified commands. The law gave unified and specified commanders control and direction of U.S. combatant forces. The so-called nonoperational chain of command or responsibility for preparing and supporting forces remained with the military departments. The act greatly strengthened the powers of the Secretary of Defense, granting him direction, authority, and control over the Department of Defense and the military services. It repealed the previous legislative authority for the service Chiefs to command their respective services. The National Security Act of 1947 described "three military departments separately administered," in contrast to the 1958 act which described a "Department of Defense, including three military departments, to be separately organized."

In addition, the 1958 legislation granted control and direction of military research and development to the Secretary of Defense and created a director of defense research and engineering. The Secretary of Defense was also authorized to establish agencies to conduct any service or supply function common to two or more services. In sum, although the 1958 reorganization act left the military departments intact, it centralized power in the Office of the Secretary



President Reagan's Secretary of Defense at the enactment of Goldwater-Nichols legislation in 1986 was Caspar W. Weinberger, shown here in 1983 with Chairman of the Joint Chiefs of Staff General John W. Vessey, Jr.

of Defense and gave the Secretary more responsibility to craft strategy in concert with the Joint Chiefs of Staff. The service Secretaries and Chiefs could still present recommendations to Congress.

From the Air Force's perspective, the legislation failed to achieve the control of combat forces desired by Eisenhower. "The top military body," emphasized Gen. Thomas D. White, Air Force Chief of Staff at the time, "was still shot through with interservice rivalry." According to White, there was "no more agreement in the JCS" than before the reorganization. Although the law "was a pretty good step," White believed that legislation by itself could not resolve interservice rivalry.

However, the war in Southeast Asia now intervened to increase the pressure to strengthen the role of the combatant commanders. In early 1982, prior to his retirement as JCS Chairman, Air Force Gen. David C. Jones testified before the House Armed Services Committee and stated that the commanders of the combatant commands and the Chairman of the Joint Chiefs needed to be given more authority and responsibility. He pointed out that since the 1958 reorga-

nization, the only important change within the defense department had been in 1978 when the Marine Corps Commandant received full-fledged status on the Joint Chiefs of Staff. In Jones's view, it was absolutely essential to construct "a joint staff and a joint system that were not beholden to the services." He observed that "we need to spend more time on our warfighting capabilities and less on intramural squabbles for resources."

In early 1985, a study conducted under the auspices of Georgetown University Center for Strategic and International Studies argued "for a sweeping restructuring of the American military operation." It described the military structure as "stagnated" and rife with interservice rivalries. Participants in this study included Rep. Les Aspin (D–Wis.), the new chairman of the House Armed Services Committee and later a Secretary of Defense under President Clinton; Sen. Sam Nunn (D–Ga.); Sen. William S. Cohen (R–Maine), also later a Clinton Secretary of Defense; and Sen. Barry Goldwater (R–Ariz.), chairman of the Senate Armed Services Committee.

The Navy opposed the restructuring. Secretary of the Navy John F. Lehman Jr. commented that these proposed reforms "would centralize too much power in Washington and diminish civilian control."

Toward the Eisenhower Vision

The drive for reform gained momentum in October 1985 when the Senate Armed Services Committee issued another study recommending that the Joint Chiefs be replaced with a military advisory council, that OSD be strengthened, and that more responsibility be given to the unified commanders. This Senate study concluded that the position of the Secretary of Defense was weaker "today than when it was created by President Truman in 1947." Congress then reached a final compromise resulting in the Goldwater-Nichols Department of Defense Reorganization Act of 1986, signed into law by President Reagan. Nunn, one of the major architects of the legislation, declared that it provided the country the kind of unified structure that Eisenhower had had in mind for the 1958 reorganization.

The Goldwater-Nichols legislation gave more power to the Chairman of the Joint Chiefs and to the unified commanders. It designated the JCS Chairman as the principal military adviser to the President. Thus, the JCS Chairman now assumed the advisory role that the corporate Joint Chiefs had maintained since 1958. The law also stipulated that communications between the President and Secretary of Defense and the heads of the unified and specified commands could be channeled through the Chairman.

The Joint Chiefs and individually each service Chief remained outside the operational chain of command. The legislation also stipulated that the JCS Chairman would perform reviews of the unified and specified commands and submit a report on roles and missions of the services every three years. It

included two other major provisions as well. It made the Secretary of Defense responsible for strategic and logistical planning and budget requests; and it created a four-star vice chairman of the JCS, a position to be manned from a service other than that of the Chairman.

Air Force Gen. Robert T. Herres was the first officer to occupy the position of vice chairman of the JCS. He described the objective of Goldwater-Nichols to be "less talk of so-called roles and missions of the services and more meaningful, aggressive action to support the combat commanders." Herres stressed that the architects of the law believed "service interests" had been "served at the expense of joint responsibilities," and "resource managers held excessive influence at the expense of warfighters."



At the signing of the Goldwater-Nichols Act in 1986, the Chairman of the Joint Chiefs of Staff was Admiral William J. Crowe, Jr.

It had taken 28 years to reach Goldwater-Nichols. Since then, additional reports have focused on strengthening America's warfighting capability, emphasizing ways to field a fighting force not constrained by parochialism.

The end of the Cold War and the startling events of the past decade have once again turned the spotlight on how best to organize the nation's military to meet the difficult challenges ahead.

The Author

Herman S. Wolk is senior historian and chief of the Analysis and Reference Division, Air Force History Support Office, Washington, D.C. He was a historian at Headquarters Strategic Air Command, 1959–1966. He is the author of *Strategic Bombing: The American Experience* (1986); *Planning and Organizing the Postwar Air Force, 1943–1947* (1984); and *The Struggle for Air Force Independence, 1943–1947 (1997)*. He is a contributing author to *Evolution of the American Military Establishment Since World War II* (1978); *Winged Shield, Winged Sword: A History of the United States Air Force* (1997); and *The Pacific War Revisted* (1997).

Mr. Wolk also served on the Office of the Secretary of Defense Special Project on the History of the Strategic Arms Competition, 1973–1974. He is a fellow of the Inter-University Seminar on Armed Forces and Society.