Strategic Air Warfare and Nuclear Strategy: The Formulation of Military Policy in the Truman Administration, 1945-1950

Patrick William Steele
Marquette University

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ABSTRACT

STRATEGIC AIR WARFARE AND NUCLEAR STRATEGY: THE FORMULATION OF MILITARY POLICY IN THE TRUMAN ADMINISTRATION, 1945-1950

Patrick W. Steele. B.A., M.A.

Marquette University, 2010

This work analyzes the military decision making within the Truman administration that culminated in the purchases of aircraft and the establishment of a virtual nuclear only strategy. When Harry S. Truman became President in April 1945, the United States Army Air Force (USAAF) was in the formative stage of a firebombing campaign that attempted to burn the Japanese out of the war by targeting the civilian population. Four months later, the use of nuclear bombs ushered in the atomic age and completely altered the military and political decision-making processes within the administration. Despite evidence to the contrary about the efficacy of strategic bombing, the military view of the atomic bomb as an ultimate arbiter of warfare whose use virtually guaranteed victory on American terms was immediately embraced across all the armed forces.

The chapters of the dissertation describe the evolution of airpower as a strategy and the fundamental differences between the branches of the armed forces regarding funding, missions, and responsibilities in the new atomic age. These substantive and structural problems manifested in arguments over Unification and the subsequent creation of the National Military Establishment. Truman attempted to provide direction to the services through the creation of the President’s Air Policy Commission but unfortunately, civilian and military leadership within the Air Force and the Navy brought their strategic disputes into the public arena. These culminated in a congressional investigation over weapon systems, strategies, and the supposed “Revolt of the Admirals” in October 1949. To secure funding and a critical role in the American defense during this era, the Air Force and the Navy supported a respective series of weapons and strategies that were ill prepared to adjust to changing American policies in any war short of a global nuclear war. Funding for a single-weapon strategy remained even as other conventional weapons were being removed in the spirit of austerity that were the hallmark of the defense spending of the Truman Administration from 1945 until 1950.
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Patrick W. Steele. B.A., M.A.

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INTRODUCTION

Air warfare has passed through a period of adolescence to find maturity in a new concept of strategic air bombardment. Thus the threat of instant retaliation through an air offensive has become one of the greatest deterrents to war today. Secretary of Defense Louis A. Johnson, 1949.1

Air power, like every other weapon, has gaping limitations for war as we shall know it for many years to come . . . Ultimately a war between nations is reduced to one man defending his land while another tries to invade it. Whatever the devastation in his cities and the disorder in his existence, man will not be conquered until you fight him for his life. General Omar N. Bradley, 1949.2

When the Republic of Vietnam collapsed in the spring of 1975 and North Vietnamese tanks rolled into Saigon, countless questions were raised about how the United States, with its overwhelming military superiority, and its allies, could have lost the war in Vietnam. Tens of thousands of lives had been lost and billions of dollars of ordnance expended across Southeast Asia, yet questions remained as to whom, or what, do we affix the culpability for the Vietnamese debacle. Critics of the Vietnam War blamed the military, political restriction, hostile press coverage, and the lack of will from both the South Vietnamese and the American population to win the war. Perhaps one of the greatest debates concerning the war in Vietnam then and now is, what was the role of airpower in Vietnam, and why did it fail to bring about an American victory? Even more, during the longest air campaign of the war, Operation Rolling Thunder (1965-1968), the United States destroyed roughly $600 million worth of North Vietnamese war material at

1 Address by Secretary of Defense Louis Johnson, June 21, 1949. Papers of Harry S. Truman, President’s Secretary Files, Subject File, Cabinet (Commerce-2)- Defense-1) Box 156, Harry S. Truman Library.
2 Address by General Omar N. Bradley, Chief of Staff, United States Army, at the Third National Industry Army Day Conference, Boston Massachusetts, February 4, 1948. Papers of Stuart Symington 1946-1950, B General (Folder 2), Harry S. Truman Presidential Library. (hereafter HST)
the cost of $6 billion in destroyed American aircraft alone.\(^3\) By the conclusion of the American war effort in Southeast Asia, the United States alone littered the landscape with the wreckage of over 3,300 aircraft, with the loss of the lives of 3,265 airmen and almost 500 prisoners of war, which further entangled negotiations to get out of the war.\(^4\) More frightening, these statistics do not include those losses inflicted upon the South Vietnamese Air Force (VNAF) or the Royal Australian Air Force (RAAF).\(^5\) Therefore, because of these losses and the defeat of South Vietnam, critics of airpower justifiably implied that bombing did not work. Strategic air proponents countered that position by suggesting that it was not a failure of airpower in and of itself that doomed South Vietnam. Rather, they proposed that it was political restrictions on the military, which did not allow the aviation assets of the United States Air Force, the United States Navy (USN), and the United States Marine Corps (USMC), to achieve a victory in Vietnam prior to 1972. Furthermore the advocates claimed that it was only after President Richard M. Nixon removed the political restraints on the air campaign in 1972 that North Vietnam buckled and agreed to a peace settlement in January 1973. In addition, supporters of airpower have continued to suggest that the recent unrestricted air campaigns over Iraq (1991 and 2003), the Balkans (1992-2000) and Afghanistan (2002) clearly show that decisive airpower can win a war. Consequently, they contend that unrestricted strategic air warfare could have worked in Vietnam if it had only been given


a chance. Arguably, however, the reality remains that both the cynics and saints of airpower are wrong.

It is clear that the principal reason airpower was unsuccessful was because in the two decades prior to the war, the United States armed forces focused almost exclusively upon nuclear weapons delivery as the means to win all wars and accepted the effectiveness of strategic bombing as dogma. Moreover, limited peacetime budgets prior to the Korean War led to severe inter-service rivalries as the newly independent Air Force and the Navy fought for funding to support their different applications of strategic air warfare. This resulted in a lack of cooperation in the development of air weapons, strategy, and delivery procedures prior to the Vietnam War. Primarily, the resulting differences and arguments between the USAF and the Navy meant that the Pentagon was ill suited to fight the expanding war in Vietnam. The weapons, tactics, and technology that were used in the limited war over North and South Vietnam had been designed for total war with the Soviet Union (USSR). As a result the Air Force and Navy attempted to attack the North Vietnamese with tactics and equipment that were primarily designed to carry nuclear weapons against Soviet targets.

Since 1945, the Air Force and the Navy spent almost as much time fighting each other over their respective strategic air roles as they did preparing to fight the Soviet Union. This continued virtually unabated into the years of the Vietnam War. Even after the near disaster of the Cuban Missile Crisis in 1962, and the Kennedy administration’s touting of flexible response rather than total nuclear war, the reality was that the air weapons and training remained from previous administrations. It would take years for
new weapons and tactics to be developed and introduced into the American military. Therefore, both the USAF and the USN had lost virtually all flexibility to change and adapt to the war that developed in Southeast Asia.

Within many accounts of the Cold War era in general, or the Vietnam War in particular, historians and other writers tend to place the blame for the disaster on either Lyndon B. Johnson and his Administration, or the leadership within the military of the 1960s. However, it must be noted that since August 1945, the Executive and Legislative branches, both Republicans and Democrats, had concurred with an all or nothing strategy for nuclear war that had emanated from the American military. Not only did the politicians choose sides in the battle for the delivery of nuclear weapons by a particular service, they also funded these strategies and procurements. Also, the press that was so quick to point out the flaws in the American military strategy often conveniently looked past the role of many reporters and newspapers that chose sides in the Air Force versus Navy debates of the 1940s, and supported the “nuclear only option.” It became difficult consequently for anybody in Washington D.C. to escape the failure of the air war because they had chosen sides during the critical debates of the 1940s.

What follows in this dissertation is a description of the military and political decision-making processes within the Truman administration that created an inflated belief in the efficacy of strategic air warfare. This produced an over-reliance upon nuclear-armed strategic bombers and led to the establishment of a force structure that

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6 An example of this was one of the budget priorities of the Kennedy administration, a new tactical aircraft (TFX) that could serve the needs of the Army, Navy and Air Force. The original concept for the TFX, later designated the F-111, began in the late 1950s, but was revamped and modified by McNamara’s office in 1961 to include a carrier-based and a strategic bombing version. Eventually the Navy dropped out of the program and the Army never participated. The first combat missions for the F-111 were flown in 1968 and three of the first eight deployed were lost. Don Logan, General Dynamics F-111 Aardvark (Atglen, PA: Schiffer Publishing, 1998), 7-9, 282.
ultimately failed in Vietnam. The formative years of the early Cold War created an environment within the Air Force and Navy command that supported a series of weapons and strategies that were ill prepared to adjust to changing American policies in any war short of a global nuclear war. This defense strategy, premised upon the delivery of atomic weapons, was believed to not only win any future war, it also could deter or curb global anti-American aggression and, theoretically, prevent World War III. The overall perception of these weapons included a belief in the cost savings during the post-World War II military budget reductions, and the assumption that they could always be delivered on target when required. As such, this dissertation is not about the Vietnam War nor does it attempt to evaluate or judge American participation in its longest war of the twentieth century. Moreover, there will not be an appraisal of the morality of the atomic bomb or its application in war beyond what the military or the politicians publically or privately stated. Instead, the readers will be presented with a thorough examination of the development and doctrine of American air policy between 1945 and 1950. The American view of strategic air warfare evolved from the condemnation of strategic bombing during the early years of World War II to one that later embraced it in the Cold War. This transition of policy developed to the point that the President, the Congress, and the Pentagon were willing to fund inferior bombers solely because they could carry more nuclear weapons, or because they were supposed to have the range to bomb Soviet cities from bases in the United States or allied nations.

Even when it became apparent that American policy, vis-à-vis the Soviet Union, could not be attained through the use of stately bombers and powerful bombs destroying the cities of the USSR, funding for a single-weapon strategy still remained. This
continued even as other conventional weapons were being removed in the spirit of austerity that was the hallmark of the defense spending of the Truman Administration from 1945 until the Korean War. Finally, Harry S. Truman is described in a different light than his previous historical works. Rather than being decisive and opinionated on issues pertaining to foreign and domestic policy, Truman was very indecisive about many aspects relating to the use of the atomic bomb. This included many of the discussions about the roles and missions of the Armed Forces and strong-willed individuals could sway the President to a particular position. At a time when it was critical for the President to take a stand, he did not, and instead allowed Secretary of Defense Louis A. Johnson to position the Pentagon squarely behind strategic bombing, even when it was apparent after the outbreak of war in Korea that a more flexible defense plan was needed for the future.

BACKGROUND OF THE PROBLEM TO BE ADDRESSED

To fully understand the limitations of airpower, one must understand the three primary forms of it that are used in modern warfare. The first is strategic bombing, which attacked “fixed military, industrial, or civilian targets in and near political or economic centers.” Strategic air warfare was often conducted through either “precision” or “area” bombing. The use of precision bombing attempted to eliminate the means of production by carefully targeting bombs on a specific target, such as a factory. In contrast, area

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7 Throughout this dissertation, the author uses a period after the S in President Truman’s full name. The S is his middle name and Truman himself placed a period after it. Also, the Harry S. Truman Presidential Library and Museum also uses the period. The one exception to this rule is reference to the USS Harry S Truman (CVN-75), which does not have a period. Please consult "Use of the period after the "S" in Harry S. Truman’s name," Harry S. Truman Presidential Library and Museum, http://www.trumanlibrary.org/sperror.htm (accessed February 14, 2010).

bombing was used to destroy the work force and surrounding community with little regard to where the bombs actually fell. It was hoped that this would limit the amount of industrial production because the workers would be eliminated, or in no condition to work. After all, a factory without workers is effectively eliminated as a strategic target. The second major form of airpower was interdiction bombing, which attacked supply lines, transportation hubs, bridges and logistical support bases. It was used primarily to deprive enemy armies of necessary logistical support and materials in the field. Interdiction strikes also linked strategic bombing to the third form of airpower, tactical bombing. This application of airpower directly targeted the enemy’s army, fortifications, and command centers, and was often directly linked to ground operations.\textsuperscript{9} Tactical and interdiction missions were typically flown during World War II, the Korean War and over South Vietnam, Cambodia, and Laos. Often, they were directly linked to combat operations of American, South Vietnamese, Australian, South Korean, or other allied troops.

Strategic, interdiction, and tactical airpower are not mutually exclusive, and they represent three different approaches to air warfare. The former wins the war by destroying an enemy’s ability to wage war, attacks his means of production and transportation, and attempts to devastate the morale of the noncombatants by systematically eliminating their urban areas and important production centers. Interdiction bombing prevented materials that escaped the strategic bombing from reaching the front, and tactical airpower, finally, annihilates the enemy army in the field. Combined, they theoretically chart a course to win a modern war with minimal costs and maximum rewards for the attacker. Touted by its proponents, strategic airpower was

\textsuperscript{9} Ibid, 6.
characterized as the ultimate arbiter of any war or even, according to United States Air
Force (USAF) Chief of Staff Carl Spaatz, it was a “power for peace.”\textsuperscript{10} Some airpower
advocates even suggested that strategic bombing that targeted primarily cities and
civilians alone could achieve an ultimate victory while others were not so sure.\textsuperscript{11} General
John C. Meyer, Commander in Chief of Strategic Air Command (CINCSAC) during the
1972 \textit{Linebacker} operations, once wrote that airpower could not solely win a war.
Instead, Meyer argued in a thesis at the Air War College years earlier that it could be
successful with “a strategy in which air power is the principal weapon, supported as may
be necessary by surface forces, and employed so as to reap maximum benefit from the
capabilities of the air weapon.”\textsuperscript{12}

The reasons for the failure of airpower in Vietnam, however, can be traced
directly to the Second World War when the United States participated in two major
strategic bombing campaigns, the first against Germany, and the other against the Empire
of Japan. In both cases, strategic bombing was conducted under the standards of total
war, and they had a clear objective: the unconditional surrender of the enemy state.
Against Germany, the British Royal Air Force’s (RAF) Bomber Command attempted the
precision bombing of war production facilities in German cities very early in the war.
Unfortunately, heavy losses to these bombers forced the British into less accurate area
bombing by night in an effort to reduce casualties. The RAF eventually fully embraced
incendiary attacks that struck right at the morale of the citizenry as an avenue to quickly

\textsuperscript{10} Statement of General Carl Spaatz, Chief of Staff, United States Air Force, before the President’s Air
Policy Commission, November 17, 1947, President’s Air Policy Commission, RG 220, July 1947-January
1948, Box 15, Harry S. Truman Library.
\textsuperscript{11} See books written by or about Giulio Douhet, William Mitchell, Curtis LeMay, or Sir Hugh Trenchard to
gather a feeling about how airpower was viewed in the formative years between 1920 and 1939, and for
LeMay, the early Cold War years.
\textsuperscript{12} John C. Meyer, \textit{Air Strategy in the Cold War}, Thesis, Air War College (Maxwell Air Force Base: Air
University, 1956), 5.
win the war. In 1942 the RAF was joined by the United States in the effort to crush Germany, and heavy pressure was placed upon the Americans to join the RAF in night raids. However, the United States Army Air Force (USAAF) instead attempted to use daytime raids to increase the results of its “precision bombing” that could achieve greater results with fewer casualties. The Americans appeared to be more comfortable with saying their bombing was precise, and they believed that the American bombers were better prepared to defend themselves against German airborne defenses than equivalent British planes. With the RAF bombing at night, and the Americans by day, the German home front had few reprieves. The Western allies were not united in strategy or tactics, but were unified in their respective goals of using strategic and terror bombing to achieve the final defeat of Germany. As a result, airpower was fully unleashed against the citizens of the Third Reich at work and at home.

Against Japan, however, the strategic bombing campaign was entirely an American effort, and in order to achieve greater results and force the Japanese into a rapid surrender, the Americans eventually replaced precision bombing with a crippling incendiary campaign. Japanese casualties were exchanged for an expedient capitulation and fewer American losses. This strategy ultimately became the pattern of American nuclear strategy for the following five decades as the leadership in the United States came to view citizens and urban areas as legitimate targets in a total war, and its geopolitical policy was directly linked to military action. As American demands to end the war were increasingly clarified during the summer of 1945, incendiary attacks continued, and Japanese fatalities mounted. This campaign seemed to offer the perfect combination of weapon and strategy as the revolutionary Boeing B-29 Superfortress and its incendiary
bombs turned city after city into piles of ash and rubble. The Japanese attempted to stop the raids, but their efforts were futile against the growing number of American and Allied bombers that were available in late 1944 and early 1945. These would increase dramatically if the war continued on into 1946 and beyond. Truman had no public qualms about the bombing and had even announced that the bombs would continue until Japan either surrendered unconditionally or was physically destroyed as a nation.

In a last ditch attempt to avoid a costly invasion of Japan and end the horrific firebombing, the Truman administration unleashed the first nuclear weapons used against a civilian population. The Japanese cities of Hiroshima and Nagasaki were destroyed in an attempt to convince the Japanese that the war was finally over. Even more, the bombs signaled to the world the power of the United States, which now had the ability to destroy cities with a single bomb, and would continue to do so until the Japanese agreed to end the war on American terms. The results appeared to be immediate and dramatic; the Japanese surrendered. The announcement of capitulation had followed months of intransigence by the government of Japan. To the Americans, it became apparent that it was only after the atomic bombs were detonated that the Japanese finally realized that they could not win the war nor prolong it any more. To many in the American defense structure, there was a clear link between nuclear weapons and rapid victory in total war. With enough special weapons, the United States could deter future aggression simply through the threat of nuclear annihilation.

The reality of the atomic bomb and the destruction it wrought fundamentally altered the strategic direction of the United States military as early as 1945. In particular, the USN and its naval aviation arm were considered obsolete by many because it lacked
the tools and the means to utilize atomic weapons. In other words, the Navy did not have an operational strategic bomber or an aircraft carrier that could handle nuclear weapons and therefore they did not have a strategy for the application of nuclear weapons. In essence, it meant that during the formative years of American nuclear and Cold War strategies, 1945-1950, the USAF was projected as the only service that could handle the new weapons. This preconception was further cemented after the establishment of the Strategic Air Command (SAC) in 1946.

With a defense strategy built around an atomic, and later, thermonuclear arsenal, each of the Armed Services developed aircraft or other weapons that were specifically designed to deliver these weapons of mass destruction. This, combined with unification of the American Armed Forces in 1947, and reduced federal budgets, created a chasm between the newly created Air Force and the Navy on strategy and weapons. The financing and strategy disputes first went public in 1947, and exploded in 1949 with the infamous ‘Revolt of the Admirals’ that resulted in the Navy being relegated to a secondary role in America’s strategic operations. The Air Force and its long-range strategic bombers were now the first line of American offense and through its perceived deterrent effect, also its defense. Even the Air Defense Command (ADC) and the Tactical Air Command (TAC) missions of air defense and ground support, respectively, were not considered as essential as SAC. As a result, TAC’s mission evolved to include nuclear air-to-ground strikes that were considered essential to achieving air superiority. More importantly for the TAC commanders, the nuclear weapons delivery capability allowed it to maintain a significant portion of the defense budget.\(^{13}\) In fact, because of its

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devotion to nuclear strike missions, jokes were circulated in the 1950s that “Tactical Air Command had been ‘SACumcized.’”

The dedication to nuclear weapons and their delivery against Soviet targets remained well into the 1950s, even after the Korean War displayed the problems of limited war against non-Soviet objectives. Aircraft procured in the 1940s and 1950s, such as the incredibly large B-36 Peacemaker strategic bomber, reflected the total war lessons of Hiroshima and Nagasaki rather than the possibilities of a limited war. Some effort was made to integrate tactical strikes into the training syllabi of the Air Force, however, nuclear weapons remained the major focus of USAF strategy, budgeting, and aircraft purchases after 1945. Like its counterparts in the Air Force, leadership in the Navy pursued carrier-based nuclear bombers and large deck aircraft carriers to operate squadrons of nuclear-armed attack aircraft. Smaller carrier-based aircraft were designed or modified to allow for atomic weapons delivery in addition to conventional bombing. For the Air Force and the Navy, these decisions made the most sense in the age of total war, but anything short of World War III would present grave problems for the Pentagon in execution of a war strategy and results.

Political support for this nuclear strategy was bipartisan and was not dependent upon political control of the White House or the Congress. Through a series of public hearings, commissions, and significant pieces of legislation, including the National Security Act of 1947, the President’s Air Policy Commission and the GOP controlled Congressional Aviation Policy Board, it was evident that Republicans and Democrats

supported a virtual “nuclear only” option for American defense, and national security became synonymous with fleets of large bombers lumbering their way to the Soviet Union to bomb them into submission. Therefore arguments opposed to that strategy were viewed as obstructionist to service unification or even insubordination against the policy supported by President Truman. The end result was that political and military leadership in Washington D.C. supported a flawed defense policy that emphasized land and carrier-based bombers that flew faster, higher, and farther than her enemy’s defenses, and dropped large atomic bombs. Despite ample evidence to the contrary, this was believed to be the most rapid avenue to an ultimate military victory, or to convince American enemies to bend to American will.

LITERATURE REVIEW

In the years since Harry S. Truman assumed the presidency in 1945, volumes of books, journal articles, and editorials have been written about the President and his administration. Often these manuscripts focus on the entirety of Truman’s life and work or simply on one aspect of the former Missouri Senator. Specific traits, such as his obstinate personality, his relationship with his wife, his devotion to the New Deal programs of his predecessor, and his fiscal conservatism have become legendary to the historical impression of Truman. However, in the pursuit of my dissertation manuscript, entitled “Strategic Air Warfare and Nuclear Strategy: The Formulation of Military Policy in the Truman Administration” it has become apparent that there is still a great amount of material within the historiography of the Truman administration to be examined. While some of the secondary source material deals with airpower or nuclear
weapons and strategy, they do not place the debate within the greater context of the Truman administration.

Some interpretations argue that the drive to protect American capital at home and abroad was the fundamental driving force of American post-war strategy, and not necessarily the desire of the military to protect the nation’s most valuable resource, its people. Other works focus on the bureaucracy of the administration without truly understanding the military problems that were faced by professional officers and ranking civilian authorities within the Pentagon. A number of books attempt to frame the postwar debate as simple inter-service rivalries and antiquated strategies that stood in the way of a unified defense and a strategic direction for the nation as espoused by NSC-68. Enthusiasts of naval aviation or perhaps the Strategic Air Command have argued the righteousness of their cause at the expense of the other service. Finally, many books deal with key individuals within the administration, such as George C. Marshall, James V. Forrestal, Louis A. Johnson, or Dean Acheson, but do not completely place their subjects within the context of the debates over strategic air policy. Therefore, it has become apparent that a new interpretation of the Truman administration and its pursuit of airpower is necessary. While no list can be truly complete, this one has been certainly exhaustive and any errors of interpretation are my own.

The first genre of Truman books to be evaluated are the memoirs and biographies that have been published since the former President returned to private life in Independence, MO in 1953. The President’s own works, Memoirs by Harry S. Truman: Volume One: Year of Decisions and Volume Two: Years of Trial and Hope are an attempt by Truman to place the best possible interpretation on his administration. The first
volume addresses the problems faced by Truman as he inherited an office he was not prepared to run and the subsequent problems of peace and the postwar political environment. The second volume does delve into the problems of strategic defense during the late 1940s and early 1950s. Truman argued that the passage of new amendments to the National Security Act of 1947 as one of the “most outstanding achievements of my administration.”¹⁶ This was after one of the greatest public battles between the armed forces, which caused the firing of the Chief of Naval Operations, and the resignation of the Secretary of the Navy. While memoirs are usually self-serving, yet, they do allow for a level of inspection into the mindset of the former President.

While not considered a memoir or autobiography, Off the Record: The Private Papers of Harry S. Truman, edited by Robert Ferrell, still provides a useful insight into the President’s administration. Collected papers from his diary, letters, and memos drafted during Truman’s life. It provides a thoughtful introspection into many of the actions that were undertaken during the Truman White House. It also included personal information about key figures of the administration. Louis Johnson was described by the President as having “an inordinate egotistical desire to run the whole government. He offended every member of the cabinet.”¹⁷ Adding to the Truman legend is a collection of Truman’s oral histories, published in Talking with Harry: Candid Conversations with President Truman. Edited by Ralph E. Weber, this work started as an examination of the intelligence gathering agencies that existed or were created during the Truman years. As Weber went through the files at the Truman Library, he found volumes of transcripts and

¹⁶ Harry S. Truman, Memoirs by Harry S. Truman: Volume Two: Years of Trial and Hope (Garden City: Doubleday & Company, 1956), 53.
notes about Truman and put them together in this tome. While insightful into the mind of President Truman, it does not include information about the Revolt of the Admirals, Secretary of the Navy and later Secretary of Defense James Forrestal. While this may seem like a simple omission, it should be noted that it was Forrestal who first raised possible issues with the USSR in the postwar period and was instrumental in postwar national security. Margaret Truman, who also wrote a biography of her father, contributed to Truman scholarship with Where the Buck Stops: The Personal and Private Writings of Harry S. Truman. Ms. Truman edited the collection of her father’s writings that were to be published after the death of the President and the first lady. In it, the elder Truman described leadership and what it took to be a great leader. While providing little information about his own administration, it does address the estrangement between Truman and Dwight D. Eisenhower in a chapter entitled “Why I Don’t Like Ike.”

David McCullough’s Pulitzer Prize winning volume entitled Truman follows Truman from the settlement of his grandparents around Independence, his early life to the death of his wife Bess Truman, ten years after his own. Portrayed in a positive and familiar light, McCullough’s Truman is witty, resolute, strong-willed, and demanding. However, McCullough does not deal with the strategic air warfare debates and internal friction in great detail. He does note, however, that even when Truman was forced to make changes within the administration, he was extremely loyal to those who had been to him first. For example, when Secretary of Defense Louis Johnson was fired in 1950, the President first demanded his resignation and “felt dreadful” and while the event took a

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turn for the dramatic the following day as Johnson cried in front of the President, McCullough noted that Truman “had seldom been so miserably uncomfortable” after removing a man whom he had known for thirty years.20

In Roy Jenkins’ *Truman*, (1987) the President’s foresight paved the way for long-term economic growth in Western Europe both under the Marshall Plan and then indigenous investment. The long-term strategic planning in Jenkins’ book is primarily limited to the creation of the North Atlantic Treaty Organization, which is of major importance to the author. Robert H. Ferrell’s *Harry S. Truman: A Life*, continues the trend of admiring biographies of the former President. Ferrell, who had published eight books on Truman, is considered by many to be the epitome of Truman scholarship. Published in 1994, it covers Truman’s life from the beginning of his life to his burial at the Truman Library grounds. While it covers the changing of the military in the late 1940s, it does not cover new territory over the internal military disputes over tactics, strategy, planning, and expenditures. It does, however, highlight a classic Truman moment with Air Force Chief of Staff General Hoyt S. Vandenberg concerning the entry of the Chinese into the Korean War. Vandenberg stated that as part of Air Force doctrine, the USAF would deliver nuclear weapons against them to which Truman replied “you are not going to put me in that position. You better go back and get yourself some more strategic doctrine.”21

Donald R. McCoy also views Truman in a favorable light. In *The Presidency of Harry S. Truman*, the entirety of Truman’s two terms is addressed, but not in real great detail. The tumultuous year of 1949, when internal friction within the Pentagon went

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public, is described in the context of Truman’s federal frugality. McCoy suggests that while he pursued domestic expenditures at the expense of defense dollars, he placed loyal bureaucrats into positions within the Pentagon to follow the President’s directives. McCoy referred to Secretary of the Navy Francis Matthews, as “something of an advocate of preventative war” does not portray the dismal reputation that Matthews had within the Department of the Navy.\textsuperscript{22} Robert J. Donovan is also sympathetic to the President. His two volumes entitled, \textit{Conflict and Crisis: The Presidency of Harry S. Truman, 1945-1948} and \textit{“Tumultuous Years: The Presidency of Harry S. Truman, 1949-1953}, are fairly uncritical and even supportive of the initiatives undertaken during the Truman years. Donovan articulates some of the problems between the strategic vision of the United States Air Force and the United States Navy, but he does not really describe exactly what the weapons and weapon systems were nor does he discuss why they were so important to their respective services.

Positive views of Truman were also apparent in Cabell Phillip’s \textit{The Truman Presidency}, published in 1966. Written during the heart of the Cold War, Phillips was an advocate of the dropping of the atomic bombs and argued that the President was justified based on the relevant information that he had to make that decision.\textsuperscript{23} \textit{From War to Cold War: The Education of Harry S. Truman} by Robert James Maddox continues the trend of portraying Truman as decisive and as a quick learner, yet one with a limited view of the world around him. However, Maddox also argues that Truman was extremely pragmatic when it came to the atomic bomb, its use, and the threat of its deployment during the late

\begin{itemize}
\item \textsuperscript{22} Donald R. McCoy, \textit{The Presidency of Harry S. Truman}, American Presidency Series, ed. Donald R. McCoy, Clifford S Griffin and Homer E Socologsky (Lawrence, KS: University Press of Kansas), 211.
\end{itemize}
1940s. Harold F. Gosnell’s 1980 Truman’s Crises: A Political Biography of Harry S. Truman takes a very measured approach to dealing with Truman. In general, it is a sympathetic portrayal of the Truman presidency and the man who judged each crisis on its own merit. Gosnell addresses many of the facets of the Truman presidency in detail but does not focus on the issues of the long-term benefits of strategic air warfare and its place within the legacy of the Truman administration. While Gosnell is critical of the containment policy as practiced by Truman, he does extol the virtues of the European Recovery Act.

Historians have debated Truman’s decisiveness and the decision to drop the atomic bombs against Japan since August 1945. J. Samuel Walker argues that despite information that it might not be necessary to drop the bombs, Truman made the decision to do so, not out of revenge, or sending a message to the Soviets, but rather for military reasons. Walker also notes that in making the decision, he “did not ask for position papers on the advantages and disadvantages of using or not using the weapon. He did not seek advice on its potential impact of forcing a quick Japanese surrender or on affecting the postwar world.”24 Walker further noted that he did seek others opinions from his military staff arguably because he was more concerned with quickly ending the war.

Tsuyoshi Hasegawa also raised issues with Truman’s decision to drop the bomb. In his work entitled, Racing the Enemy: Stalin, Truman, and the Surrender of Japan, Hasegawa argued that Truman in fact had never actually made the decision to drop the bomb. Rather, despite what Truman later said, Hasegawa suggested, “the president never issued such an order. The fact is that the atomic bomb was dropped without Truman’s

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explicit order.” It was only after the dropping of the bomb on Nagasaki that the President actually used “his personal authority on decisions about the atomic bomb.” In other words, Truman made his decision by deciding not to interfere with the existing plan to drop the bombs. This is far different from other interpretations that give Truman more of an active role in the authorization to drop the bomb. However, the end result is whether Truman approved it overtly and signed off on it or if he merely chose not to stop the operations, the end result was still his consent.

The revision of Truman’s positive legacy is varied and often extremely critical of the President and his administration. Arnold A. Offner argued in Another Such Victory: President Truman and the Cold War, 1945-1953. Specifically written to counter the positive impression of McCullough and others, Offner argues that Truman lacked the necessary skills of a leader and was often dependent upon his staff, advisors, and other policy makers within the administration. Offner does not focus on the debates over strategic air warfare, the Revolt of the Admirals, or the B-36 hearings. The description of the removal of Louis Johnson was because he had been a “hawkish ally of MacArthur” and a vocal opponent of Secretary of State, Dean Acheson, who had “maneuvered deftly during the crisis to underscore” Truman’s authority. Offner also argues that Truman’s policies significantly reduced American options in the Cold War era diplomacy. Robert H. Ferrell, while generally supportive of the President, is somewhat critical about Truman’s handling of the Cold War and its related problems. When discussing the Soviet explosion of their first atomic bomb and the American reaction, Ferrell notes that

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here “again, in the decision to go ahead with the H-bomb, the President probably made a mistake.”

Ferrell argued that this decision, like others, was made when there were only two options presented. That is, make the bomb or let the Soviets do it first. However, as Ferrell points out, a third option could have been made to attempt to ban the H-bomb through international coercion or diplomatic efforts. However, there is no guarantee that this could have worked and the end result was an escalating arms race. Yet, despite this critique, Ferrell adds that in the end, Truman acted on his beliefs and did not back down from them.

Truman is portrayed as an honest but marginal President in William Pemberton’s “Harry S. Truman: Fair Dealer and Cold Warrior.” Pemberton argues that it was Truman’s humble background that limited his ability to be a great leader in foreign policy, an area where Truman had been praised in the past. Pemberton further suggested that Truman’s reputation as a decisive leader is historically overplayed as he was often manipulated by those he trusted the most and also by those he distrusted. Truman is also criticized for having a Europe-first approach to an American expansionist diplomacy at the expense of Asia and even Africa. Additionally, Truman is criticized, perhaps unfairly, for the rise of McCarthyism in the early 1950s. Gabriel and Joyce Kolko, in their work entitled, The Limits of Power: The World and United States Foreign Policy, 1945-1954, take a very grim view of the Truman Administration. Attributing the security of Western Europe against a Soviet aggression as a virtual myth, the Kolkos contend that Truman almost single handedly moved Eastern Europe into the sphere of Soviet control through the implementation of the European Recovery program. The Kolkos also argue

that military planning and diplomacy were designed primarily to extend American
capitalism and curtail the expansion of Left leaning political movements.

Overviews of the administration are important to two authors in particular, Mark
S. Byrnes in *The Truman Years, 1945-1953* and Bert Cochran’s *Harry Truman and the
Crisis Presidency*. The former book is a small overview of the administration, but its
small size limits its effectiveness. Published in 2000, it does make use of much of the
secondary source material that had been printed since the President’s death in 1972. The
latter book is much larger and published in 1973. Both works attempt to frame Truman
in the context of his times and his administration. Neither work references the difficulties
over service unification, strategic planning, and the public debates that captivated the
are bit players in the administration. Taking a different approach, Raymond P. Ojserkis’s
work, entitled *Beginnings of the Cold War Arms Race: The Truman Administration and
the U.S. Arms Build-Up*, argues that while the arms race began after the outbreak of the
Korean War, there were attempts to convince Truman that it was necessary to outspend
his self-imposed budget restrictions to confront the Soviet Union. Thoroughly
researched and full of relevant information, Ojserkis’s work, however, does not shed any
new light on the inter-service rivalries that caused Truman so much grief. He does
include information on the problems between Dean Acheson and Louis Johnson and also
between the Secretary of Defense and his Service secretaries, but does not expand upon
strategic air warfare and why it was believed to be essential for the long-term security of
the United States. He does note that “Admiral Louis Denfeld, chief of naval operations,
resigned at the end of October 1949 as part of the campaign against Johnson, but it was to
no avail.” In addition, the main focus of the book is in the years 1951-52, after the outbreak of the Korean War and the implementation of NSC-68.

Arguably, the most important element of Truman historiography in relation to my dissertation, is the relationship of the President to the military planners who attempted to chart a course for American strategic air warfare. Michael Hogan in his *Cross of Iron: Harry S. Truman and the Origins of the National Security State, 1945-1954*, argues that the need for national security created a situation that threatened traditional American freedoms. Hogan maps out the administration’s attempt to create Universal Military Training and how this helped to create a national security state. Again, when it came to strategic planning, Hogan does not go into detail about the B-36 issues or problems that beset Secretary of Defense Johnson when he attempted to reign in spending. While he spoke of the Revolt of the Admirals, which took place in October, 1949, he does not describe in detail why so many naval officers were willing to risk their careers through public insubordination over strategic planning and military expenditures. Daniel Yergin also worked through some of this territory in *Shattered Peace: The Origins of the Cold War and the National Security State* in 1977. In Yergin’s view, the Truman administration was often reactionary, impulsive, and prone to miscalculations about Soviet intentions. Yergin is critical of the administration and their attempt to contain the expansion of Soviet-style communism and suggests that too often, avenues for peace were bypassed by ideologues that populated the administration.

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Published thirty-seven years before Hogan, Paul Y. Hammond wrote about the relationship between the military and respective administrations in his classic, *Organizing for Defense: The American Military Establishment in the Twentieth Century*. Charting the rise of the military organization since the Spanish American War, the book is limited in its understanding of the long-term post World War II issues because it was published before the release of materials relevant to strategic air warfare. However, Hammond spends quite a bit of time on the development of the National Security Act of 1947 and the maturation of the policy aspects of the Joint Chiefs of Staff and the Department of Defense. Hammond also focused on the relationship between the President, the congress, and the military in the political arena of the early Cold War years. While not definitive, Hammond certainly adds important insight into the inter-service rivalries of the late 1940s.

1973 saw the publication of *The Awesome Power: Harry S. Truman As Commander in Chief* by Richard F. Haynes. This work charts the rise of the power of the President in the postwar era. Truman is credited with many of the changes in the presidency with his pursuit of service unification, the coordination of federal agencies regarding national security, and the waging of an unpopular war without Congressional support. Haynes does provide some information about the inter-service rivalry, however, like others before and after, he does not provide enough information about why the rivalry existed and was sustained after the passage of the National Security Act of 1947 and the subsequent amendments that changed the focus of the Pentagon. Haynes added that the “revolt had revealed not only a fundamental failing of unification, it also pointed
up a lack of a fixed military strategy.”31 While this was the case, it did not prevent the President from acting decisively in foreign policy whereas he could not often do that with domestic policy. Even more, it was the exigencies of the Cold War that necessitated the rise of presidential power as commander-in-chief.

Sara L. Sale ventured into the political debates over the containment of the Soviet Union and the expansion of communism with her work *The Shaping of Containment: Harry S. Truman, The National Security Council and the Cold War*. Sale’s work focuses on the formation of the National Security Council, its relationship in the planning and prosecution of American policy under the Truman administration. She further discusses the evolution of Truman’s view of the NSC from an advisory board to an agency that could at times arbitrate the differences between the State Department and the Pentagon. As the Cold War progressed, the NSC developed policy on a case-by-case basis. However, while Sale does not address the inter-service rivalry that created multiple versions of a strategic air warfare plan, she does focus on the differences between Louis Johnson’s Defense Department and Dean Acheson’s state.32

The role of the Truman administration’s policymakers is one of the main focuses of Melvyn P. Leffler’s *A Preponderance of Power: National Security, the Truman Administration, and the Cold War*, published in 1992. Leffler had previously described national security as a policy that “encompasses the decisions and actions deemed imperative to protect core values from external threats.”33 In his book, Leffler contended that the Administration, the Pentagon, and the State Department worked to economically

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and militarily expand American power in the world to bring about national security. He further argued that while that was the case, there was not much effort directed at creating or sustaining long-term industrial development or support of the domestic infrastructure. Both sides of the Iron Curtain shared the blame for the rise in Cold War tensions as both acted in reaction to the other’s intentions, real or imagined. Again, the relationship between the Navy and the Air Force are not discussed in detail nor are they essential to Leffler’s thesis. However, he does contend that Johnson’s decision to cancel the Navy’s first supercarrier and allegedly allocate the funds for B-36s confirmed the rumor that Johnson “was a champion of air power and atomic weapons.” This placed Johnson with the supporters of the USAF and their vision of strategic air warfare despite the setbacks of the Korean War.

The Korean War is an important part of the Truman historiography. Many books have been written over the years concerning the role of the United States in that limited war. Many focus on the military actions, battle histories, naval engagements, or air warfare as written by the pilots and naval aviators who fought the war. However, there is more to the story than just the military history of the Korean War. William Stueck’s 2002 book entitled Rethinking the Korean War: A New Diplomatic and Strategic History challenges many of the traditional and revisionist interpretations of the war. While involving more sources of Chinese and Soviet origin, Stueck’s interpretation of Truman remains a Europe-first focused President, cautious about Soviet global intentions during the crisis in Asia. Paul G. Pierpaoli Jr.’s Truman and Korea: The Political Culture of the Early Cold War follows the administration’s attempts to transition from the post-World

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War II peace dividend through the post-Korean War permanent mobilization. This had a tremendous impact on the economic and political infrastructure of the United States during this era. It is as though the Korean War eclipsed the President’s ability to control military spending in perpetuity and created other problems on the home front, including industrialization, political retrenchment away from New Deal legislation, and splits between the administration and congress.

Joseph Goulden’s Korea: The Untold Story of the War attempted to use new materials accessed through the Freedom of Information Act, to understand the Truman Administration’s role in the Korean War. While the book does not deal with the 1940s inter-service problems, it does address a common theme, the removal of Louis Johnson as Secretary of Defense. While noted in many other works previously mentioned, this one mentions insubordination, problems with the state department, and disloyalty to the President on the part of Johnson as the primary reason for his dismissal.\textsuperscript{35} The Korean War by Max Hastings also addresses the view of Johnson from inside the administration. Hastings suggests that among “the glittering cluster of intellects around the President, by far the least impressive figure” was Johnson and that he was merely a “political operator, a fund raiser, an electoral grandstander” who bragged of his accomplishments and support of the President.\textsuperscript{36} According to Hastings, it was Johnson who left the American military at home and in Japan at levels that left them woefully unprepared to fight on the Korean peninsula. However, Hastings does not explain why Johnson pursued policies that seemed to bankrupt the Pentagon at the very time the Cold War was heating up. A critical view of Johnson is also demonstrated in Richard Whelan’s Drawing the Line: The

\textsuperscript{36} Max Hastings, The Korean War (New York: Touchstone, 1987), 50.
Korean War, 1950-1953. In it, Johnson is described as a “hulking man who frequently resorted to bluster and temper tantrums in order to get his way” and was not above the “strategy of attacking his colleagues in the administration until (he hoped) he could emerge in the public eye as the only one who was competent and anti-Communist.”

While most books on the Korean War make at least a passing reference to Johnson, only one major biography has been published to date. Keith D. McFarland and David L. Roll collaborated on *Louis Johnson and the Arming of America: The Roosevelt and Truman Years*, (2005). In their work, Johnson was an extremely hard working and competent lawyer and civil servant. Motivated by a fear that the United States would be unprepared for war, Johnson used his position in the War Department and later the Department of Defense to build up American defenses. It is in the latter role that we see Johnson advocating a position of a Cold Warrior and a hawk but following the President’s initiatives in budget reductions at the expense of conventional army and naval forces. These policies were eventually exposed with the dawning of the Korean War and the poor performance of American forces exhibited during the early stages of the war. The authors do delve into the arguments on airpower, but it is not an essential element to their thesis.

Like Johnson, James Vincent Forrestal, former Secretary of the Navy and the first Secretary of Defense, has an intriguing history and was a key player in the Truman Administration. Unlike Johnson, however, there are a couple of biographies that have been published over the decades since his tragic death. His role in the Truman Administration is critical to understanding the inter-service rivalry that destroyed

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Forrestal and paved the way for the disaster in Korea and eventually led to Johnson’s replacement by George C. Marshall. The first publication dealing directly with Forrestal after his untimely death on May 22, 1949 was the edited copies of his diaries. Forrestal began to keep daily journal after his appointment as Undersecretary of the Navy in 1944 until shortly after his forced removal from the administration. Edited by Walter Millis and E.S. Duffield, *The Forrestal Diaries* were pieced together from scraps, journals, and other pieces of paper that were dropped off at the White House by Forrestal shortly before his death. Given that they were published in 1951, there is much information that was classified or of personal nature that were kept out of the print edition. The personal observations of different historical characters in and around the Truman administration make this work still valuable today.

Arnold A. Rogow’s *James Forrestal: A Study in Personality, Politics, and Policy*, published in 1963, was the first attempt to place Forrestal in historical context. It followed his life from his youth until this tragic end, Rogow attempted to understand what drove Forrestal to his untimely death. Based on published sources, the book merely reiterates the legend of Forrestal and his role in the administration. While he was an advocate of a strong national defense and a tough foreign policy, he was also influential and successful, particularly through 1948. Rogow suggests that Truman had requested that Forrestal stay in the administration long before Forrestal was asked to resign. In retrospect, Truman said “I realized later that I should have let him quit when he wanted.”

The Forrestal history was updated and enhanced in 1992 with the publication of Townsend Hoopes and David Brinkley’s *Driven Patriot: The Life and Times of James Forrestal*.  

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Forrestal. Hoopes and Brinkley dive deep into the psyche of Forrestal and what made him such an ardent nationalist, a workaholic, and in their mind, the architect of Truman’s containment policy. A loyal supporter of the Navy, Forrestal was destroyed by the unification battle and his own attempt to make the position of Secretary of Defense a very weak position. Sympathetic to Forrestal, Hoopes and Brinkley portray him as a vital character in Truman’s creation of the postwar Pentagon.

Forrestal’s role in the administration is also examined in Jeffery M. Dowart’s, *Eberstadt and Forrestal: A National Security Partnership, 1909-1949*. One of the primary purposes of this work is to focus on the civilian role in wartime and postwar mobilization of resources and the bureaucratization of ideology and politics. Dowart’s work goes in depth into the battle over unification and why Forrestal fought against the Truman Administration’s plan for total unification and how he got a compromise that helped the Navy Department transition into the postwar defense structure. Ferdinand Eberstadt was the subject of a Robert Cuff article in the “The Public Historian” in 1985. Cuff examined Eberstadt’s role in the reorganization of the federal government and his role in the postwar defense policy through integrated “forms of industrial and economic mobilization planning in the executive branch.”

Among the practitioners of naval aviation that are essential to the postwar strategic debate that are to be addressed by my dissertation include Admiral Chester A. Nimitz, Admiral Marc Mitscher, Admiral Arleigh A. Burke, and Admiral John H. Towers. Nimitz and Burke served as the Chief of Naval Operations during this time frame while Towers and Mitscher had long careers as a naval airpower advocates. E.B.

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Potter wrote biographies of both *Nimitz* (1976) and *Admiral Arleigh Burke,* (1990) which develop their respective views of naval power. While the biographies focus primarily on World War II, both have chapters about the battles that were fought over supercarriers and nuclear bombers. In the tome on Burke, an entire chapter is dedicated to the Revolt of the Admirals. Information about the entire affair is included, however, the focus is on *what* happened rather than *how* the revolt affected the Navy and Burke’s role in the sordid affair rather than *why* it happened. Burke was also the subject of Ken Jones and Hubert Kelley Jr.’s *Admiral Arleigh (31-Knot) Burke: The Story of a Fighting Sailor,* (1962). Certainly dated compared to Potter’s work, it has the same flaw in its interpretation concerning the debates over airpower and the role of the navy in the Cold War. Theodore Taylor’s *The Magnificent Mitscher,* originally published in 1954 is a traditional history on one of the architects of naval aviation. The bulk of the text addresses Mitscher’s service during the Second World War. Taylor, however, laid out the argument about the divisiveness of naval aviation not only between the services, but also within the Navy. *Admiral John H. Towers: The Struggle for Naval Air Supremacy,* (1991) by Clark G. Reynolds further developed the problems highlighted by Taylor. Through the role of Towers, we see the battle of naval airpower predate World War II and even the same protagonists seemed to be in continuous conflict. For example, Reynolds clearly displayed the problems between the Navy Department and Louis Johnson in his role as Assistant Secretary of War (Air) and as Secretary of Defense. Like the other books that deal with naval officers, this book is sympathetic to the concerns of the sea service and critical of the USAF.
One of the most important naval officers involved in the early stages of the American nuclear program was Captain William S. “Deak” Parsons, the weapons officer for the atomic strike on Hiroshima. Parsons is the subject of Al Christman’s biography entitled *Target Hiroshima: Deak Parsons and the Creation of the Atomic Bomb* (1998). In Christman’s view, Parsons was extremely critical of the development of the atomic bomb from a theoretical idea to a functional weapon during the Manhattan project. Even more, Parsons was instrumental in the push for the Navy’s role in strategic deterrence with his support of carrier-based heavy attack aircraft including the P2V-3C Neptune and the AJ-1 Savage bomber.\(^{40}\) Parson’s role in the early atomic program is expanded in Jonathan M. Weisgal’s *Operation Crossroads: The Atomic Tests at Bikini Atoll* (1994). Weisgal further argued that *Crossroads* proved that the Navy was not obsolete and there was a real need to rebalance the air forces of the United States.\(^{41}\) Even more, the tests confirmed the reality that there was not a good defense against atomic weapons, so therefore, the Navy began to look at offensive options to defend the fleet and American interests on the seas.

Richard Rhodes, author of *The Making of the Atomic Bomb* (1986) and *Dark Sun: The Making of the Hydrogen Bomb* (1995) charts the course of the atomic program from concept to mass production of the weapons. Rhodes addressed the moral debates among the scientists as well as the arguments concerning the military applications of the new technologies. The interservice rivalry between the USN and the USAF is discussed primarily in the latter book as Rhodes highlighted the demands made by both for control

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over the limited bombs that were first available for military application. Even more, as the production of atomic bombs increased, Edward Teller, the chief proponent of the hydrogen bomb, transcended Robert Oppenheimer, the scientist most responsible for the success of the atomic bomb, in importance. Oppenheimer fell from grace and lost his security clearance. Norman Polmar clarified the types of weapons that were being developed and their application in his *Strategic Weapons: An Introduction*, (1982). Polmar argued that the pursuit of smaller, more efficient nuclear weapons became such a driving force in the armed forces that even the Navy could boast that most of the aircraft flown from the decks of carriers in the 1950s could be armed with nuclear bombs.

In a work that is essential to understanding how atomic weapons altered all aspects of American defense and foreign policy, one must look at James L. Abrahamson and Paul H. Carew’s *Vanguard of American Atomic Deterrence: The Sandia Pioneers, 1946-1949*. While these authors cover material that is often implied or impugned in other historical works, Abrahamson and Carew frame the crisis that many viewed the emerging Cold War and the perception that atomic weapons were indeed the most effective counterweight to Soviet intentions. Even more, they also display how the inevitable improvements to the design of the atomic bomb were initially directed by the military in the vacuum of civilian authority or international agreements.

David Alan Rosenberg wrote several articles that highlight the role of nuclear weapons in American strategic planning from several perspectives. In “A Smoking Radiating Ruin at the End of Two Hours” Rosenberg analyzed two declassified documents that “shed considerable light on American plans and preparations for nuclear war in the first years of the Eisenhower Administration.” They highlighted questions
about an American preemptive strike by SAC and the true size of the American nuclear stockpile to accomplish any assigned mission.\textsuperscript{42} This was followed up with an article on “The Origins of Overkill: Nuclear Weapons and American Strategy, 1945-1960.” Once again, this commentary was premised upon recently released classified information. Rosenberg contended that there was serious consideration for preventative war with the Soviets and the evolution of American strategy was reflected in the growing nuclear arsenal and serious consideration for the costs of a nuclear exchange in the mid 1950s.\textsuperscript{43}

In a 1979 article in \textit{The Journal of American History} Rosenberg highlighted how the military had analyzed the 1949 Soviet atomic bomb test “in the context of strategies for war with the Soviet Union developed prior to the Soviet test.” This article synthesized the how these existing plans “shaped the military’s role in President Truman’s H-Bomb decision.”\textsuperscript{44}

Limitations on the number of atomic bombs in inventory, lack of nuclear capable bombers, and doctrine are the subject of William S. Borgiasz’s \textit{The Strategic Air Command: Evolution and Consolidation of Nuclear Forces, 1945-1955}, (1996) and Harry R. Borowski’s \textit{A Hollow Threat: Strategic Air Power and Containment Before Korea}, (1982). Borgiasz argues that long-term planning was extremely difficult during this post war period because of limited budgets and rapid technological advances. While both the Truman and Eisenhower administrations supported strategic bombing, targeting intelligence, basing, and support structures were initially hard to attain until the


introduction of forceful leadership under Curtis LeMay. Written fourteen years earlier, Borowski’s work contends that the cost savings of atomic weapons was the main driving force for their increased importance after the Berlin airlift. Therefore, cost drove doctrine, doctrine drove strategy, and strategy attempted to alter or design aircraft and weapons that could deliver on the promise of the nuclear age. Borowski further contended in “Air Force Atomic Capability From V-J Day to the Berlin Blockade -- Potential or Real?” that one of the issues missed by many Cold War historians was an analysis of “how did the atomic monopoly translate into real military power?” His conclusion suggested that the gap between the potential and reality of American strategic air warfare was real and the inability to accurately deliver bombs on Soviet targets needs to be considered in ongoing academic debates regarding these early Cold War years.\footnote{Harry R. Borowski, "Air Force Atomic Capability from V.J. Day to the Berlin Blockade-- Potential or Real?,” \textit{Military Affairs}, October 1980: 105-110.}

structure of NATO and its command as influenced by American strategy built around sea lines of communication. While the US Navy was certainly the cornerstone of these strategies, Maloney clearly states that the there was not unanimity of purpose or direction among the NATO allies. Sokolsky’s argument transitions the USN’s strategic contributions from initial ideas, to actual commitments of nuclear-armed aircraft carriers and finally to ballistic missile submarines.

The capstone of my dissertation deals with the 1949 Revolt of the Admirals and the differences between the Navy’s view of the postwar period as well as the Air Force’s command over defense dollars. To date, only one major work has been written on the revolt, and that is Jeffery G. Barlow’s 1994 *Revolt of the Admirals: The Fight for Naval Aviation, 1945-1950*. In this work, Barlow frames the debate over postwar nuclear and conventional strategy inside the debate over the National Security Act of 1947 and its subsequent amendments. While most books portray this event as a major defeat for the Navy and its interests, Barlow contends that it was merely a setback and eventually the Navy was able to fully participate in the postwar strategic roles, through airpower.

While Barlow attempts to place this as a debate between both the Air Force and Navy positions, it is evident that Barlow is a subscriber to the naval arguments raised in the series of congressional hearings. Moreover, while this book deals with naval aviation in the 1940s and 1950s, it does not address the problems of pursuing carrier-based tactical nuclear bombers in the 1950s and the problems that they would have during the 1960s.

Arguments over naval strategy in the postwar period are the subject of Michael A. Palmer’s *Origins of the Maritime Strategy: American Naval Strategy in the First Postwar Decade*, and his *On Course to Desert Storm: The United States Navy and the Persian*
Changes within the Navy department are discussed in Thomas C. Hone’s *Power and Change: The Administrative History of the Office of the Chief of Naval Operations*. All three, published by the Naval Historical Center, focus on the value of the carrier force and the necessity of naval aviation to preserve American interests in the Cold War era. Clearly biased in their interpretations, they do not fairly argue the Air Force’s perspective nor do they look the long-term issues relating to pursuing a nuclear-based defensive structure.

E.T. Wooldridge edited an impressive collection of essays and articles for a book entitled *Into the Jet Age: Conflict and Change in Naval Aviation, 1945-1975*, (1995). Included within this work are primary source editorials written by some of the Navy’s key players in the postwar strategy debates including Admirals Arleigh Burke, Gerald Bogan, Charles Donald Griffin and George Anderson. These aforementioned flag officers were all critically important to the shape of the postwar USN. While the Truman administration is not specifically targeted for their arguments, the USAF is and the authors are very critical of the Air Force and its devotion to strategic air warfare. This book, like many others, tends to view the debates and interservice rivalries as battles to be won at the expense of the other services.

Michael T. Isenberg attempted to deal with the post-World War II in his book, *Shield of the Republic: The United States Navy in an Era of Cold War and Violent Peace, Volume 1, 1945-1960*. Isenberg argues, again, on behalf of the Navy and against the USAF and, like the previous works, there is not an attempt at synthesis of the airpower arguments. Jerry Miller, a career naval officer, attempted to place the issue of carrier-based naval aviation and nuclear weapons at the forefront of his work, entitled, *Nuclear
Weapons and Aircraft Carriers. Published by the Smithsonian Institution Press in 2001, this work is based primarily on Miller’s first-hand observations and training. Miller references nuclear policy and strategy in different chapters, but these are merely part of his synthesis of his work and not the main focus of the book.

In The Fast Carriers” The Forging of an Air Navy, (1968) Clark G. Reynolds created an impressive argument about carrier aviation and its role in winning the Second World War. Through an impressive narrative, Reynolds described how naval aviation assumed supremacy in US naval operations during the war and how it eclipsed the surface and subsurface fleets in mission status. While the book does not deal with the post-war navy nor nuclear strategy, it is essential to see how the Navy came to understand naval aviation’s function in modern warfare. Reynolds also addressed the United States Strategic Bombing Survey (USSBS) conducted in Japan, which was extremely critical of strategic bombing and its limited effect on the Japanese war effort. Critics of postwar strategic air warfare would point to the USSBS as supporting documentation.

Aircraft carriers were also the domain of Andrew Faltum in The Essex Class Aircraft Carriers, (1996). While the USN worked to develop several classes of new supercarriers in the 1950s and 1960s, the World War II era Essex class carriers were still the backbone of fleet well into the 1960s. Faltum focuses on their role in WWII and how the subsequent postwar developments of nuclear weapons and escalating needs for tactical air support changed the physical appearance of the twenty-four carriers in this class. While Faltum discusses the impact of strategic air warfare, it is not developed in depth.
Richard P. Hallion, in his classic *The Naval Air War in Korea*, published in 1986, focused on the rise of tactical aviation in the aftermath of the Revolt and describes the vindictiveness of Louis Johnson and his anti-naval bias. Hallion argued that despite a lack of political support for the Navy in the post-World War II era, outdated equipment and carriers, the Navy was able to help the United Nations forces in Korea because the Navy could accomplish missions that were in many cases beyond the range or endurance of United States Air Force aircraft and crews. Hallion frames the Korean War through the role of tactical not strategic airpower.

Procurement of naval weapons, carriers and aircraft has been the subject of scores of books over the last six decades. Many have been written for the general consumer or veterans who served on particular vessels. Academic interpretations on these subjects are a bit more atypical. Several examples that are important to the context of my dissertation are Joel R. Davidson’s *The Unsinkable Fleet: The Politics of U.S. Navy Expansion in World War II*, (1996), Edward H. Heinemann and Rosario Rausa’s *Ed Heineman: Combat Aircraft Designer*, (1980), Glenn E. Bugos’s *Engineering the F-4 Phantom II: Parts Into Systems*, (1996) and the National Defense Research Institute’s *The U.S. Aircraft Carrier Industrial Base: Force Structure, Cost, Schedule, and Technology Issues for CVN-77*, (1998). Davidson tackles the issue of internal and external stimuli on the design, development, costs, and support of the US fleets during WWII. Important to my work, Davidson addressed the transition of naval construction and personnel, from the war to peacetime starting in 1944 as well as problems between the Navy and War Departments. Even more, Davidson articulates that Secretary of the Navy James Forrestal and Chief of Naval Operations Ernest King did not agree about the size of the
fleet. Moreover, congressional funding for construction eclipsed actual expenditures and Forrestal and supporters in Congress were reluctant to approve additional funding for ships when it appeared that the Navy already had a surplus of ships.\textsuperscript{46} Edited by John Bikier and many others, \textit{The U.S. Aircraft Carrier Industrial Base: Force Structure, Cost, Schedule, and Technology Issues for CVN-77} (1998) was put together by RAND to determine the overall cost impact of carriers to the United States. While it does not get into academic arguments surrounding the carrier fleet, it does display the challenges faced by American ship makers as the purchases of carriers have substantially declined over the decades since WWII. Moreover, the book reflects how the carrier missions have evolved and could be negatively impacted by newer weapons including missiles, political concerns over budgets, and enemy action.

Heinemann and Rausa’s work highlight the career of one of the most influential aircraft designers in American history. Heinemann’s career at Douglas Aircraft Corporation transcended the interwar period of the 1930s through the heydays of the Cold War. Heinemann was responsible for several key aircraft types that were extremely important to the success of the USN in World War II. However, it is in the postwar era that Heinemann saw his greatest accomplishments. Heinemann understood the transition of US defense policy from conventional weapons to nuclear, and began to design aircraft that reflected this trend. During the late 1940s when many in the Navy were despairing about the future of naval aviation, Heinemann was designing aircraft that reflected the inevitability of USN nuclear bombers in spite of a lack of support from the Truman

Administration and the Department of Defense. Glenn Bugos interpreted how an aircraft company, in this case McDonnell Aircraft Company, took a series of vague proposals, weapon systems, and theories to build the F-4 Phantom II. While it was initially procured for the USN, it was modified to meet two requirements, first, compatibility with the USAF, which was forced by Secretary of Defense Robert McNamara to adopt the Phantom. The other was to adopt a multi-mission role, including nuclear strike. This corporate interpretation of a weapons system clearly displays how weapons were designed, produced, modified, and sold to meet the changing requirements of the Cold War years.

United States naval aviation is only one aspect of my dissertation. To understand the policies that were so desperately fought over one must understand the decision to utilize strategic bombers as the first line of offense against American enemies. The rise of strategic airpower was tied directly to the rise of the bomber as a new offensive weapon. Many interwar airpower advocates, including the Italian Giulio Douhet, American General William “Billy” Mitchell, and Soviet émigré Alexander de Seversky went so far as to advocate that airpower that targeted primarily cities and civilians alone could win the next war. Douhet’s *Command of the Air*, (1921) viewed airpower as being revolutionary toward the conduct of warfare. Written in the years following the Great War, Douhet saw strategic bombing as being the final arbiter in any war because bombers demoralized civilian populations and forced them to sue for peace. Mitchell’s collection of essays and articles entitled *Winged Defense: The Development of Possibilities of Modern Air Power--Economic and Military*, (1925). Mitchell argued not only for an

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independent United States Air Force, but he also contended that it would be the primary means of deterring potential enemies. De Seversky had the fortune of writing his classic *Victory through Air Power* (1942) after seeing how bombing had already impacted the Second World War. In this work, de Seversky argued that strategic bombing was the essential tool to winning modern wars and would make ground wars obsolete. Like the previous two works, *Victory through Air Power* has been debated and interpreted throughout the ages and while much of it is outdated, it is still a starting point for discussions on strategic air warfare.

John Buckley argued in *Air Power in the Age of Total War* (1999) that airpower, in bringing war to the home front directly through attack or the fear of attack, was systemic of the new age of total war in a “physically destructive sense.” Furthermore, airpower was also “a measure of total war, for more than any other weapon the aircraft was a product of industrial warfare and the modern era.” Buckley went on to argue that airpower has developed a new level of efficiency based upon the use of modern weapons and stealth technology as displayed in the first Gulf War. Taking the war to the enemy was also a key component in Buckley’s work.


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Furthermore, Schaffer points out that Franklin Roosevelt was determined to make the German population feel the retribution of the allies. However, he needed an assessment tool to accurately gauge the impact of the bombing on the morale and production of war materials in Germany. This led to the creation of the United States Strategic Bombing Survey for Europe. Even more, the President made it very clear that he was willing to support “attacks aimed at terrorizing enemy civilians.” This carried over into the postwar era throughout the military and Truman Administration as Schaffer reminds the readers of the speech that Secretary of the Navy Francis Matthews gave in 1950 endorsing the idea of a preventative war.

Hoyt concentrated on the impact on the Japanese population base as the Americans executed a series of devastating firebomb raids during 1945. Many Americans believed that this was essential to demoralizing the Japanese and forcing them to surrender. However, Hoyt clearly states that while the raids hampered production at many factories and many citizens were resigned to dying in the war that *did not* mean that they could or would be bombed into surrendering. In fact, many felt that their suffering was a reflection of the sacrifices Japanese soldiers were making throughout the last vestiges of the empire. Werrell dives much deeper into the debate over the efficacy of strategic airpower in the war against Japan. Werrell argued that the theory of airpower failed to achieve the goals that were promised by airpower zealots. While enemy aircraft production, oil supplies, weapons procurement, and morale were all negatively impacted by the air war, the American strategic bombers were never able to successfully eliminate the Japanese will to resist or produce. Even more, that while the strength and intensity of

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the American attacks had some psychological benefits to the US war effort, the Japanese were not defeated until the full impact of the US naval blockade of Japan began to starve out the home population.

Air Force Major General Haywood S. Hansell, Jr., an instrumental officer in the planning and execution of the air war against Japan, would have staunchly disagreed with Werrell’s conclusions. In his *Strategic Air War Against Japan*, Hansell has an eye-opening interpretation about strategic bombing and its successes in World War II. Hansell clearly wrote the book in the context of the Cold War and with the role of the Strategic Air Command in mind. For example, in discussing the atomic bomb, Hansell stated that the bomb “may not have been needed to bring defeat to Japan, but it was needed to save the Army from its obsession with invasion, and its demonstrated power would be needed after the war to deter Russian domination of Europe. Additionally, despite the negligible bombing results as listed in the USSBS, Hansell contended that “the strategic air offensive against Japan, carried out in the context of the Allied grand strategy, was a magnificent and decisive accomplishment.”

Hansell is also one of the reasons for the success of the United States Army Air Forces XXI according to Daniel L. Haulman’s *Hitting Home: The Air Offensive Against Japan*, (1999). Part of the Air Force History and Museums program, this book, like Hansell’s, argues about the success of the bombing raids. Haulman, however, reminds the reader that Hansell was relieved of command when the results of the first raids over Japan did not match with prewar hype. Hansell is also the subject of Charles Griffith’s *The Quest: Haywood Hansell and American Strategic Bombing in World War II*, (1999).

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51 Haywood S. Hansell Jr., *Strategic Air War Against Japan*, Strategic Air War Against Japan (Maxwell Air Force Base, AL: Airpower Research Institute, Air War College, 1980), 92.
Griffith argues that Hansell was an unapologetic believer in the efficacy of strategic bombing in World War II and its deterrent value in the decades of the Cold War. Griffith also furthers the idea that the firebombing was the “result of the technology that made the firebombing possible, the desire on the part of the air force to end the war before an invasion, and the perceived desire for vengeance by the American public.”

An unrepentant believer in strategic air warfare and aerial coercion was Walt W. Rostow, an Advisor to the Kennedy Administration and the National Security Advisor to President Lyndon Johnson. Clayton D. Laurie defined Rostow’s views in a 2008 article in “War & Society” entitled “Rostow’s Panacea: Strategic Air Power, the OSS Enemy Objectives Unit, and the Origins of ROLLING THUNDER.” Laurie suggested that Rostow’s views on airpower stemmed from his wartime experience in linking enemy targets to their war sustaining capacity or economic value. If these objectives were destroyed by a maximum effort against North Vietnam, they would lead to the desired diplomatic actions by the communist government. Like other believers in strategic bombing, Rostow looked past the data that indicated he was wrong and he “remained convinced of airpower’s potential to affect the war’s outcome” if it were only used aggressively. In 1984, Richard H. Kohn and Joseph Harahan conducted a series of interviews with the men, including General Curtis LeMay, who helped develop and refine American strategic bombing concepts. Published in “International Security” in 1988, the excerpts from those interviews clearly indicated that in the minds of these originators of postwar strategic bombing, airpower remained unchallenged in its ability to win wars.

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Smaller conflicts like the Korean War were seen as anomalies because the United States never actually “used strategic concepts” during that war. It remained their goal to make sure more of the Air Force than just Strategic Air Command would also be able “operate across a much larger portion of the warfare spectrum” in any conflict with the Soviet Union.  

Tactical airpower in World War II is also debated among many scholars and proponents. Two books, contradictory in subjects, display the merits of airpower to help win battles and lay the groundwork to win wars. Joel S. A. Hayward’s case study *Stopped at Stalingrad*, (1998) addresses the goals and ambitions of the German armed forces in their attack against the Soviet Union. Lacking true strategic bombers like the western allies, the Germans were forced to use smaller bombers in an attempt to win the day. However, lack of support from the government, an inability to attain desperately needed oil supplies, and material shortages doomed the efforts of the Luftwaffe to win the war against the Soviet Union. From an American perspective, the most important practitioner of tactical airpower was General Elwood “Pete” Quesada, the commander of the IX Fighter Command in Europe. In Thomas Alexander Hughes’ *Overlord: General Pete Quesada and the Triumph of Tactical Air Power in World War II* (1995). Throughout this work, Hughes places Quesada at the feet of the great thinkers and strategists of American power, from Dwight D. Eisenhower to James Doolittle. In this interpretation, the Americans have many of the same problems that afflicted the German war effort, however, there were some clear differences. The American high command valued the role of aircraft in paving the way into France in 1944, defending the troops on

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the ground, and assaulting the enemy’s means of support around the battlefield. Even more, while the Germans struggled to coordinate the goals of the war between the army and the Luftwaffe, the Americans were able to overcome very strong differences of tactics to develop priorities that all could work with. Hughes and Quesada’s views of tactical airpower are essential to understanding the counterpoints against strategic air warfare.

James S. Corum and Wray R. Johnson further examine the role of Airpower in Small Wars: Fighting Insurgents and Terrorists, (2003). Through careful examinations of wars and battles from U.S. interventions in Latin America prior to the Great War to the Soviet war in Afghanistan, Corum and Johnson carefully lay out the promise and problems of airpower in small wars. In particular, they contend that it is too often virtually impossible to merge political goals and bombs on target. For example, while discussing the French in Algeria in the late 1950s and early 1960s, it was apparent that French interdiction campaigns had been successful in preventing weapons and supplies from reaching Algerian rebels. However, despite limited casualties on French forces and massive losses of indigenous Algerians, it is apparent that “a determined people motivated by nationalism and armed with little more than patience and a willingness to die in large numbers can win a war against a well-led and well-armed modern military force supported by the latest technology and plenty of airpower.”

Craig C. Hannah’s Striving for Air Superiority: The Tactical Air Command, (2002) is an overview of the second largest command in the United States Air Force. Hannah used a variety of sources, oral histories, and interviews to flesh out the growth of

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the tactical air command from its primary mission of air supremacy, to the tactical delivery of nuclear weapons, and finally back to air superiority. Hannah argues that many in TAC understood that funding was available for nuclear bombers, both large and small, and therefore, the TAC leaders pursued aircraft that were ill suited to their mission. They rationalized that you could achieve air superiority by nuking your enemy’s aircraft out of existence. However, this did not work in conventional wars and it left TAC and the United States vulnerable during conventional confrontations, particularly in Vietnam.

Michael Sherry’s *The Rise of American Air Power: The Creation of Armageddon*, (1987) is a critical examination of the role of airpower in American history concluding with the immediate post WWII years. Sherry argued that the atomic bomb “lacked reality as a weapon of war and as an instrument of international relations.”

Richard P. Hallion’s expertise in airpower is evident in two works, *Strike from the Sky: The History of Battlefield Air Attack, 1911-1945*, (1989) and *Storm over Iraq: Air Power and the Gulf War*, (1992). In *Strike from the Sky*, Hallion charts the rise of tactical airpower from the Great War through the Soviet air experience on the eastern front of the Great Patriotic War. While Hallion does not focus on strategic air warfare in this book, he took great lengths to highlight how tactical airpower wins wars. The primary focus of *Storm over Iraq* is the first Gulf War, however, within its pages Hallion developed the role of strategic and tactical airpower from its humble beginnings throughout the World Wars, Korea, and Vietnam. In a concise series of arguments, Hallion described how technologies evolved to match new doctrines that developed out of previous wartime experiences.

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The use of strategic bombing as a weapon is directly related to the thesis of John R. Carter’s *Airpower and the Cult of the Offensive*, (1998). Carter argued that this terminology reflected “the condition that occurs when an organization believes so strongly in the supremacy of offense that it no longer develops and evaluates its doctrine rationally.”\(^{57}\) This cult of the offensive can be attributed to airpower in that when utilized in a strategic manner, it is inherently offensive by definition. Robert A. Pape’s *Bombing to Win: Air Power and Coercion in War* (1996) addresses the limitations of bombing on attaining national goals in wars. Touted as the first major book on the political effects of war published since the Vietnam War, Pape’s book is instrumental to understanding that airpower usually does not attain national goals by “raising the costs and risks to civilians. When coercion does work, it is by denying the opponent the ability to achieve its goals on the battlefield.”\(^{58}\)

Mark Clodfelter wrote what is arguably the best synthesis of airpower in his classic *The Limits of Air Power: The American Bombing of North Vietnam*, (1989). Strongly critical of the advocates of Armageddon, Clodfelter takes issue with Air Force planners who blamed politicians for the shortcomings of conventional strategic air warfare that was conducted over North Vietnam. He argued that it was not solely the political limitations that doomed the war nor was it alone a failure of tactics. Clodfelter argued that airpower was unsuccessful because the Air Force had focused primarily on nuclear weapons delivery and inter-service rivalries during the years prior to Vietnam. In addition, Clodfelter contended that for most of the war, the United States was never able to translate political goals in Southeast Asia through the application of airpower. This


\(^{58}\) Pape, *Bombing to Win*, 314.
failure combined with the instability of the South Vietnamese government virtually doomed any air campaign over Southeast Asia almost before the first American aircraft dropped its weapons. Unlike my dissertation, Clodfelter focuses primarily on the Air Force rather than the entirety of the American defense system.

Thomas A. Keaney and Eliot A. Cohen also looked at battlefield circumstances and the application of airpower in their *Revolution in Warfare? Air Power in the Persian Gulf*, (1995). Using reams of official reports and published data, Cohen and Keaney attempted to frame the success of airpower in Operation Desert Storm against the reality of the circumstances that it faced. While it does not cover the era of my dissertation, it does apply some of the lessons and limitations of airpower that are a cornerstone of my project. Keaney and Cohen see in modern airpower what the advocates of nuclear strategic air warfare saw a generation earlier. That is, airpower “is an unusually seductive form of military strength because, like modern courtship, it appears to off the pleasures of gratification without the burdens of commitment.”

59 Benjamin S. Lambeth also focused on *The Transformation of American Air Power*, published in 2000. Like many other volumes that were written after the first Gulf War, Lambeth attempted to frame the success in Desert Storm, as well as NATO operations over Serbia in the late 1990s, with the growing pains of airpower. Not only does Lambeth chart the role of airpower in previous wars, he also cited how technology altered doctrine, rather than doctrine being the driving force of technological change. Moreover, Lambeth also argued that while the airpower advocates believed that strategic bombing could win the war and certainly it was instrumental in achieving American goals, it did not “weaken
Saddam Hussein’s control over his people.”\textsuperscript{60} Therefore, if airpower had limitations during one of the brightest examples of its success, one must question how strategic air warfare, as developed in the 1940s and 1950s, could possibly coerce the Soviet Union into submission to American national goals or objectives.

John Gooch edited a series of papers and published them with the title, \textit{Airpower Theory and Practice}, (1995). Of particular importance in this book is the chapter written by Peter J. Roman on strategic bombers and missiles. While Roman’s chapter deals with 1957 and beyond, he does still address the limitations of manned bombers and their chances of success. Even more, Roman argued that the Eisenhower administration’s move to economize the military at the expense of bombers was because “bombers would be a less effective and economical way of delivering nuclear weapons than missiles.”\textsuperscript{61}

\textit{Plotting a True Course: Reflections on USAF Strategic Attack Theory and Doctrine, the Post-World War II Experience}, (2003) edited by David R. Mets and William P. Head is an extremely important interpretation of airpower and its application from the earliest hours of the atomic age through combat operations in Kosovo in the 1990s. In particular, an essay on deterrence raised important questions about the role of nuclear weapons in the American defense plans. In particular, Lt. Col. Mark J. Conversino raised the question about how the use of nuclear weapons stops the Soviets from striking towards the English Channel. In that contingency, was the United States fully prepared to use nuclear weapons on French, Spanish, or even German soil to stop the prospective Soviet invasion? Even more, the question that remained was, did the United States have enough


bombs to hurt the Soviet war effort and the ability to deliver them rapidly enough to weaken the Red Army?

Robert Coram wrote one of the most interesting books on airpower and its limitations. Entitled *Boyd: The Fighter Pilot Who Changed the Art of War*, (2002), this book reveals a maverick pilot who challenged the status quo of the United States Air Force and the concepts of strategic air warfare. Always critical of the “bigger, higher, faster, farther” belief in USAF weapons procurement, Coram’s Boyd was consistently fighting for simplicity in doctrine, training and application of weapons. Boyd fought against the older “Bomber Barons” who controlled the USAF through the Strategic Air Command. Even more, Boyd’s “fighter mafia” disciples helped redirect the USAF into weapons that were indeed instrumental in winning the Gulf War. Boyd was also credited with developing the concept of a time based strategy called the OODA Loop, for the “Observe-Orient-Decide-Act” cycle that is important within military decisions, and even in business.62

The role of the aviation industry itself in the decisions to pursue a virtual nuclear first strategy was premise of Donald R. Mrozek’s 1974 article entitled “The Truman Administration and the Enlistment of the Aviation Industry in Postwar Defense.” Mrozek concluded that the administration was persistent in its efforts to militarize the economy and it placed the aviation industry in a position that they sought government contracts “as insurance against their own economic failure.”63 Certainly, this was reflected in the testimony presented to the President’s Air Policy Commission in 1947.

Mrozek also examined the force structure and balance of the United States military in the years between Truman and Eisenhower. He argued that the Truman and Eisenhower administrations believed that “Air Force might offer an inexpensive means to achieve national security objectives” even as costs for men, machines, and weapons continued to rise. More importantly, Truman’s defense policies were not extensively altered by the Eisenhower administration. Furthermore, Ike did not believe that nuclear weapons had a deterrent effect for smaller, regional conflicts.  

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Finally, it is understood that I do not attempt to take the issue of strategic air warfare lightly or for granted. I am reminded of what General Omar Bradley argued in 1949. In an address before the Third National Industry Army Day Conference in Boston, Bradley argued that he was a supporter of airpower in the modern age and he understood that great limitations affected its use. Bradley also stated that while an air campaign could cripple an enemy, however, the United States would be forced to gain victory “over our dead bodies—those of our soldiers on the ground.” Unfortunately, it was a lesson that was missed after the carnage of World War II, the uneasy peace of Korea, and the painful losses of Vietnam. From condemnation to embracement, the Americans would transform the idea of air warfare in less than a decade and create the inevitable bureaucratic infighting over missions and funding. Rather than cooperation or a synthesis over strategy and costs, a critical battle for survival was about to begin.
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CHAPTER ONE
THE BACKGROUND OF UNITED STATES STRATEGIC AIR WARFARE

A well organized, well planned and well executed bomber attack, once launched, can not be stopped.\textsuperscript{66} Major General Haywood S. Hansell, Jr. USAF

What was criminal in Coventry, Rotterdam, Warsaw, and London has now become heroic first in Dresden and now in Tokyo.\textsuperscript{67} Oswald G. Villard, member of America First.

On April 12, 1945, Harry S. Truman took the oath of office and assumed the presidency of the United States at an extremely difficult point in history. The Second World War was in the final stages in Europe and it was already apparent that there were going to be substantive diplomatic and possibly even military problems between the United States and the Soviet Union. Even more, while the war against the Empire of Japan had inflicted significant casualties on the Americans during the previous three years of war, it appeared to many that the losses would continue throughout 1945. While the new President was briefed on the war and current progress on the new atomic bomb, the strategic bombing campaigns against Germany and Japan continued unabated. It was the latter, however, that modeled direction of post war military spending and strategy because to accept a nuclear strategy premised upon the mass destruction of enemy populations, the United States first had to accept the same with conventional weapons.

The war against Japan ended after months of aggressive incendiary attacks on Japanese cities, virtual strangulation from an aggressive unrestricted submarine campaign against Japanese shipping, and two atomic bombs. Despite the long years of war since

\textsuperscript{66} Haywood S. Hansell Jr., \textit{Strategic Air War Against Japan}, Strategic Air War Against Japan (Maxwell Air Force Base, AL: Airpower Research Institute, Air War College, 1980), IV.

Pearl Harbor, many viewed the Japanese capitulation without an invasion as unprecedented in warfare and a vision of the future. Unlike the war against Germany, where the Nazi government surrendered only after invading armies from the Soviet Union, the United States, the United Kingdom and France had crushed the last remnants of German power, the magic elixir of strategic bombing had forced the Japanese out of the war without the use of ground troops fighting for every square inch of Japanese soil. This decisive use of airpower ended the war before a major intrusion in the theater by the Soviets. The use of American strategic bombers linked the goal of unconditional surrender of all Japanese forces to the threat made by Truman when he warned them that if they continued to prosecute the war, they would face “sheer and utter destruction” as targets of American power. It was believed that airpower now had the ability, through the massive application of force, to compel or coerce an enemy state to abandon resistance and submit.

In the summer of 1945 General Henry H. “Hap” Arnold, chief of the United States Army Air Forces (USAAF), estimated that under current operations, Imperial Japan would be completely stripped of all targets within eighteen-months. Air attacks combined with an effective naval blockade would bring about the total annihilation of Japanese cities and its industrial capacity “until all of Japan was completely destroyed.” To further emphasize this point, Arnold confirmed reports that the Japanese capital of Tokyo was no longer considered a priority target because most of the capital’s industrial infrastructure was already destroyed.\textsuperscript{68} Arnold’s assertion was later corroborated by the

post war United States Strategic Bombing Survey (USSBS).\textsuperscript{69} Indiscriminate air attacks on the major urban areas of Japan marked a shift in tactics for the Americans and also represented the type of indiscriminate terror bombing that Arnold had once decried as “abhorrent to our humanity, our sense of decency.”\textsuperscript{70} Yet, the time and pressures of total war against Japan allowed for these types of attacks to continue. Together, the Boeing B-29 Superfortress, its incendiary weapons, and the strategic air campaign led to a level of destruction in Japan that signified a major change of American war making potential, and paved the way for postwar nuclear strategy. Arnold’s announcement was an ominous warning for not only the Japanese, but the rest of the world as he made it clear that American airpower had reached a point where it could, virtually single handedly, wipe a major power off the face of the earth with a sustained strategic air campaign.

It was presumed that the major production centers were the Achilles heel of Japan and they were attacked without remorse. The Americans did not suspend or alter their attacks on the Japanese infrastructure to allow for bilateral discussions that would lead to a negotiated settlement. Rather, it was implicit that in the age of total war, the bombing would not stop until the Japanese agreed to end hostilities on American terms. American policy was overtly linked to military action and it was plainly evident what it would take to end the war.

\textsuperscript{69} The United States Strategic Bombing Survey, \textit{The United States Strategic Bombing Surveys (European War) (Pacific War)}, The Summary Reports Reprint, ed. Truman Spangrud (Maxwell Air Force Base, AL: Air University Press, 1987), 85.

THE RISE OF THE STRATEGIC BOMBER

The decision by the Americans to exploit strategic bombers as the primary offensive agent against the Japanese was directly linked to the rise of the airplane as the new offensive weapon. Many of the earliest airpower advocates, including the Italian Giulio Douhet, American General William “Billy” Mitchell, and Soviet émigré Alexander de Servesky, went so far as to advocate that bombers that primarily targeted cities and civilians alone could win the next war. Airpower brought the war to the home front directly through an attack or, even the fear of attack, and was systemic of the new age of total war in a “physically destructive sense.”\(^{71}\) The use of strategic bombing as a weapon is directly related to what Major John R. Carter, USAF, called the “cult of the offensive.” Carter argued that this terminology reflected “the condition that occurs when an organization believes so strongly in the supremacy of offense that it no longer develops and evaluates its doctrine rationally.”\(^{72}\) This cult of the offensive can be attributed to airpower when utilized in a strategic manner because it is inherently offensive by definition.

Prior attempts at strategic bombing in World War One, the Spanish Civil War, and the Japanese war against China in the late 1930s, had clearly demonstrated both the destructive power of the bomber, as well as its limitations. Bombers could destroy sections of cities and annihilate or intimidate populations, but they were also vulnerable to attacks by defending fighters and anti-aircraft fire. When attacking an urban center that was not well defended, it was believed that the bombers could inflict material and

psychological damage upon the inhabitants greater than the effort expended. In other words, it took relatively few bombers with a light payload to break the morale of the targeted citizenry. In 1932, former British Prime Minister Stanley Baldwin argued that the horror of aerial warfare was enough to abolish military aviation. He urged those who would listen to him in the House of Commons that: “for the man on the street…there is no power on earth that can protect him from bombing…The bomber will always get through… The only defense is in offense, which means you have got to kill more women and children quicker than the enemy if you want to save yourselves.”

In many ways, this last chilling statement was the gospel that airpower disciples from all nations began to preach.

During the Spanish Civil War (1936-1939) the Germans dispatched the Condor Legion, an experienced group of Luftwaffe airmen who conducted the first post-World War One use of strategic bombing to demoralize a population. The Legion launched its first terror bombing in April 1937 against the Spanish city of Guernica. The Germans attempted to assist General Francisco Franco’s fascist forces when for almost three hours, German aircraft dropped bombs and strafed “enemy” civilians as they tried to flee the destruction. So horrific was the destruction and subsequent international condemnation that the German government denied that it had anything to do with the attack. That remained their official stance until the Nuremberg trials of 1946.

An editorial in the New York Times in May 1937 entitled Death over Valencia, argued that the bombardment of Guernica was not conducted within “the accepted rules of warfare” and this type of

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warfare was universally condemned and considered illegal under international law. For a belligerent not “to accept this interpretation would be in effect to wipe out the centuries-old distinction between combatants and non-combatants and to justify indiscriminate slaughter.” The total casualties at Guernica were initially estimated at over eight hundred men, women, and children killed. It should be noted that the German bombers that inflicted this damage were much smaller in size, payload, and capabilities than the bombers that would be used in the Second World War, in particular, the B-29s that would later raze Japan. The number of casualties also greatly paled in comparison to the casualties that were inflicted in the latter campaign.

One of the first Americans to condemn the attacks in Spain was Newton D. Baker, the former US Secretary of War in the Wilson administration. Baker had argued as early as 1918 that the United States should not participate in this type of bombardment and described strategic bombing as synonymous with the policy of German aggressors during the Great War. He also lent his name, along with many other prominent Americans including Senator William E. Borah of Idaho, distinguished historian Dr. Charles A. Beard, celebrated attorney Clarence Darrow, and renowned physicist Dr. Albert Einstein, to an international appeal drafted in the aftermath of Guernica that condemned the destruction of the old city. However, despite the irate rhetoric aimed at airpower from those that opposed it, in reality, Guernica was bombed by merely forty three aircraft which released an estimated fifty tons of bombs over the city and officially killed over

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1600 and wounded upwards of 800 more. These numbers, while horrific, paled in comparison to bombing raids conducted a few years later during the Second World War.

During their extensive war with China, which began in 1937, the Japanese Army Air Force and Japanese naval aviators also resorted to terror bombing. This position angered many Americans and at the 1938 national convention of Disabled American Veterans of the World War, the Assistant Secretary of the Army and former head of the American Legion, Louis A. Johnson, reminded his audience that in the United States, mankind is not considered “as cannon fodder” and that we embrace human life with the “utmost respect.” In spite of the American position, the Japanese made it clear to the world that Japan would indiscriminately bomb the provisional Chinese capital at Chunking until “its spirit of resistance is broken.” Secretary of State Cordell Hull unilaterally condemned the attacks aimed at Chunking without reservation. Hull further suggested that the American people and government were opposed to the “ruthless bombings” of civilians. Clearly and very publically, President Franklin D. Roosevelt used Hull and Johnson to highlight the value of human life in the mind of the administration. What was not evident at the time, however, was how rapidly the Americans and the administration would change their views on strategic bombing. One decade hence Johnson himself would accept an American strategy premised on the destruction of civilian targets inside the USSR as the most expeditious manner to win a war.

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PRESIDENT FRANKLIN D. ROOSEVELT AND STRATEGIC BOMBING

In the opening hours of the Second World War, Roosevelt echoed the critics of strategic bombing as he demanded that all the belligerents show restraint. He argued that the targeting of civilians resulted in “the maiming and death of thousands of defenseless men, women, and children” and, that this form of “inhuman barbarism” would cause hundreds of thousands of innocent bystanders to pay the ultimate price in a war for which they were not the least bit responsible. Roosevelt appealed that all nations agree that “in no event, and under no circumstances, undertake the bombardment from the air of civilian populations or unfortified cities” and requested multilateral support and observation of this limit. To clarify his position to the American population, FDR used the opportunity of a Fireside Chat two days later to remind his listeners that they were a neutral nation, and that even a “neutral cannot be asked to close his mind or close his conscience.” The President, however, was in a quandary as he overtly condemned the type of warfare that he privately believed was fully capable of destroying an enemy’s will to resist. As early as September 1938, FDR discussed the possibility of war at a Cabinet meeting shortly before the Munich Agreement was reached. Roosevelt argued that he would make the war against Germany primarily an air war because the German population would break before the allies under a relentless bombing campaign. He thought that this solution would be more cost effective, inflict fewer American casualties, and was “more likely to succeed than a traditional war by land and sea. Roosevelt also

assumed that American airpower might actually deter or limit war because it could dominate an enemy without inflicting horrific collateral damage.86

In public Roosevelt’s true feelings on strategic bombing were clouded behind obfuscation and uncertainty. Clearly FDR did not want his position on bombing to blur the line of distinction between the heartless attacks of civilians by despotic nations as opposed to the high altitude “precision bombing” embraced by western democracies. He pursued a balanced approach for a defense strategy that was divided into three main components: deterrence, effective organization of existing facilities, and the ability to meet rapid expansion.87 Yet Roosevelt struggled to define American international goals or national policy through the application of strategic bombing of targets for morale, material, or retribution. It should be noted that at the time there was not a proven link between the destruction of an enemy’s war production and their respective political will that was necessary to win a war. In February 1938, the New York Times reported that American strategists would not target civilians because the evidence of contemporary bombing campaigns indicated that the results were not worth the risks. Moreover, there were no reported advantages for attackers in comparison to the costs associated.88

As the Roosevelt administration attempted to maintain American neutrality, the War Department continued to attempt to define the strategy and purpose for airpower. At the same time, the American people, politicians, and the press continued to condemn the indiscriminate bombing of civilians by the Japanese, Italians, and Germans. Yet, the

United States Army Air Corps (USAAC, 1926-1941), the precursor of the United States Army Air Forces (USAAF, 1941-1947) and the United States Air Force (USAF, 1947-Present), continued to prepare for a strategic bombing campaign in the event of an American entry into the Second World War. Even more ominous, in October 1939, Alexander Sachs presented FDR a letter ostensibly from Albert Einstein that informed the President that it was possible to create a new form of energy from the fission of atoms. A number of scientists and physicists now believed they could create a new generation of high yield weapons that could be used in war. According to Einstein’s letter it was possible that a bomb created from this effort could be large enough to destroy an entire shipping port and the surrounding area although it might be too big to carry by air. Roosevelt listened carefully and then made a decision that began the long road to Hiroshima. He created an Advisory Committee on Uranium that met in Washington only ten days after Sach’s meeting with FDR. The idea of nuclear energy presented to Roosevelt would lead directly to the creation of the Manhattan Project and the atomic bomb.

THE DEVELOPMENT OF AMERICAN STRATEGIC AIRPOWER

While FDR’s intrinsic view on strategic bombing was ambiguous at best in 1940, the challenges and horrors of war dramatically changed the American public’s attitude of bombing from condemnation to the acceptance by 1944. For many of the senior airmen,

strategic bombing was seen not only as an avenue to winning the war, its success could also open the path to an independent United States Air Force. Dating back to the days of Billy Mitchell in the 1920s, aviation factions in the Army had lobbied for sovereignty from the Army.\textsuperscript{92}

Mitchell, not always politically popular or even tactful, advocated using bombers in roles that had been the domain of the other Services. For example, Mitchell envisioned that large bombers would become the first line of American defenses because they could strike at enemy shipping that threatened American shores, a role that had always been the priority of the United States Navy. Mitchell truly believed in the offensive capabilities that larger bombers offered and in “attacking the vital centers with fire, high explosives, and chemical weapons” as this was a more cost effective way of winning a war.\textsuperscript{93} General Curtis E. LeMay, arguably the most influential advocate of postwar strategic bombing, contended that Mitchell rightly believed in strategic airpower and “the idea that air power could be used to strike an enemy’s heartland and destroy his means and willingness to wage war.”\textsuperscript{94} Unfortunately for the outspoken Mitchell, he lost his career because of his convictions and actions. His views on strategic air warfare were vindicated in World War II, and to many he remains a patron saint of the Air Force.

During the 1930s, the Air Corps Tactical School defined the major roles for strategic airpower during a sustained campaign. Properly executed airpower destroyed the enemy’s industrial and logistical support structure and crippled its framework of

\textsuperscript{92} Dik Daso, \textit{Architects of American Air Supremacy: General Hap Arnold and Dr. Theodore von Kaman} (Maxwell Air Force Base, AL: Air University Press, 1997), 40.
political and social life. This included attacks on electrical grids, transportation
networks, fuel and food distribution, and critical manufacturing. Civilians might
eventually be targeted, however, because it was implicit that attacking the enemy’s
population could paralyze their war capacity. This was to be, however, a last resort rather
than a first strike. The final role for airpower identified was the defense of the United
States and its own communications and transportation system.95 The oceans surrounding
the continental United States provided an additional defense from air assault and it was
felt that the United States had time to overcome its perceived military weaknesses.96

On the eve of the World War II, the Navy and War Departments endeavored to
strengthen their respective service’s air assets through purchases of additional aircraft and
the training of a new generation of aviators. In November 1938, FDR articulated the
need for a greatly expanded annual production of aircraft and the necessary factories to
maintain the higher level of production.97 Contracts were signed for a newer generation
of fighters, bombers, patrol aircraft and other weapons that the administration felt was
necessary in order to be prepared for the pending war against the Axis powers. Included
in the purchases were long-range bombers that theoretically could fly unescorted to strike
targets with impunity. These new weapons, including the B-17 Flying Fortress, gave the
United States the ability to project American power on distant shores within our own
hemisphere or also abroad. This created a confidence that enemy nations would not
infringe on American sovereignty because any bases built within range of the United

95 Haywood S. Hansell Jr., The Strategic Air War against Germany and Japan: A Memoir (Washington
97 Eugene M. Emme, “The American Dimension,” in Air Power and Warfar: The Proceedings of the 8th
of Air Force History, 1979), 74.
States would be targeted and destroyed by long-range bombers. In other words, the deterrence factor of the bombers meant that the United States could weather any military threat to the Panama Canal Zone, the Caribbean, Puerto Rico and Cuba through the direct application of force from the air.\(^98\) Perhaps the greatest summation of this conviction was James L.H. Peck’s 1940 book entitled, *Armies with Wings*, in which the author argued that “retaliation, or the threat of it, is the best known air raid precaution” and that the new strategic bombers are “America’s peace insurance. Long may they fly.”\(^99\) In an effort to support this idea of “hemisphere defense,” a balanced approach to bombers and fighters was required, as were additional air bases outside the continental United States.

In June 1941, the Assistant Secretary of War for Air, Robert A. Lovett oversaw the reorganization of the USAAC and the Air Force Combat Command into the new USAAF under the command of General Henry H. “Hap” Arnold. Arnold was an aviator who was now at the top of the USAAF command structure and reported to the Army Chief of Staff. This allowed the practitioners of strategic air warfare in the USAAF to develop the policies and strategies outside of direct Army control. This new structure would dominate the aerial planning before the American entry into World War II.\(^100\) It is evident that the leadership in the USAAF implemented a strategy that emphasized the annihilation of industrial targets. If the manufacturing base was targeted along with other sites that supported the enemy military, the enemy’s “will and capability” to wage war would be undermined.\(^101\) In theory, this plan worked to undermine an enemy’s war

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\(^101\) Hansell, *Strategic Air War Against Japan*, 3.
effort, however, it does not take into consideration many other intangibles such as
civilian morale.

At the request of the Roosevelt administration in July 1941, the command of the
USAAF’s new Air War Plans Division (AWPD) began work on a strategic plan, AWPD-
1, that was completed just before the attack on Pearl Harbor. The plan was driven by the
growing crisis across the globe, including the invasion of the Soviet Union by Germany,
and represented an amalgamation of strategic air warfare and national defense policies
that were in fact a blueprint for a strategic air campaign against Germany. According
to Kenneth Werrell, author of *Blankets of Fire: U.S. Bombers over Japan in World War
II*, the major focus of AWPD-1 was the destruction of Germany’s “electric power
grid…transportation and oil.” This was to be followed by a bombing campaign aimed
against Berlin, the capital of Germany and the symbol of German power and prestige.

Included within the plan was the destruction of the Luftwaffe’s air bases and means of
production and an underlying belief that the war could be won through strategic
bombing. This aerial assault could force a German surrender through the application
of bombs on valuable targets and then allow the American war effort to reallocate against
Japan. The total force requirement needed for the implementation of AWPD-1 was
estimated at almost 62,000 aircraft formed into 251 combat groups supported by more
than two million personnel. Included in this optimistic plan were 47 groups of B-17

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102 Emme, “The American Dimension”, 78.
105 Lemay and Yenne, *Superfortress*, 43.
and B-24 heavy bombers, 24 groups of B-29 and B-32 very heavy bombers, and 44 groups of B-36 very long-range bombers.\(^{106}\)

Unfortunately for the Americans, at the time the plan was adopted there were no very heavy or very long-range bombers in production. It would not be until several years after World War II ended that the B-36 would finally be produced. With the mass production of the B-17 Flying Fortress and the B-24 Liberator in place before the bombing of Pearl Harbor on December 7, 1941, the USAAF had the core of the strategic bombing fleet that would punish Germany and Italy from 1942 until 1945. Yet, the Flying Fortress and the Liberator would not have the range or bomb capacity to hit the Japanese home islands until American air bases were secured much closer to Japan. The long-range Boeing B-29 Superfortress did, and, eventually it became the main battery of the American assault upon Japan. More than any other weapon or developed during the war, it was the firebombing of Japan by B-29s that modeled the concept of post-war strategic nuclear plans and morals.

**THE REVOLUTIONARY B-29 SUPERFORTRESS**

The term “revolution” has often been overused or misused to describe various aircraft or weapons that in reality were more evolutionary in performance or capabilities. As the firearm revolutionized infantry tactics in the Middle Ages or as HMS *Dreadnought* altered naval design and strategy in the early twentieth century, the B-29 completely changed air strategist’s ideas of what a bomber could actually accomplish. The Boeing B-29 was indeed radical in almost every category that gauged aircraft performance. It was faster, could fly higher, and carry a much heavier bomb load than all

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\(^{106}\) Hansell, *Strategic Air War Against Japan*, 6. (See Appendices for images of respective aircraft)
previous generations of bombers and allowed it to surpass most contemporary World War II fighters. So successful was the basic design that variations of it remained in USAF service well into the latter years of the Cold War.\textsuperscript{107} Later generations of bombers were designed around jet engines that gave them performance far in excess of the B-29, but arguably, none ever entered into service with such an incredible advantage over known enemy defenses as did the Superfortress.\textsuperscript{108} Its design and construction revolutionized the aviation industry in the United States as well as the Soviet Union where the B-29 was reverse engineered into the Tupolev TU-4. Most importantly, the Superfortress would be the first airborne weapon system that lived up to the prophesies of the air advocates. With the proper tactics, weapons, and expert crews, the B-29/TU-4 was the first airplane that could dramatically enforce national policy not only during the waning days of the Second World War, but in the fledgling years of the Cold War.

The B-29 program began in 1937 and before its first combat missions in 1944, more than six million man-hours of engineering went into the development of the basic design.\textsuperscript{109} Unlike the B-17 or B-24, the Superfortress’ cockpit and crew compartments were pressurized to allow greater crew comfort and extremely high altitudes. The B-29

\textsuperscript{107}Variants of the original B-29 design continued to serve in the USAF, the Air National Guard, or Air Force Reserve for years after the original Superfortress was first designed. The KB-29 tanker served into the 1950s, the KB-50 tanker remained in service in the 1960s, and the KC-97 Stratotanker was not retired until the late 1970s. For a brief description of the evolution of aerial refueling, please see Robert S. Hopkins III, \textit{Boeing KC-135 Stratotanker: More than Just a Tanker} (Leicester: Midland Publishing, 1997), 14-24.

\textsuperscript{108}One reason for this discrepancy was the advent of fast jet interceptors in the early 1950s and ground based or air launched anti-aircraft missiles that entered service in the late 1950s. Perhaps the closest comparison was the North American XB-70, which was arguably as radical in concept as the B-29 had been in its time. Designed to fly three-times faster than the speed of sound and at extreme altitudes, there was only one enemy fighter that could potentially stop it, namely, the MiG-25. However, the XB-70 was never ordered into production as Secretary of Defense Robert McNamara canceled the program as a cost savings measure. For a description of the XB-70 program, please consult Jeanette Remak and Joe Ventolo Jr., \textit{XB-70: The Ride to Valhalla} (Osceola, WI: MBI Publishing, 1998).

\textsuperscript{109}Statement by William A. Allen, President, Boeing Aircraft Company before the President’s Air Policy Commission, Released Sept. 30, 1947, Papers of Stuart Symington, 1946-50, M General (Folder 2) Memoranda-General (Folder 2), Box 8, HST.
could carry an impressively large bomb load, usually, around twenty thousand pounds and could deliver it within a range of almost four thousand miles at an altitude of over thirty five thousand feet. The bombs could be delivered either by visual contact, through the Norden bombsight, or by radar.\textsuperscript{110} By any definition, the B-29 was the largest, fastest, and most technologically advanced four-engine bomber of World War II.

Although it was not designed originally to go to war against Japan, as the USAAF had only presumed a war with Germany in 1937, the B-29 Superfortress would bring a rain of ruin upon Japanese cities that was almost unprecedented in modern warfare.

In September 1940, Boeing was ordered to begin construction on a pair of prototypes that would test the basic B-29 design. After the attack on Pearl Harbor thrust the United States into the war, contracts for aircraft figuratively exploded in Washington D.C. Orders for the B-29 were accelerated and in February 1942 Boeing was notified that two other manufacturers, specifically the Bell Aircraft Corporation and the Glen L. Martin Company, would be responsible for the production of more than 4,000 B-29s that were manufactured by the end of the war.\textsuperscript{111} To coordinate the mass production of the largest bomber that the United States had made up to this time, a B-29 Liaison Committee was created with the objective of managing and directing the production of the Superfortress. In October 1943 the existence of the B-29 was formally acknowledged to the American press. Eddie Rickenbacker, an American World War One ace and noted aviation expert, commented that once the B-29 was operational, no nation could “survive the pounding a fleet of these planes” could deliver. Even more, Hap Arnold stated that


this new plane would make the B-17s and B-24s “the last of the small bombers.” He later referred to the B-29 as a “battleship of the air” and contended that once they were in use, “today’s long range will become medium range and today’s heavy bombers will consequently become light-heavies.”

The first B-29s had scores of problems to work out although none was more serious than the engine fires that plagued the Superfortress and threatened the entire program. Months into the flight-testing program, the second XB-29 took to the skies. Minutes into the flight, a fire broke out in the number one engine and in spite of the best efforts of the crew, the fire could not be extinguished. Pieces of metal began to fall off the aircraft as flames began to eat through the wing spar. Three of the crewmembers bailed out, however, they were killed when their parachutes did not open in time. Meanwhile, three miles short of Boeing Field, the XB-29 crashed into a meat packing plant and killed pilot and the remaining crew in addition to twenty employees of the plant. This accident put the entire B-29 program in jeopardy. LeMay later wrote about the substantive problems that plagued the B-29 and he lamented that the B-29 “had as many bugs as the entomological department of the Smithsonian Institution.” However, most of the problems associated with the Superfortress had been worked out before the first B-29s went into combat.

116 The Tupolev Aircraft Bureau was tasked with reverse engineering the B-29 from three early model Superfortresses that had landed in Soviet territory during the war. As such, the Soviet Tu-4 was also plagued with engine fires. Yefim Gordon and Vladimir Rigmant, Tupolev Tu-4: Soviet Superfortress (Hinkley: Midland Publishing, 2002), 24-27.
THE EVOLUTION OF AMERICAN STRATEGIC BOMBING PLANS

The Japanese attack on December 7, 1941 changed the direction and speed of the B-29 program. AWPD-1 was changed in the aftermath of Pearl Harbor to reflect a new long-range air plan against the three Axis powers. According to the newly developed AWPD-42, B-29s and B-32s were projected to bomb Germany until the collapse of the Nazi government. Once that was accomplished, and in conjunction with the capture of bases closer to Japan, the Very Long Range bombers would be transferred to the Pacific to strike at Japan. Against Japan, the primary directive of AWPD-42 was the destruction of the Japanese “will to wage war by destroying the war-supporting industries and the systems upon which the war industries and the civilian economy of Japan depended.” With this objective, AWPD-42 targeted Japanese aircraft engine plants, submarine yards, command and control centers, as well as steel, chemical, and rubber factories. Furthermore, the strategic air campaign targeted about one hundred twenty three objectives to be bombed over a six-month period. B-17s and B-29s would be the primary aircraft assigned to these missions.

One problem with AWPD-42 was the lack of a sustained campaign against the electric power system, transportation facilities, repair centers, sea routes, and railroads. It also, along with AWPD-1, did not envision a fundamental role for escort fighters for bombers. The lack of friendly fighters protecting the bombers had created grievous

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118 Hansell, Strategic Air War Against Japan, 14-15.
119 Werrell, Blankets of Fire, 49-50.
120 Hansell, Strategic Air War Against Japan 15.
121 Griffith, The Quest, 77.
problems for the B-17 and the B-24 during their first combat operations over Europe. German fighters were able to exploit weaknesses in the American bomber formations and shoot down the attackers at an alarming rate.¹²² In contrast, the B-29’s performance created the illusion that the Superfortress would not be as dependent upon escort fighters during the bombing raids over enemy homelands. There was also an underlying belief within the command structure of the USAAF that the bombers would always get through. This core belief in the bomber became well entrenched among American strategists. Despite the deficiencies of AWPD-42 and the problems associated with the B-29, the USAAF had, by early 1943, a bomber and a strategic plan. It now needed a weapon that could destroy the Japanese war effort.

In contrast to the air war against the Axis in Europe where the USAAF publicly embraced “precision bombing” against specific targets rather than general “area bombing,” the war against Japan would be radically different. The reality of the air campaign against Germany had displayed the limitations of precision bombing to the leadership of the Army Air Force, and its main strategic bombing force, the Eighth Air Force. In the days before guided munitions, accuracy was measured in hundreds of yards rather than in inches and all too often, bombs that were aimed at particular targets missed by wide margins and struck the surrounding areas with high explosive bombs. This required aircraft to return to the target in an effort to finally minimize its strategic value or destroy it. The lack of accuracy in precision bombing increased the cost of the campaign in weapons expended, aircraft losses, and casualties among the airmen. In contrast to this, Royal Air Force’s Bomber Command had already made the transition to

area bombing at night in an effort to destroy target areas and reduce allied casualties. The British also embraced the use of incendiary bombs to burn down the main production or cultural centers of Germany. In Europe, the Americans were reluctant to embrace this new strategy and did not appear to be that willing to sacrifice accuracy for expediency. That attitude changed after the introduction of the Superfortress into combat when greater results were required to offset the tremendous cost of the B-29 program.

TAKING THE SUPERFORTRESS TO WAR

The unit tasked with bringing the B-29 into the war against Japan was the brand new Twentieth Air Force, established in April 1944. Unlike other USAAF commands, the Twentieth was under the direct control of General Henry Arnold at the War Department rather than at the front. Therefore, overall command of the B-29s and the strategic air campaign was in the hands of the senior air strategists, and not the theater commanders including General Douglas MacArthur or Admiral Chester A. Nimitz. This created a level of autonomy for the Twentieth Air Force that was not allowed in any other USAAF command. The Twentieth was divided into two major units, the XX Bomber Command based originally in India and China, and the XXI Bomber Command stationed in the Pacific. The XX Bomber Command and its 58th Bomb Wing would introduce the early B-29 into combat. Many of the problems that had plagued the early B-29s still had to be worked out, including in-flight engine fires. Yet the war could not wait until the B-29 and its systems were perfect and, consequently, the early bombing results were less than stellar. However, Secretary of War Henry Stimson ominously noted that the

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123 Hansell, Strategic Air War Against Japan, 26-28.
“blow from the air just struck against Japan is the beginning of a new phase of our war in
the Pacific. The new long-range bombers have overcome the tremendous barriers of
distance to bring the heart of Japan under the guns and bombs of the Army Air
Forces.”

The XX’s B-29s were located on primitive airstrips in China where supplies were
a constant problem because all gasoline, bombs, spare parts, and replacement crews had
to be flown from India to China after a long, dangerous flight over the Himalayas. It was
a logistical nightmare that required additional aircraft to ferry materials into China.126
Despite these difficulties, the Superfortress raids were important to FDR and his overall
strategy for winning the war. The President also saw the raids as having a twofold
purpose: the first to punish Japan and the second, to improve the morale of the Nationalist
Chinese who had been fighting the Japanese since 1937.127 Retribution against the
Japanese might be a tangible goal, however, the success of the latter goal is much harder
to assess.128 More importantly, it was evident that bombing missions originating in China
were hard to sustain and airbases needed to be secured closer to the main American
supply lines that stretched across the Pacific. This was accomplished through the valor of
the American Army, Marines Corps, USAAF and the Navy who liberated islands in the
central Pacific from the Japanese. After extensive work by naval construction battalions,
new air bases capable of operating B-29s were opened on Saipan, Tinian, and Guam in
the Mariana Islands. The B-29s and their crews would garner the press coverage as the

127 Eric Larrabee, Commander in Chief: Franklin Delano Roosevelt, His Lieutenants, and Their War (New
128 It should be noted that during the Vietnam War, strategic strikes against North Vietnam were linked to
punishment as well as improving the morale of the South Vietnamese.
war progressed, but it was the dedication and sacrifice of the sailors, soldiers and Marines that made it possible.

While the XX Bomber Command brought the B-29 into the war with strikes against the Japanese in China as well as some targets on the Home Islands, it would be the XXI that would become the most famous and feared operators of the Superfortress. General Haywood Hansell, a long time promoter of precision bombing, and one of the architects of the strategic air warfare plan, had been given control of the XXI Bomber Command based in the Mariana Islands, much closer to Japan. Hansell and his staff wanted to use precision bombing of Japan, but there were problems with this goal including the weather. Clouds or storms often obscured targets and the high operating altitude of the B-29 subjected bombers to the previously unknown jet stream. This wreaked havoc on high explosive bombs that were dropped from over thirty thousand feet and resulted in collateral damage in adjacent areas that was often far worse than damage inflicted upon the target. Therefore the first strikes on Japan had caused very little real damage to Japan’s industrial base and had done very little to inspire fear in the Japanese because the B-29s were not yet being utilized in an effective manner.¹²⁹

Despite the setbacks, the B-29s continued to practice precision bombing on Japanese targets. The goal was to destroy the Japanese fuel supplies that would starve the Japanese war machine of needed petroleum. British and American carrier-based aircraft periodically joined the B-29s in strikes on the Japanese mainland during this campaign of interdiction. However, it was perceptible that precision bombing was not garnering the necessary results and a new direction in tactics was required.¹³⁰ There was too much

invested in the B-29 program for it to have only marginal successes against Japan. It was the aircraft that the USAAF wanted, their reputation was at stake, and Superfortresses were under the direction of the airmen in Washington. If they could not achieve dramatic results with the greatest plane ever produced, how could they possibly make the case for an independent United States Air Force?

In an effort to increase the pressure and outcome of the bombings, raids were increased in size and frequency. Targets included the capital of Japan which was bombed on November 24, 1944 by over one hundred B-29s which attacked Tokyo with little opposition. Notwithstanding their best efforts to destroy the American bombers, the Japanese lost five fighters destroyed and nine damaged for one B-29 destroyed and one damaged.\textsuperscript{131} It appeared that the Japanese pilots were not aggressive and bombing Tokyo was, in the words of the lead bombardier Captain Vincent Evans, “like bombing in Kansas.”\textsuperscript{132} The B-29s were starting to justify their cost as the most expensive and highest performing bomber to date, but much better results were still needed.

With the first B-29 strike on Tokyo now recorded, it was up the USAAF and the press to report and promote what happened and what the results of the raid had been. The first strike used over 270 tons of ground piercing and incendiary bombs, small by the standards of the war in Europe, but much larger than had previously been used in the Pacific War. The main target of the mission was the Nakajima aircraft engine factory in Tokyo, and the secondary targets were the docks. The USAAF quickly assessed the results of the raid and was disappointed because only 27 bombers were able to hit the

primary target and effected only limited physical damage to the engine plant.\textsuperscript{133} Despite the limited damage to the targets, the American press coverage resounded with stories of the success of the mission. George Horne, a reporter for the \textit{New York Times} wrote that the air campaign that just started would probably be the last battle of the war against Japan and “those who have planned it accept the first flights of the B-29’s for what they are—the first blow.”\textsuperscript{134} The tone of the statements coming out of USAAF indicated that they were still practicing precision bombing rather than the more inhumane area bombing. Lieutenant General Millard Harmon stated to the press that the USAAF now had all of Japan in “our bombsights now…We want to emphasize that we are not bombing people. We are bombing the Japanese war machine.”\textsuperscript{135} Harmon’s comments reflected the strategic goal of the United States in general and Hap Arnold’s Twentieth Air Force in particular. They were formally committed to daylight precision strategic bombing, with the destruction of industry and shipping as the principal function of existing B-29 raids. Collateral damage to “flimsily built worker’s settlements near the plants” was to be expected.\textsuperscript{136}

RAZING \textit{SHOWA}: Burning the Reign of Enlightened Peace

As the conventional B-29 raids increased in tempo, however, it soon became apparent that the strategy of precision bombing was going to be replaced by the type of terror bombing that had been soundly condemned when previously done by the Germans or the Japanese. The decision to change the air campaign to fire bombing reflected a

\textsuperscript{133} Taki and Sakaida, \textit{B-29 Hunters of the JAAF}, 28-31.
\textsuperscript{134} George Horne, ”B-29 Blows Against Japan to Be Steadily Increased,” \textit{The New York Times}, November 25, 1944.
\textsuperscript{135} Horne, ”B-29 Blows Against Japan to Be Steadily Increased,” November 25, 1944.
growing change of direction within the USAAF and its leadership. As early as 1939 a course offered by the Air Corps Tactical School informed its students that Japanese cities were extremely vulnerable to fire bombs. Two years later in the aftermath of the Pearl Harbor attack, George C. Marshall rhetorically threatened to unleash American bombers to start the Japanese cities on fire. Proponents of the change from precision to area bombing, like General Curtis LeMay, saw the value of firebombing as more than just the terrorization of the enemy. They believed that if properly executed, the incendiary raids would compel the Japanese to surrender by destroying the means of production, the workers, and their will to resist. This could be accomplished at an extremely low cost to the Americans in lives, machinery, and weapons. It was reported that roughly 1,700 tons of bombs carefully put on target in the most inflammable areas of Japan could effectively destroy basic, communal services, disrupt war production by as much as 30%, and would cause roughly 12 million Japanese in 20 cities to abandon their homes. All of this would accelerate the end of the war on American terms. Once again, strategic bombing was linked to national goals, but this time the bombing was linked to rapid destruction of the enemy’s homeland as the quickest avenue to peace on American terms. The strategic bomber in general, and the B-29 in particular, became the symbol of an expedited victory and American policy in action.

There was a concern, however, that the Japanese might be able to upset the bombing by challenging the United States for control of the air over Japan. The first B-29 raids had been conducted without American fighter escort because there were no aircraft with the range to shepherd the B-29s to and from the target. However, if the

137 Crane, Bombs, Cities, and Civilians, 126.
Japanese made a concerted effort to attack the B-29s, the American ability to bomb unmolested would be compromised. It was not until Allies gained airbases closer to the Home Islands that the USAAF fighters would get into the battle over Japan. It was apparent that fighter aircraft from land bases as well as carrier air groups would be necessary to protect the B-29s as the Japanese gained experience in attacking them. These new air bases also allowed the B-29s to carry more bombs instead of additional fuel and there was the possibility of adding groups of shorter ranged B-17s and B-24s to join the attack on Japan if they became available or were needed.

American control of the air over Japan and increased numbers of bombers with greater bomb loads created the path to a rapid victory. In an effort to increase the pressure on the Japanese government to surrender, the USAAF made the decision to use firebombs against Japanese cities as they had done to a much smaller degree against the Germans. Once the Americans made the decision to use incendiary bombs to burn out the fighting spirit of the Japanese, the link between airpower and American policy was forged. From 1944 until at least 1991 when Strategic Air Command (SAC) stood down, the overriding United States goal in a total war was to destroy the heart and soul of an enemy state by bombing their cities and cultural centers into oblivion. This was a far cry from the American condemnation of strategic bombing only a few years earlier.

The USAAF had conducted secret tests of incendiary bombs against models of Japanese urban centers and concluded by October 1943 that Japanese cities burn extremely well. Fire bombing them could be effective because Japanese industrial targets were often located in and around residential sections that were more vulnerable to

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extensive fires. Furthermore, it would only take about 2,000 tons of incendiaries to reduce the production of war materials in the factories and homes of Japan.\textsuperscript{140} The concept of firebombing Japan was not a well kept secret and eventually Hanson Baldwin, a noted military expert for the \textit{New York Times}, suggested to his readers that Japan was far more vulnerable to air attacks than Germany had been. It had a densely packed population base with “concentrated industry, inflammable cities, bottlenecked communications and dependence on the Asiatic mainland for most raw materials.”\textsuperscript{141}

Between November 1944 and January 1945, the XXI Bomber Command continued to hit targets across Japan from altitudes around thirty thousand feet and the results were not spectacular. The \textit{New York Times} reported on December 14, 1944 that estimates of serious damage inflicted by the strategic air campaign tended to be overoptimistic and that the Japanese industrial base would “not be knocked out in a week or a month and may never be bombed out of operation.”\textsuperscript{142} Even a raid on the Mitsubishi Aircraft Engine Works in Nagoya destroyed only the industrial sector of the city but not the production of crucial war materials as the Japanese moved these efforts underground.\textsuperscript{143} For the investment made into the B-29 program, results like these were not sufficient or definitive enough to justify Arnold’s pet bomber project. In an effort to achieve the promise of strategic airpower, a decision was made to make General Curtis LeMay, an expert in strategic air warfare, the field commander of the B-29s. His ascension was the result of a shift in strategic doctrine and political pressures on the entire B-29 program.\textsuperscript{144}

\textsuperscript{140} Craven and Cate, \textit{The Army Air Forces in World War II: Matterhorn to Nagasaki}, 610.
\textsuperscript{141} Hanson W. Baldwin, “Japan’s Plight Grave: Quickening Air Blows and Blockade Alone, However, Will not End War,” \textit{The New York Times}, June 20, 1945.
\textsuperscript{144} Sherry, \textit{The Rise of American Air Power}, 258.
He assumed command of the XXI Bomber Command on January 21, 1945 and answered only to Arnold back in Washington D.C.\(^{145}\) LeMay was one of the most inventive air strategists of his generation and continued to use the tactics worked out over the previous months. However, he also began to prepare for a new strategy based on the belief that Japan was extremely vulnerable to fire and area bombing.

In early 1942, Arnold was briefed by his staff on targets in the Tokyo area that were “particularly susceptible to fire” which created a schism between those that wanted to continue precision bombing and those that argued for area bombing.\(^{146}\) While the traditional proponents of strategic airpower advocated for the continued destruction of the Japanese heavy industries, those in favor of area bombing contended that targeting the *producers* of war material was more beneficial. Airpower advocate Alexander de Seversky argued that the United States had an opportunity for experimentation on a “perfectly good ‘guinea pig.’”\(^{147}\) LeMay stated that he had an idea for the implementation of firebombing. It called for multiple types of incendiaries, including phosphorus and napalm. These weapons had been extensively tested to determine how effective they were against Japanese style structures. In addition, the Allies had seen first hand how effective firebombing had been against the German cities of Hamburg and Nuremberg in 1943 as well as Dresden in 1945. In the latter attack, official reports estimated that between 25,000 and 35,000 Germans were killed in the firestorms that completely destroyed the city and its remaining infrastructure.\(^{148}\)

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With these results in hand by early 1945, LeMay’s planners argued that the area bombing of Japan would be even more effective because the 158 tons of bombs dropped by the RAF against 31 Germany cities “gave 8.4 percent loss of one year’s production and dehousing of 5,136,000 persons; 6,000 tons on six Japanese cities is estimated to give 15 percent loss of one year’s production and dehousing of about 9 million persons.” If the old German stone urban centers had burned, the paper cities of Japan would be turned to ash. In addition to the firebombs themselves, LeMay wanted to bring the B-29s “all the way down from thirty thousand to about nine or even five thousand.” One of the XXI’s bomb wing commanders, General Thomas Power, argued that the Superfortresses would need less fuel to fly at a lower altitude, and the weight saved in fuel could be replaced by bombs. Also, bombing at night could minimize the risk to the bombers and crews by flying at lower altitudes.

The first firebombing mission was flown against Japan was on the night of March 9/10, 1945 when a total of 2,000 tons of bombs were delivered by over 330 B-29s in this devastating attack on the Japanese capital of Tokyo. The first B-29s were armed with napalm to start the fires, and later aircraft dropped magnesium cluster bombs that would expand the conflagration. As the bombs fell, an inferno was quickly spread by wind gusts. Updrafts from the fires rose into the sky to buffet the bombers that were still over the target area and for two and one half hours, the B-29s ignited so many fires that some areas were still burning four days later. Many Japanese on the ground were killed from the fire, smoke inhalation, lack of oxygen or were drowned in rivers and canals as they

150 LeMay and Kantor, *Mission with LeMay*, 347.
152 Craven and Cate, *The Army Air Forces in World War II: Matterhorn to Nagasaki*, 614-615.
tried to escape the flames. After sixty minutes of trying to combat the blaze, the Tokyo fire department had been decimated. They lost almost 100 fire engines, 128 fire fighters and 500 civil guards who had attempted to help put out the firestorm. It was estimated that the raids killed more than 100,000, and left a further one million without homes or shelter. Bruce Rae of the New York Times reported the day after the raid that a “blanket of fire was thrown over an area of fifteen square miles in the heart of Tokyo” by more than 300 B-29’s “in the largest and most intensified raid on that city to date.”

Throughout this report and others that followed, there was no moral condemnation for the firebombing and targeting of civilians. Instead, many press releases and newspaper accounts praised the actions of the B-29 crews and their aircraft. Furthermore, the Times editorialized that less than twenty five percent of Tokyo had actually been burned and history had indicated that it would only take a little time for the Japanese to reorganize and recover from this loss and that the United States would “certainly send our flying fleets again and again over Tokyo and Nagoya. These great cities may become no more than holes in the ground.” Another article commented that the “incendiaries we are scattering by the tens of thousands are burning up not only Japan’s war material resources but Japanese energy, resolution and hope. All are heavy losses.”

The use of firebombing spread quickly to other industrial centers as LeMay stated that it would continue until the total destruction of the Japanese industrial capacity and

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154 Frank, Downfall, 9.
155 Buckley, Air Power in the Age of Total War, 193.
156 Bruce Rae, "Record Air Attack," The New York Times, March 10, 1945.
war effort was achieved. Despite the evidence to the contrary, LeMay argued that precision bombing had not been abandoned.\textsuperscript{159} But it had, and the Americans would only try precision bombing again in good weather or when the supply of incendiaries was limited. It became clear that LeMay intended to use the B-29s to inflict maximum damage on the Japanese as rapidly as possible in spite of his claims that the Americans were not purposely targeting civilians. Unfortunately, the strategic targets that were being bombed with precision were “concentrated in the urban areas.”\textsuperscript{160} In other words, the massive loss of life among the Japanese was euphemistically reduced to terms like collateral damage. Murmurs of remorse or concern were squelched under the demands for rapid results and a greater return in the investment of the B-29 program. Simply destroying the means of production of the Japanese economy did not seem to be the fastest way to end the war. The USAAF command decided therefore to continue to go after the heart of that production, the people themselves. This was a major step in the evolution of airpower as American policy eventually transitioned into the single weapons system approach that would dominate the formative years of the Cold War.

To keep up the efficiency of the attacks, and expedite a quick surrender, all B-29 combat units were dispatched to Pacific bases and joined in the fire bombing raids. More ominous for the Japanese, the United States Eighth Air Force, the primary strategic bombing force in the European Theater, prepared to transfer units to the Pacific in the summer of 1945. Precedence was placed on the bomb wings of B-17s and B-24s that were to be transferred from England back to the United States and then on to the Pacific Theater. By August 1945 two bomb groups of the Eighth had been converted to B-29s

\textsuperscript{160} Werrell, \textit{Blankets of Fire}, 157.
and were equipped to join the raids against Japan.\textsuperscript{161} It was estimated that with the Eighth joining the attacks on Japan sometime in August, the USAAF could double the tonnage of bombs that had been dropped on Japan to that point, and hasten the end of the war as Japanese defenses would quickly be overwhelmed.\textsuperscript{162}

The situation for the Japanese could get dramatically worse as the British Royal Air Force’s (RAF) Bomber Command anticipated the transfer of a large number of Avro Lancaster bombers, the largest available to the RAF, to participate in the war against Japan under the code name “Tiger Force.”\textsuperscript{163} The RAF planned for operations in the Pacific theater since October 1943 and the commanding officer of Bomber Command, Sir Arthur Harris, envisioned the development of a larger bomber that would join the Americans in the aerial assault on Japan. Harris had supported the idea of area bombing during the air war against Germany, and had no reservations about attacking civilian targets. An organization staff was put together to begin the plans of sending modified Lancasters to the Pacific once the war with Germany was completed. However, the war ended before the RAF could place their first bombs on Japanese soil.\textsuperscript{164} If these new units were added to the raids against Japan, the Allies would soon engulf the skies over Japan. With so many bombers attacking, the Japanese would not have been able to disrupt allied control of the air and the remaining Japanese cities would be pummeled with no avenue for Japanese recourse.

\textsuperscript{161} Freeman, \textit{The Mighty Eighth}, 233.
\textsuperscript{162} Hansell, \textit{The Strategic Air War Against Germany and Japan}, 253.
ATTACKING THE ACHILLES HEEL OF JAPAN

In addition to striking at Japanese war production, American aircraft also targeted its transportation network. Rail lines were severed after strikes from B-29s, carrier-based planes, or shellfire from American surface and submarine fleets. Japanese shipping was being decimated at such a prodigious rate, that of the 6.4 million tons of vessels that Japan had at the beginning of the war, roughly 4.5 million tons had already been sunk by the American submarine campaign by the summer of 1945. Attacks on the Japanese shipping industry meant that it was only able to make up less than half of the losses.\footnote{\textit{The New York Times}, "Japan's Achilles Heel," June 4, 1945.}

With more American aircraft coming into the theater on a daily basis, it would be almost impossible for Japan to maintain even that level of production. The immediate lack of shipping dramatically impacted food supplies for the military and the civilian population at home and abroad. American attacks also dramatically disrupted the critical supply of petroleum as Japanese fuel production was being targeted at its source, as well as the refineries. Japanese production of other critical materials was further hampered because many workers were killed and others abandoned their posts because of the fear imposed by the firebombing.

In an effort to further reduce Japanese war production, the Americans began to drop leaflets that warned the citizens of a targeted city of their impending doom. The flyers stated that the United States was not at war with the Japanese people but with their obstinate government. Since military targets were going to be attacked, it was in the best interest of residents to vacate the area. General LeMay also felt that this propaganda caused the Japanese to despair in their war effort once they realized the Japanese armed
forces could not stop a B-29 raid even when the Americans told them when and where it was coming. LeMay made it clear to all who would listen that it was his ultimate goal to end the war as rapidly as possible. If it cost the lives of several hundred thousand, it was a small price for the millions of lives that would be lost if the war continued.  

THE BEGINNING OF THE END AND THE RISE OF HARRY S. TRUMAN

By the spring of 1945 it had been determined that the fastest way to defeat Japan was through firebombing and the interdiction of Japanese supplies on the ocean through air and naval attacks. These would continue throughout 1945 and would help pave the way for the final invasion of Japan sometime in the fall of the same year. It was believed that this course of action would minimize American casualties and maximize the Japanese vulnerabilities. They also represented the final line of attack on Japan agreed to by the Roosevelt administration. It now appeared in mid-1945 that it was now only a matter of time before Japan would be vanquished. Roosevelt, however, would not live to see the strategic air warfare plan that had evolved since 1941 bring about peace.

Vice-President Harry Truman was meeting with some Senate colleagues on April 12, 1945, when he received an urgent phone call. In a few moments, Truman’s life and legacy was changed when he heard the words, “Harry, the President is dead.” Truman later wrote that while he had been concerned about this possibility for weeks, he was unprepared and a bit overwhelmed. Unlike Roosevelt, Truman could not be accused of being duplicitous with his public statements on the war in general, or the strategic


bombing campaigns in particular. He was plainspoken to the point of being blunt, considered himself well read on most subjects, and appeared to be as stunned as anybody that he was now the President. Truman was extremely confident in his ability to make decisions that he felt were correct, regardless of popular opinion or political pressure. He reinvigorated the Cabinet and came to rely on those officials for framing the critical decisions of his administration with the understanding that his was the final judgment.168

For the time being, it did not appear likely that the new President would make dramatic alterations to the American wartime strategy. Despite this, he was subjected to a preview of the post war defense struggles as each of the armed forces attempted to persuade the incoming President of their approach to win the war and keep the peace in the aftermath.169 This proved to be a preview of the postwar defense struggles. Truman spent the first days of his presidency absorbed in familiarizing himself with existing war plans, international agreements, as well as being briefed on a new type of weapon of immense power. Specifics about the atomic bomb project were brought to the President’s attention at later meetings. Of a more immediate concern was the battle for Okinawa that began eleven days before Roosevelt’s death.

Located roughly 400 miles from Japan, Okinawa became a symbol of increased Japanese resistance and tenacity the closer that the Allies progressed to the Home Islands.170 It was apparent to the Americans on the ground and in command that the Japanese fought, not like a defeated nation whose homeland was under relentless incendiary attacks, but like an army with nothing to lose. The Japanese fought the

169 Pape, Bombing to Win, 91.
170 Norman Polmar, "Invasion Most Costly," Naval Institute Proceedings (United States Naval Institute) 121, no. 8 (August 1994).
Americans in creative ways including Kamikaze attacks on American shipping, tactics that would inflict massive casualties on the numerically superior Americans. They were also prepared to use civilians as human shields. By dispersing Japanese soldiers among the civilians it triggered an American response that is estimated to have killed more than 160,000 Okinawans out of an estimated population of 450,000 when the battle began.\textsuperscript{171} The Japanese military casualties were estimated to have been in excess of 107,000 known killed and another 27,000 believed to have been buried inside defensive fortifications and caves. The Americans also took 10,000 Japanese military personnel as prisoner.\textsuperscript{172} Even more disturbing, countless civilians committed suicide rather than face an occupation by the unknown Americans. For the United States, the numbers from Okinawa were staggering as well. More than 12,000 Americans were killed or were classified as missing, 50,000 wounded, 32 ships sunk, 368 vessels damaged, and 763 aircraft destroyed.\textsuperscript{173} Secretary of War Henry Stimson later maintained that the War Department believed that the Imperial Japanese forces could still muster over 5 million armed men, and the United States could still suffer dramatic casualties in a final effort to crush the Japanese Empire and get to the gates of Japan itself.\textsuperscript{174}

The sobering statistics of the Okinawa campaign reflect one of the greatest flaws in early strategic air warfare efforts, the inability to translate destruction on the enemy home front to the defeat of his armies in the field. At the same time that the firebombing of Japanese cities increased in missions and efficiency, Japanese military forces on

\textsuperscript{172} David Rees, \textit{The Defeat of Japan} (Westport: Praeger Publishers, 1997),113.
Okinawa were able to inflict heavier casualties on the Americans than any previous battle in the Pacific. The Japanese did not surrender because their cities were being destroyed at an unprecedented level in modern warfare, a violation of the dogma of strategic bombing advocates. Rather, the garrison at Okinawa fought until it was no longer feasible for them to continue, and it became obvious to many of the American commanders that casualties would continue to increase the closer they got to Japan. It was assumed, therefore, that any operations on the Home Islands would increase casualties dramatically, and many in the administration believed that it was imperative to get Soviet cooperation against the Japanese. The Soviets would be able to engage large numbers of Japanese troops in Asia and prevent their return to Japan.

Against this backdrop, however, Truman took a hard line with Soviet foreign minister Vyacheslav Molotov when he visited the new President on April 23, 1945. In a preview of Cold War hostilities, Truman raised concerns regarding the failure of the Soviets to implement all of agreements from the Yalta conference and he bluntly informed Molotov that he believed the Soviets had intentionally breached the accords reached in February 1945. The President wanted these concerns relayed to Soviet Premier Josef Stalin. It is remarkable that Truman took this position at this time because it was still hoped that the Soviets would assist the Americans in defeating Japan. There was also hope that the Soviets would consider the possibility of basing B-29s in Siberia for missions against Japan. Perhaps Truman felt that the bombing campaign, as well as ongoing unrestricted submarine warfare would burn or starve Japan out of the war before the Soviets would enter. It is clear, however, that Truman did not confront

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Molotov by threatening or using atomic diplomacy because the President had yet to be fully informed of the bomb and its potential. On April 24, 1945, the day after the meeting with Molotov, the Joint Chiefs of Staff (JCS) canceled all plans to base B-29s on Soviet territory.\textsuperscript{177} It is not obvious whether this was a result of the meeting, or the realization that Siberian bases were no longer necessary to successfully conclude the war.

On April 25, 1945, the Joint Chiefs of Staff adopted a course of action that included the use of ground troops in addition to the existing air and naval campaigns to finally crush Japan. This was a tacit indication that the JCS did not believe that airpower alone could win the war and that they were willing to risk a potentially catastrophic ground invasion.\textsuperscript{178} An assault on the island of Kyushu, 350 miles from Okinawa, was projected to be the first step in the final defeat of Japan. Islands captured in earlier campaigns would provide bases for air and naval assets that were to support the invading forces. Planning continued throughout April for this operation, but there were considerable disagreements about whether or not an invasion was even necessary. Fleet Admiral William D. Leahy, the Chief of Staff to the Commander-in-Chief, later acknowledged that the destruction of the Japanese naval and air forces made “early surrender inevitable,” but he was clearly opposed to an invasion of the Home Islands. In his memoirs, Leahy stated that in the end, the JCS authorized the planning of the invasion, but approval of an actual landing was not yet given.\textsuperscript{179}

\textsuperscript{177} Alperovitz, \textit{Atomic Diplomacy}, 31.
\textsuperscript{179} William D. Leahy, \textit{I Was There: The Personal Story of the Chief of Staff to Presidents Roosevelt and Truman Based on His Notes and Diaries Made at the Time} (New York: Whittlesey House, 1950), 245.
A WEAPON OF UNPRECEDENTED POWER

In another critical step towards the formation of the postwar single weapon defense plan, the atomic bomb was formally explained to President Truman. Secretary of War Stimson sent a letter to Truman on April 24, 1945 that requested a time to meet with the President to discuss a critical top-secret issue. Stimson reminded the President that he had mentioned this to him shortly after Truman took office, but now it was clear that it would have “such a bearing on our present foreign relations and has such an important effect upon all my thinking in this field that I think you ought to know about it without much further delay.” The following day, Stimson and General Leslie R. Groves, the head of the Manhattan Project, formally briefed Truman on the progress and the impact of the atomic bomb on the current war as well as in the future. They presented the bomb as another weapon to be expended in the war, and did not question whether or not it should even be used. The President was also informed that nuclear weapons would also impact postwar diplomacy and there would also be pressure to have some form of international control of the bomb. Truman later wrote that the information given to him had indicated that atomic bombs could shorten the war but it would involve “wiping out entire cities and killing people on an unprecedented scale.” The impact on Truman was unmistakable. He commented to others that he would “have to make a decision which no man in history has ever made” and it was terrifying to consider that he was the


one who would ultimately make the horrific choice. His conclusion ultimately placed a higher importance on preventing American casualties than on preserving Japanese lives.

Stimson also recommended to Truman that the President put an advisory committee together to consider how the bomb would be used, and what were the long-term ramifications of its use. This Interim Committee met for the first time in May 1945, and was chaired by Stimson. All relevant information and requests would be relayed through Stimson’s office directly to Truman. Joining the Secretary of War on this committee was the Undersecretary of the Navy Ralph Bard, the Director of the Office of Scientific Research and Development, Dr. Vannevar Bush, Truman’s representative James F. Byrnes, Assistant Secretary of State, William L. Clayton, Chief of the Office of Field Service Dr. Karl T. Compton, Chairman of the National Defense Research Committee Dr. James B. Conant, and the alternate chairman, George L. Harrison, who was also Stimson’s special consultant.

The committee was presented with an introductory explanation to the specificity of their role concerning the bomb, existing international agreements, and wartime control, and what the President would officially declare about the project once the bomb was revealed. It was also tasked with looking at post-war research and development of

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183 Truman, Memoirs: Year of Decisions, 87.


atomic power. The committee also discussed the creation of three specific panels. A Scientific Panel was agreed to on May 14, 1945 and was tasked with providing feedback on the technical aspects of the bomb as well as to “present the Committee their views concerning the political aspects of the problem.” Members of the panel included Dr. J. Robert Oppenheimer and Dr. Enrico Fermi, two of the masterminds behind the bomb. A Military Panel was debated and it was agreed that input from the top echelons of the military, including Army Chief of Staff General George C. Marshall and Fleet Admiral Ernest J. King, would be essential to the decision to use the bomb. An Industrial Panel was also discussed, but it was not created at that time.

Over the next several months the Interim Committee discussed the use of the bomb, as well as the implications it would have on American diplomacy, vis-à-vis the Soviet Union. Some consideration was given to how information about a test of the first weapon would be presented to the President and how he would relay the information to the Allies. On June 26, 1945 the Interim Committee recommended that the news about a test of the bomb should be accessible to Truman at the Potsdam Conference and it was expected that the weapon would be used against Japan. More importantly, the committee felt that Truman should not entertain consideration about international control of the weapon at present. It was recommended that the bomb be used without warning to maximize the impact and to display its overwhelming power and any other course would

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compromise the American goal of unconditional surrender. The suggestion was made that the bomb was “likely to bring an end to the war” and “we see no acceptable alternative to direct military use.”

As the Interim Committee was examining the role of the atomic bomb, Secretary of War Henry Stimson still oversaw the continued bombing of Japan throughout the early summer 1945. Stimson had previously been an outspoken critic of the terror bombing of civilians, and had been concerned about how this would affect America’s image in the postwar world. With that in mind he met with Truman again in June 1945, and reminded the President that he had always demanded precision bombing of targets in populated areas, however, now some in the USAAF had informed the Secretary of War that bombing for accuracy was no longer possible. The Japanese had successfully scattered their war production among the houses of their workers and that the American incendiary bombing campaign could match the Nazis in atrocities committed if not restrained. Stimson also suggested that if the firebomb raids were completely successful and the vast majority of Japanese cities were reduced to ash heaps, there would be no accurate gauge to assess the impact of the atomic bomb.

His recommendation to use the bomb was also based on his concern that the American home front might grow weary of the war and that would have a negative impact on the ability of the War Department to successfully finish the war. The Joint Chiefs of Staff were also concerned about the potential unrest in the United States about the length of the war or the realization that throughout history, the Japanese had never capitulated in a war. There was general agreement and hope that the war could be

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189 Stimson and Bundy, 15.
190 McCullough, Truman, 392-393.
brought to a quick end without undue American casualties. By mid summer 1945, it was apparent that the war could end because of several scenarios. These included the United States destroying scores of cities through firebombs or through a single bomb, starvation of the native population through a naval blockade, or finally, a bloody invasion. Arguably, the priority for Truman and the military was the preservation of American lives and as such, enemy fatalities were not as much of a concern.\(^{191}\)

After looking at the options, Stimson echoed those who advocated using the atomic bomb against Japan because it could compel Emperor Hirohito to accept unconditional surrender and enforce it over his armed forces and his people. Hirohito, as a political and spiritual deity, was essential to the framing of a long-term peace, and he was the only one who could push Japan towards a final capitulation. Stimson further contended that the bomb was the unique instrument that could accomplish the goal of ending the war as soon as possible. Most importantly, this would end hostilities with the “least possible cost in the lives of the men in the armies which I had helped to raise.” Finally, Stimson came to the conclusion that “no man, in our position and subject to our responsibilities, holding in his hands a weapon of such possibilities for accomplishing this purpose and saving those lives, could have failed to use it and thereafter looked his countrymen in the face.”\(^{192}\)

After listening to many in the military and scientific community, Stimson’s Interim Committee recommended using the bomb as soon as possible, without an advanced warning.

There was some level of resistance from within the Manhattan Project itself about the use of the bomb, as a number of resistors within the program argued that the bomb


had been created on the order of President Franklin Roosevelt to use against Germany, not Japan. Moreover, it was apparent to some that despite the very heavy casualties inflicted upon the Americans at Iwo Jima in February 1945, and Okinawa the following April that the Japanese were already on the verge of defeat, so its use would be considered superfluous. They argued that there were other options besides the bomb or direct invasion including negotiations with Japan, and that use of the bomb could trigger an arms race with the Soviet Union that would destroy the peace that had been so painstakingly attained during the war. Yet Truman made the decision to use the bomb because of his understanding that its use could prevent the continuation of the war, stop the incendiary attacks, and lift the blockade that was destroying Japan. The question that remains is, why not warn the Japanese of the bomb and its consequences? James Byrnes, Truman’s pick to replace Edward R. Stettinius as Secretary of State, was a member of the Interim Committee and argued after the war what could have happened if a warning had been given. It would have been possible for the Japanese to use American and allied prisoners of war as human shields to protect their cities knowing that Truman would be reluctant to authorize a strike that would kill scores of Americans. If a test bomb were detonated with Japanese representatives present, they might not be convinced that it was fully weaponized and capable of being dropped from a B-29 or even worse, the bomb might misfire, and convince them that the Americans were bluffing about the atomic bomb. This would encourage them to disregard any American threats in

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194 Stimson and Bundy, On Active Service, 633.
the future and continue to fight on indefinitely. For the Truman administration, this could be a worst-case scenario, a weapon that did not work and a hollow threat that cost billions to produce. If the bomb was dropped without warning and did not work, it might make a big hole in the ground, but the only ones who would have known about it were the Americans.

Throughout the spring and summer months of 1945, Truman attempted to maintain the American policy that was in place since the Atlantic Charter of 1941, the defeat of Germany first, and then Japan. Truman was also obligated to follow what had been the overriding goal for both major theaters since the Casablanca conference January 1943. At the conclusion of that summit, Truman’s predecessor Franklin D. Roosevelt announced that the war would not end until unconditional surrender of the Axis powers had been achieved. This did not “mean the destruction of the population of Germany, Italy, or Japan” but did mean the destruction of the philosophies that drove those nations to aggressive war. Notwithstanding Truman’s commitment to following FDR’s war policies, there was considerable debate in the War, Navy and State Departments about the feasibility of unconditional surrender. Several prominent Americans disagreed with Roosevelt and Truman about this demand because they feared it would cause the Japanese to fight to the bitter end. This could close off any discussion of a negotiated settlement that would prevent a bloody invasion of Japan. Secretary of the Navy James V. Forrestal believed that a completely prostrate Germany and Japan would benefit

196 Byrnes, Speaking Frankly, 261.
197 Frank Freidel, Franklin Roosevelt: A Rendezvous with Destiny (Boston: Little, Brown and Company, 1990), 463.
fledgling Soviet international domination. Truman was not oblivious of these concerns, but he would not abandon the goal he inherited from Roosevelt. This would cause Truman to permanently link American strategic air warfare with its national policy of unconditional surrender. The application of airpower as policy to achieve this goal in total war would become the foundation of American postwar strategy.

THE DEMAND FOR UNCONDITIONAL SURRENDER

Unconditional surrender of Japan was the overriding goal of the Truman administration during the waning weeks of July 1945. The continued firebombing of Japanese urban centers was directly linked to the goal of expediting an end of the war and pushing the Japanese government to accept capitulation on American terms. This did not mirror Roosevelt’s original public statements about sparing the populace from annihilation. Instead, it reflected what many within the American civilian and military command came to see as a reality of modern warfare. The civilian population of any nation was considered to be a legitimate target to be destroyed in order to win a war. Therefore, Truman authorized raids against non-military targets spread across Japan including a further 33 cities that were considered to be vulnerable to firebombing. But there was growing concern within the administration about the obliteration of Japanese cities and the brutalities inflicted upon the Japanese. Truman was advised that with the increases in American casualties the closer the Americans came to Japan, many more could be expected with an assault on Japan itself and that the Americans could expect

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about a million casualties.\textsuperscript{201} It must be noted that this did not necessarily mean a million fatalities, but it was still a daunting figure. There is considerable historical debate about how many casualties were actually predicted, however, regardless of the number, Truman made it clear that his first priority was with the American military personnel who were scheduled to embark on an invasion of Japan in late 1945.

The potential losses had to weigh on Truman’s mind in July 1945 as he prepared to head to Europe for the Potsdam Conference, the last wartime meeting of the Big Three. The evidence that was presented allowed Truman to come to the conclusion that the only option that remained to end the war on American terms was to use the atomic bomb. The decision was contingent upon a successful test of the bomb that was scheduled to take place while Truman was in Germany. If it worked, the atomic bomb would strengthen the American bargaining position with the other Allies as Truman sought a way to end the war.\textsuperscript{202} On the way, the President was informed that U.S. intelligence had intercepted a plea from the Japanese Ambassador in Moscow to the Soviet government. The Japanese, who now stood alone, were open to the idea of ending the war, but not on the principles of unconditional surrender, and the Ambassador hoped that the Soviets would be willing to mediate a solution with the United States. The Soviets, however, would not reciprocate and the Japanese government in Tokyo indicated that they would continue to fight on.\textsuperscript{203}

Upon his arrival in Berlin, Truman briefly addressed the press, and stated that the United States had gone to war with every intention of creating a lasting peace free from the hatred and recrimination that had followed the last World War. In a discourse that

\textsuperscript{201} McCullough, \textit{Truman}, 401.
\textsuperscript{202} Byrnes, \textit{Speaking Frankly}, 262.
\textsuperscript{203} Andrew, \textit{For the President’s Eyes Only}, 152.
lasted just under two minutes, Truman stated that the people of the United States longed for a world in which “all people will have the opportunity to enjoy the good things of life, and not just the few at the top. Let us not forget that we are fighting for peace and for the welfare of mankind. We are not fighting for conquest . . . We want peace and prosperity for the world as a whole.”

Some wondered if the President would pursue peace at any price, and the end of the war be expedited to that objective, or if he was prepared to see the war end on his terms to create that lasting peace. It was reported in the press that the destiny of Truman and the other allied leaders was to keep the peace because the “alternative is staring them in the face here in Berlin.”

Truman surveyed the wreckage of the capital of Germany and to some he personified the noble ideals and principles that had propelled the Americans from their isolationist past to the verge of an internationalist future. It was a long way from Independence, Missouri, to Potsdam, and of all the Americans who traveled with him, none represented the indomitable spirit of Middle America better than Truman. The last time he had been to Europe was as an artillery captain in the Missouri National Guard after his unit had been activated into the American Expeditionary Force. Truman was one of the millions of Americans mobilized to make the world safe for democracy, and he had seen war and destruction first hand, and did not relish the perpetuation of the current war any longer than necessary. He also understood how ending the Great War prematurely had created the dynamics that allowed Adolf Hitler to assume dictatorial control of Germany by 1933, and so it was incumbent upon the American delegation to present the goal of unconditional surrender of Japan as part of the greater war effort and

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the best avenue towards long-term peace. It was also clear that Truman wanted the war to end before he had to take drastic measures, and he also hoped the Japanese would surrender quickly. If this were the case, Truman could prevent the Soviets from playing a large part in the final defeat of Japan, and making territorial or other reparations claims at the expense of the Japanese. This would also give the United States a greater role and responsibility in the occupation and restructuring of postwar Japan. All of this was contingent on Japan agreeing to cease hostilities.  

The issue of unconditional surrender was discussed with the British during a meeting of the Combined Joint Chiefs of Staff. Admiral William D. Leahy, the Chief of Staff to the Commander in Chief, later wrote that it was advisable to let the Japanese know that unconditional surrender did not necessarily mean the complete destruction of their government or the emperor. It was even hoped that eventually Hirohito would understand this and agree in order to prevent a great loss of life for both the Japanese and the Americans. It was evident to the Allied command that the attacks on the Japanese were wearing them down, and, that the end of the Japanese military was forecast with mathematical certainty. In the political arena, it was less certain that the Japanese government was willing to bow to the demand for unconditional surrender.  

After consultation with the Allies at Potsdam, Truman again articulated the terms of surrender for Japan. The peace terms did not mention the possibility of the atomic bomb or Soviet intervention on the Allies’ behalf, but it did make it clear that there was no intent to enslave the Japanese or destroy Japan after the surrender.  

On July 21,  

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207 Leahy, I Was There, 419.  
209 Leahy, I Was There, 419.
1945, an Allied radio broadcast clearly stated the Allied demands to the Imperial government. The spokesman who presented the requirement on behalf of the United States was an expert on the Japanese, USN Captain E.M. Zacharias. He stated that the options for Japan were: accept the terms of unconditional surrender “with it attendant benefits as laid down by the Atlantic Charter” or face “the virtual destruction of Japan followed by a dictated peace.” The United States was running out of patience, and was prepared to hold the Japanese leaders “responsible for the criminal prolongation of the war.” Joseph C. Grew, former US ambassador to Japan and the Acting Secretary of State also warned that there would be no modification of unconditional surrender demand but President Truman may redefine American objectives in the Pacific Theater at the expense of the Japanese.  

Already expecting an allied invasion within months and suffering from the firebombing campaign, the obstinate Japanese government continued to spurn the efforts of the Americans to force the capitulation of Japan. Word continued to filter back to the United States that Japan would never accept unconditional surrender and that the only way the war would end would be through a ground war fought on Japanese soil. In a broadcast that was made over the air in Tokyo and intercepted by the Americans in June 1945, the announcer contended that “I do not know what course the people of Germany may take, but as for us, the Japanese people, there is no choice but to take death” and the final battle had just begun. The Japanese were willing to fight across the home islands after making the Americans bleed all across the Pacific. Finally, in another broadcast, it was assumed that the Americans would attack after a period of bombing that would give

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the Japanese “time—precious time—to prepare for the decisive battle.” On July 21, 1945, Kusuo Oya, a commentator on the Japanese Broadcasting Company declared that he believed that Truman would be forced to modify his position on unconditional surrender because of the pressure applied by the American people. He added the Soviets were not about to enter the war against Japan, and the British were looking for a way out of the war that made Truman’s position untenable.

Clearly, it appeared that it would take a cataclysmic event to force a change in the Japanese position and end the war. It would be the dropping of the atomic bombs that appeared to trigger the desired response from the Japanese. Subsequently, the United States became devoted to the idea of atomic warfare and the intrinsic belief in its efficacy to win all wars.

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CHAPTER TWO
STRATEGIC BOMBING AS NATIONAL POLICY IN THE ATOMIC AGE

The decision to use the atomic bomb was a decision that brought death to over a hundred thousand Japanese . . . But this deliberate, premeditated destruction was our least abhorrent choice. Secretary of War Henry Lewis Stimson

If they do not now accept our terms, they may expect a rain of ruin from the air, the like of which has never been seen before on this earth. President Harry S. Truman

The decision to drop the atomic bomb on Japan has been endlessly debated since the moment that it was announced to the world. Critics of President Harry Truman suggest that because the atomic bomb was used after many considered the Japanese to be already beaten, therefore, vengeance or racial prejudice was the prime motivation for its use.\textsuperscript{213} Another contention is that Truman faced incredible pressure from the military to use the bomb to ward off Soviet interest in the region and/or to justify the cost of the Manhattan Project. It has also been argued that the nuclear attacks were viewed as an extension of the existing firebomb raids that were already killing thousands of Japanese on a regular basis. The impact of that cannot be underestimated even as the Americans attempted to assuage the severity of it. It was rationalized that firebombing had become an accepted and proven tactic and the tens of thousands of lives lost were not out of scale with other major sieges or urban ground fighting that had taken place during the Second World War.\textsuperscript{214}


In the end, we will never know for certain the real reason why Truman allowed the bomb to be dropped. We do know that he claimed that he never regretted the decision to use the bomb. As evidence, within 48 hours of the bombing of Nagasaki, Truman responded to strong criticism from the Federal Council of the Churches of Christ in America, who had characterized the bombing as an “extremely dangerous precedent” and indiscriminate. In his rebuttal, Truman contended that he was more distressed by the delivery of the atomic bombs than anybody, however, he was also “greatly disturbed over the unwarranted attack by the Japanese on Pearl Harbor and their murder of our prisoners of war.” The President concluded by stating that when “you have to deal with a beast you have to treat him as a beast. It is most regrettable but nevertheless true.”

In a message to Congress two months after the bombing of Hiroshima and Nagasaki, Truman stated that he believed that the bomb had shortened the war and saved the lives of “untold thousands of American and Allied soldiers who would have otherwise have been killed in battle.” But this did not mean that Truman relished this role. In a letter to Senator Richard Russell of Georgia, the President wrote that the Japanese were cruel and barbaric in warfare, however, that did not mean that the United States should adopt the same approach to war. Truman lamented “the necessity of wiping out whole populations” of Japanese, however, he placed the blame squarely in the lap of the government who refused to surrender. Truman reminded Russell that his “objective was to save as many American lives as possible but I also have a humane feeling for the women and children

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216 Harry S. Truman’s Message to Congress on Atom Bomb, Papers of George M. Elsey, Harry S. Truman Administration, Subject File, (National Defense, Armed Forces Unification-Atomic Energy), Box 88, HST.
in Japan.\(^{217}\) Even as late as 1958 Truman was criticized by the City Council of Hiroshima for his lack of public remorse for the decision to drop the bomb as well as his support for the hydrogen bomb project. The former President replied it was the Japanese who instigated the war and that “thousands of young American sailors and civilians were killed in this unwarranted and unheralded attack” which brought animosity between the two nations. He also made it clear that the Japanese had rebutted the ultimatum to surrender with a “very curt and discourteous reply” and in the end, the sacrifice of “Hiroshima and Nagasaki was urgent and necessary for the prospective welfare of both Japan and the Allies.”\(^{218}\)

If we cannot know for certain why Truman authorized the atomic strikes, perhaps there should be a greater focus on how it was used and what was its result. After all, a generation of strategic bombing proponents would claim that the bombs ended the war. If nuclear weapons could crush the will to resist in a “fanatical” nation like Japan, how much more likely was it that other nations, like the Soviet Union, would collapse under the weight of the atomic bomb? It is further alleged that the atomic bombs killed fewer people than the ongoing incendiary raids and despite the horrific implications of radiation poisoning; it was merely a more powerful bomb rather than a revolutionary weapon now in the arsenal of democracy. Far more had died in the conventional incendiary raids than the two atomic bomb strikes. More cities were destroyed by non-nuclear B-29s and it appeared that the United States had the ability to destroy Japan one bomb at a time or


through thousands of bombs at one time. It was now accepted that the atomic bombs were the ultimate expression of American power linked to its national wartime policy.

It was apparent that the atomic bomb represented a world-shattering step in weaponry, capability, and intimidation. Not only was it the definitive weapon of the type of Armageddon envisioned by airpower pioneers dating back to the 1920s, but it was also the type of weapon that on its own could be used to coerce enemy nations to comply with political goals or initiatives. Their use required several committees and Presidential approval to determine how, when and where they would be used as Japanese targets were becoming extremely scarce in the fading days of July 1945. It was hoped that through the massive, instantaneous destruction of a city, the morale of the Japanese would collapse and they would be obliged to surrender. Moreover it was presumed that the use of the bomb would not interfere with existing air, ground, or naval operations that continued to grind down the Japanese war effort. General Henry “Hap” Arnold was one of the few in the USAAF who was opposed to the growing pressures to use the atomic bomb because he believed that the use of the bomb, or even an invasion of Japan, was excessive. Arnold assumed that General Curtis LeMay’s B-29s were in the process of burning the Japanese out of the war and all he needed was more time. This was morally justified because many believed that it would end the war on American terms.

Yet, the question remains, why did the United States, a nation that had condemned indiscriminate bombing in the past, become a practitioner of it by 1945? Perhaps this answer can be seen in the complexity of the positions taken by Secretary of

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War Henry Stimson. He had struggled with the acceptance of indiscriminate firebombing. Still, he rationalized it as a form of precision bombing against legitimate military and political targets. He also accepted it because the goal of the war was a total victory, and this outweighed his personal revulsion toward such tactics. In other words, those tactics were expedient. In times of peace, it is very easy to denounce actions that were not vital for American national security. When Spain, China, or England was being bombed, it did not directly affect American national interests. After Pearl Harbor, the United States had fought a long war to get close enough to Japan to attack it. The strategic air campaign did not appear initially to either weaken Japanese morale, or their industrial capacity. Therefore a new strategy had to be put in place to quickly bring about an end to the war. The answer was a fire bombing campaign that targeted the Japanese people themselves, in addition to the war production centers of Japan. It would be this strategy that would pave the way for the implementation of nuclear weapons in the American arsenal and strategy after the war even though there was ample evidence, in the form of the United States Strategic Bombing Survey, that the Japanese did not surrender solely because of the firebombing or atomic bombs.

The razing of Japan also helped to establish the belief in the supremacy of the bomber. This helped create a need for newer and larger bombers with greater combat ranges, and eventually an independent United States Air Force. The war with Japan marked a critical change in the use of airpower and the role of civilians as a legitimate target in a total war. It was estimated that more than 330,000 civilians were killed in Japan, the vast majority a result of the incendiary attacks, in a war that came to view

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civilians as important to an enemy’s war machine as oil, electricity, ships, or even rifles. Clearly, the post-war American strategic planning was built upon the ashes of Japan and the complete belief in the efficacy of atomic weapons to bring about an American victory in any war, against any enemy. Therefore, the future would require new aircraft to release the bombs and in those heady days of the mid-1940s, the USAAF and the Navy saw their respective service as the one most capable of delivering nuclear ordinance. It became more than just a fight for funding, but a true belief in the theory of atomic warfare.

THE ANOMALY OF HIROSHIMA AND NAGASAKI

One critical aspect of the atomic strikes that is extremely important to understand is that they had only limited connection to the previous conventional military actions against Japan. This does not mean that LeMay did not attempt to bring the bomb under the control of his command. Previously he endeavored to have the atomic bomb and the crews that trained to deliver it brought directly under his control, but was unsuccessful.222 Instead, the atomic missions remained unique in their operational planning and execution and were the ultimate expression of strategic bombing. They had the ability to destroy whole cities in a single attack without exposing thousands of American airmen to the risks of aerial combat. In post war nuclear planning, these types of missions would become the norm.

Inside the bowels of the Manhattan Project lurked the Target Committee that made many of the key recommendations about where the bomb was to be used. The

committee was briefed on the types of bombs that were in production and the expected differences in results.\textsuperscript{223} Their primary responsibility was to determine which cities were to be bombed and they ultimately recommended that the bomb should be used where it would capitalize on the psychological impact of the new type of explosion. It was expected that the detonation would be “spectacular for the importance of the weapon to be internationally recognized” once the details were released. It was further established that the bomb should be targeted against a military objective that was located “in a much larger area subject to blast damage in order to avoid undue risks of the weapon being lost” because of a “bad placing of the bomb.” Shockingly, there was serious discussion about following up the atomic strikes with incendiary bombs because the impact would be greater because the Japanese firefighting capacity would be severed. Eventually this was ruled out because time was needed to determine the full impact of the atomic strike and the follow-up incendiary strike was to be avoided.\textsuperscript{224}

A special unit, the 509th Composite Squadron had trained exclusively for nuclear delivery and conducted the atomic bomb missions in August 1945. The B-29s used by the 509\textsuperscript{th} were specially adapted to carry the large size of the atomic bomb. Under the program named \textit{Silverplate}, an estimated $76 million was spent to convert 46 standard B-29s into nuclear bombers and to provide crew training and logistical support.\textsuperscript{225} The

\textsuperscript{223} Two types of bombs were dropped; the first was a “gun type” uranium based weapon that was extremely simple in design. The other was a far more complex “implosion type” that used plutonium as its primary fuel. For a description of the development and deployment of nuclear weapons, please consult James M. Gibson, \textit{Nuclear Weapons of the United States: An Illustrated History} (Atglen, PA: Schiffer Publishing, 1996).


modifications included removing defensive turrets to lighten the airframe, special propellers to keep the troublesome engines from overheating, fuel injection, and alterations to the bomb bay that allowed both types of atomic bombs to be carried. This made these specific B-29s the only aircraft in the world that had the ability to carry out nuclear attacks for the next several years. The 509th developed the tactics for dropping the bomb beginning in September 1944 and had begun practice missions over Japan in July 1945. These sorties familiarized the crews with the weather over Japan, and arguably, lulled the Japanese into complacency about these small raids.

General Henry “Hap” Arnold was informed of the four main Japanese targets for the atomic bomb on July 24, 1945. In a memo about the “Groves Project,” Arnold read that the first bomb was scheduled to be dropped on “the first day of good weather” between August 1 and 10, 1945, and the first target on the list was Hiroshima. It was a city with a population estimated at 350,000, was considered to be a major hub of Imperial Army activity, and it had many industries, minor shipyards, and was considered a port of entry into the Home Islands. Nagasaki, population 210,000 was also chosen because it was important to shipping and industry on the island of Kyushu. Kokura was targeted because it had substantive army supplies, armories, and the greatest concentration of railroad shops on the island. The final city on the list was Niigata, a major supplier of diesel engines and machine tools and was considered a major seaport. All four cities also were considered to be havens for “key Japanese industrialists and political figures who

226 During the Berlin Air Lift in 1948, the Truman Administration dispatched B-29s to England in a show of American resolve and nuclear superiority. However, none of the Superfortresses sent to the United Kingdom had been converted to carry nuclear weapons. Norman Friedman, The Fifty-Year War: Conflict and Strategy in the Cold War (Annapolis, MD: Naval Institute Press, 2000), 79.
have sought refuge from major destroyed cities." 228 One other city had been considered, the old capital of Kyoto, but Secretary of War Stimson, with Truman’s approval, removed the latter from the target list because its value to the heritage of Japan superseded its importance as a military target. 229

The following day, General Carl Spaatz, Commanding General of the United States Army Strategic Air Forces was ordered to get the bomb operationally deployed. Spaatz had come to the Pacific after commanding strategic bombing operations in Europe, where he had attempted to keep precision bombing as the chief American air mission. These types of daylight raids, however, might have produced greater results, but exposed Spaatz’s forces to tremendous losses. Spaatz insisted that the American bombers used legitimate targets as their objective, and understood that there would be collateral damage to outlying areas. He maintained that the damage was justified in the context of the greater war and not an attempt by the Americans to use the same terror bombing that had been condemned at the beginning of the war. 230 Upon his arrival in the Pacific, after a brief stop in Washington, Spaatz assumed overall command of the Strategic Air Forces in the theater. Curtis LeMay was also promoted at this time to be his chief of staff.

Spaatz was disturbed about the escalating destruction that was burning Japan to the ground, yet he had been ordered to keep up the pressure on the Japanese until they surrendered. Spaatz supposed that the Japanese had two courses of action, surrender

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229 Stimson and Bundy, *On Active Service*, 625.

quickly or pursue a policy of national suicide. Truman would not allow any suspension in the campaign that would be misinterpreted as a change in American strategy because strategic bombing was still the national policy.²³¹

DROPPING THE BOMB

On August 6, 1945, the bombing of Japan took a dramatic and revolutionary step after months of planning, development, and scientific discovery culminated in a new era. The atomic age was ushered in at 9:15 AM with the flashing of a brilliant light that was the ultimate expression of the American effort to end the war. It was evident to anyone who saw the mushroom cloud that was visible more that 360 miles away from Hiroshima that the choice remaining for the Japanese was between unconditional surrender and annihilation.²³² The use of the bomb was, of course, a calculated risk because there was the possibility that it could steel the resolve of the Japanese against the new technology, and make them more unified behind the emperor than before. The bomb could also have led to the outcries by America’s allies of excessive force or brutality against a defeated foe. It could also be the definitive blow to finally end the war.

The explosive power of the bomb practically leveled the built-up areas of Hiroshima and spawned a firestorm in the aftermath that consumed considerable portions of the city and caught large numbers of civilians. Because of the relatively flat area of Hiroshima, and a massive influx of air in the aftermath of the bomb, the fires spread to a maximum velocity between 30 and 40 miles per hour. The firestorm burned out an area about 4.4 square miles killing an estimated 70,000 to 80,000. This single bomb

approximated the destruction of the March firebombing of Tokyo that had ruined at least 16 square miles, and killed roughly the same amount of the inhabitants of the capital city.\textsuperscript{233} The atomic blast also completely destroyed the ability of the citizens of Hiroshima to combat the fires or deal with the casualties. Roughly 30\% of the inhabitants were killed outright, while another 30\% were seriously injured. As the conflagration swept through the remains of the city, many people fled to outlying areas in an attempt to survive and find food and shelter. Within 24 hours of the blast, people began to return to the city in an effort to find survivors and this forced the Japanese authorities to restrict those entering the remains of the city.\textsuperscript{234} President Truman was notified aboard USS Augusta on the return trip from the Potsdam Conference, and he told those around him that this “was the greatest thing in history.”\textsuperscript{235} Secretary of War Henry Stimson also informed the President that early indications were that the bomb had worked better than expected; the results yielded appeared to exceed those of the bomb tested back in July, and, there had been no enemy resistance or anti-aircraft fire. The results were evidently “greater than any test,” and the condition within the B-29 after the explosion was normal.\textsuperscript{236} As further information became available, the President felt confident that its use would indeed accelerate the end of the war.\textsuperscript{237}

Truman held a brief press conference aboard the ship and authorized the release of the statement that had been revised over the previous months. Fleet Admiral William

\begin{footnotes}
\item[234] Ibid, Page 6.
\item[236] Message to President Harry S. Truman, 6 August 1945, Papers of George M. Elsey, Harry S. Truman Administration, Subject File, (National Defense, Armed Forces Unification-Atomic Energy), Box 88, HST.
\end{footnotes}
Leahy, traveling with the President’s entourage, later argued that the use of the bomb and its consequences had weighed on the minds of those who knew of its imminent use. When a reporter asked Leahy if the atomic bomb would revolutionize warfare, he ominously replied that “defensive ordnance had always been developed to meet new offensive weapons” and the “threat of this new bomb would be met as other threats had been in the past.”

The formal announcement that came through the White House press release in which Truman took the opportunity to again reiterate the American goal of unconditional surrender, and stated that the bomb was dropped because the Japanese government rejected the Potsdam Declaration. In a very clear warning about future bombings, the President stated that the United States was “now prepared to obliterate more rapidly and completely every productive enterprise the Japanese have above ground in any city. We shall destroy their docks, their factories, and their communications. Let there be no mistake; we shall completely destroy Japan’s power to make war.”

Secretary of War Stimson added that the atomic bomb “should prove a tremendous aid in the shortening of the war” which many understood to be an extreme understatement.

American propaganda leaflets were also dropped upon Japan in the aftermath of the first atomic mission that stated the intransigence of the Japanese government caused “two momentous events” to occur. The first was the Soviet declaration of war that was relayed to the government via the Japanese ambassador to the Soviet Union that meant that Japan was now standing alone against the two most powerful nations in the world.

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238 William D. Leahy, I Was There: The Personal Story of the Chief of Staff to Presidents Roosevelt and Truman Based on His Notes and Diaries Made at the Time (New York: Whittlesey House, 1950), 431-432.
241 Shalett, “New Age Ushered”
The second event was the virtual destruction of Hiroshima by a single bomber. What had taken 2000 B-29s in the past could now be accomplished in a single sortie. The leaflet encouraged the people of Japan to petition the Emperor to end the war before another bomb was used. The final warning was clear, “Act at once or we shall resolutely employ this bomb and all our other superior weapons to promptly and forcefully end the war. EVACUATE YOUR CITIES.”

Another leaflet was also dropped which stated that the United States was in possession of the most powerful bomb “ever devised by man” and we “have just begun to use this weapon against your homeland.” It also mentioned that once the Japanese had surrendered, they “could begin the work of building a new, better, and peace-loving Japan.”

Nagasaki was almost as ill prepared for an atomic bomb as had been Hiroshima days earlier. Few details had reached the city before the second bomb was dropped, and it is estimated that only about 400 people had sought shelter in the city’s tunnel shelters. The area immediately below the bomb’s detonation was effectively destroyed, but a firestorm did not develop in Nagasaki because of the relatively uneven terrain on which the city was built. The area of destruction was much less than the first bomb as only about 1.8 square miles was destroyed, and the numbers of casualties numbered between 35,000 and 40,000. Medical facilities in Nagasaki were particularly hard hit as more

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than 80% of the hospital beds as well as a medical college were located in close proximity to ground zero. However, it should be noted that despite the damage to the city, shipping was virtually unaffected by the bomb. Railroad transportation into and out of the city was disrupted for approximately two days while repairs were made.\(^{245}\)

Truman later wrote that the three days between atomic strikes was time granted to the Japanese government to agree to end hostilities. When no formal movement in that direction was offered, the second attack was unleashed. Truman believed that this final nuclear bomb “apparently threw Tokyo into a panic, for the next morning brought the first indication that the Japanese Empire was ready to surrender.”\(^ {246}\) The following morning, Secretary of the Navy James Forrestal recorded in his diary that the Japanese had indeed indicated that they were ready to conditionally accept the terms of surrender that were issued at Potsdam. The Truman administration felt that it was in the best interest of the American war effort to wait until they received the surrender from Japan before they addressed whether or not it fully complied with the unconditional surrender demands that had been in place since late July. Secretary of War Stimson suggested that the bombing campaigns be suspended for fear of a backlash at home as well as among the defeated Japanese. Forrestal reminded his colleagues that the United States alone would bear the brunt of Japanese hatred and animosity during occupation and therefore he also supported an end to the bombing. President Truman disagreed, however, and wanted to sustain the war effort at current levels until the Japanese agreed to American terms.\(^ {247}\)

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\(^{245}\) Ibid, 11.


On August 14, 1945, moments before the Japanese announced their intentions; the last conventional strike on Tokyo was recorded. As the planes were hitting their targets, word filtered down that the Japanese had agreed to surrender, and the war came to an abrupt end. Subsequent raids were recalled but not before American aircraft shot down nine Japanese planes for the last aerial victories of the war.\textsuperscript{248} The Americans had won the war and had done so, to paraphrase Baldwin’s 1932 quote, by killing more Japanese women and children quicker than the Japanese could do to the Americans because the bomber had gotten through. As Truman would later say, the goal was not “Peace in our Time, but Peace for All Time.”\textsuperscript{249}

THE IMMEDIATE IMPACT OF HIROSHIMA AND NAGASAKI

Eighteen months before the end of World War II, airpower proponent Alexander deServesky wrote a prophetic article for the \textit{New York Times} that suggested that the world was on the verge of seeing aircraft assume the ability of defeating nations virtually single-handed. He argued that the allied victory at the island of Pantelleria, near Sicily, was achieved solely through airpower, and that it was essential in the defeat of Italy, and the collapse of Benito Mussolini’s regime. Without examining other reasons why Italy surrendered, deServesky claimed that it was because of a raid on July 19, 1943, when about 500 aircraft bombed Rome, that the morale and fighting spirit of the Italian armed forces was finally destroyed. This forced the Germans to assume the responsibility of


defending Italian territory as the Fascist armed forces dissipated.\textsuperscript{250} While this story seems irrelevant to postwar strategic planning, there is one major correlation, the assumption that the airpower \textit{alone} could force an enemy to surrender. For some, it was assumed that airpower was the primary cause of the defeat of Germany, and more importantly, many believed that the atomic bombs caused the final capitulation of Japan. LaMotte T. Cohn, the president of the Aircraft Industries Association suggested that the use of airpower that emerged from World War II is “one of the great motivating influences on civilization.” He argued that airpower was more important than even the atomic bomb because it was a weapon in the arsenal of airpower, and the airplane had a greater “influence on the commerce and intercourse of the world.”\textsuperscript{251} The impact of the nuclear arsenal on American military strategy and foreign policy was immediate, and it allowed the Americans to maintain a significant presence in the postwar world. In the hands of an enemy, atomic weapons could place the United States in the same position as Japan at the end of the war, alone and undefended. This thought weighed on the minds of those conducting the United States Strategic Bombing Survey in Japan.

Team members raised the question about what would happen if the same weapons were used against American cities of similar size to Hiroshima and Nagasaki. It was suggested that American residential areas, constructed of materials similar to Japanese buildings, would share roughly the same fate as their Japanese counterparts that were destroyed within an area of approximately six square miles. Modern buildings made of reinforced concrete and steel would have fared better, but relatively few American buildings at the time were of “blast-resistant construction.” The conclusion was that the

\textsuperscript{251} Letter From LaMotte T. Cohn to W. Stuart Symington, June 14, 1946, Papers of Stuart Symington, 1946-50, A-B General (Folder 1) Box 1, HST.
majority of buildings in the United States in late 1945 and early 1946, would not survive an atomic blast that detonated within a mile to a mile and one half of them. Casualty rates would depend upon the density of the population of that city, and even what time of day a nuclear attack would take place.\textsuperscript{252} To alleviate the threat of an atomic strike on the United States, the survey team suggested that the United States mobilize the “economic and administrative life of the nation that no single or small group of successful attacks can paralyze the national organism.” Preparations needed to be done to provide safety for civilians and medical facilities, and the creation of an active civil defense. The survey team also suggested that atomic bombs were effective as defensive weapons. The threat of their use in retaliation could prevent an aggressor from using them against the U.S. As well, dispersing and concealment of American weapons systems would prevent the destruction of all retaliatory forces in one strike. Defensive measures also needed to be created to counter the delivery of an enemy’s atomic bombs on American soil.\textsuperscript{253}

British Prime Minister Clement Attlee also raised substantive and fairly insightful concerns to Truman in a top-secret letter on September 25, 1945. Attlee suggested that the world was now facing the reality there now existed a weapon that could strike suddenly, without warning, and completely destroy the “nerve centre of a great nation.” Existing national borders were out of date since the beginning of air warfare, and there can be no boundaries that would prevent bombers with atomic weapons or even nuclear missiles from unleashing catastrophic attacks on distant cities. Attlee added that it was

\textsuperscript{252} It was suggested in this report that the population of Manhattan during the day was about 3.2 million and only 1.6 million at night.

evident that ongoing discovery in the field would lead to weapons that were much stronger than the ones used against Japan, and the only defense against the bomber was another bomber. This could result in a war of mutual annihilation through atomic weapons. Attlee hoped the two Allies could mutually agree on which direction to go before “the fears and suspicions which may be developing elsewhere have such a firm hold as to make even more difficult any solution we may decide to aim at.”

Attlee’s letter raised many of the issues that would confront the United States between 1945 and 1949 when the Soviets attained their first nuclear bomb. It is not clear if the letter had much of an impact on the President. Truman did pursue a controlling agency for all aspects of nuclear power under United States jurisdiction, and he also pursued a policy with nuclear weapons that placed the American military on a perpetual wartime basis and mindset. For Attlee, this direction with the coming of the Cold War meant that perhaps he was right when he suggested that he “ought to direct all our people to live like troglodytes underground as being the only hope for survival, and that by no means certain.”

THE FINAL ASSESSMENT: THE UNITED STATES STRATEGIC BOMING SURVEY

A proper assessment of strategic bombing and its impact on the war was necessary to determine what the impact bombing had on the defeated nations. The decision to put a committee together had been made in late 1944, when President Franklin Roosevelt instructed Secretary of War Henry Stimson to create the United States strategic

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254 Clement R. Attlee to President Harry S. Truman, 25 September 1945, Papers of George M. Elsey, Harry S. Truman Administration, Subject File, (National Defense, Armed Forces Unification-Atomic Energy), Box 88, HST.

255 Ibid
Strategic Bombing Survey (USSBS). Almost 1,000 military and civilian personnel were assigned to the group, and the USSBS moved into Europe after the war to inspect the damage, interrogate key German survivors, and document the results. All aspects of bombing were investigated, including the types of targets, influence on production, and if the Americans were able to achieve the “precision bombing” that had been their goal early in the war.²⁵⁶ Paul Nitze, one of the directors of the USSBS, stated that it was expected that all who served on the USSBS would be objective and “that the standard of impartiality was that they should not know nothing about the problem at all.” Nitze went to Europe to assess all aspects of the Allied bombing effort against Germany while the European war was in its last throes.²⁵⁷ After the surrender of the Third Reich, members of the survey teams went into Germany and began to conduct thousands of interviews of military, civilian, political, industrial and scientific personnel. The USSBS also investigated the full shock of strategic bombing to a civilized nation in total war.²⁵⁸ The information gathered would fill 200 volumes and provided a sobering reflection of warfare without restriction or conscience. As the work progressed, Nitze, and several others on the committee, including John Kenneth Galbraith, Orvil Anderson, Henry Alexander and George Ball were called back to Washington for a meeting with Hap Arnold. According to Nitze, another committee was established to investigate the war against Japan in a similar fashion to the one conducted in Europe. Using the information that was already garnered about the efficacy of strategic bombing against Germany, the

new survey team would even have the ability to influence strategy as the war advanced into its final stages.\textsuperscript{259} However, only Nitze and Galbraith accepted the new assignment.

On August 15, 1945, President Truman formally requested a study to evaluate the bombing, conventional and atomic, of Japan. The survey team was based in Tokyo by September 1945, and set up other offices in Nagoya, Osaka, Hiroshima, and Nagasaki. Other mobile teams were created to assess other areas of Japan, various islands in the Pacific as well as targets on the Asian mainland. It was believed that this made it possible to “reconstruct much of wartime Japanese military planning and execution” as the war progressed. The use of the atomic weapons presented the survey team with a new sense of urgency to fully assess the value of the bombs because they might “qualify or even change the conclusions and recommendations of the Survey as to the effectiveness of air power.” For this report, more than 100 engineers, architects, economists, fire experts, medical personnel and photographers studied each city for ten weeks between October and December 1945.\textsuperscript{260}

The USSBS results for Japan indicated that one reason for the success of the American bombers was that the Japanese themselves “failed to fully appreciate the strategic revolution brought about by the increased capabilities of airpower.”\textsuperscript{261} The conventional B-29 raids had forced the dispersal of Japanese war production facilities and materials. Limited electricity and supplies necessary for manufacturing caused a decline

\textsuperscript{259} Nitze, "Oral History Interview with Paul H. Nitze," 85-87.
\textsuperscript{260} The United States Strategic Bombing Survey: The Effects of the Atomic Bombing of Hiroshima and Nagasaki, The Chairman's Office, 19 June 1946, Papers of George M. Elsey, Harry S. Truman Administration, Subject File, (National Defense, Armed Forces Unification-Atomic Energy), Box 88, HST.
\textsuperscript{261} The United States Strategic Bombing Survey, \textit{The United States Strategic Bombing Surveys (European War) (Pacific War)}, The Summary Reports Reprint, ed. Truman Spangrud (Maxwell Air Force Base, AL: Air University Press, 1987), 69.
in aircraft engine production and Japanese defenses were overwhelmed. When the firebombing commenced in March 1945, it created greater economic strife within Japan. The USSBS reported that within 66 urban centers of Japan, about 40 percent of the built-up areas were laid to waste, and about 30 percent of those who lived there had lost their homes and most of their possessions. More than one half of Japan’s oil refining capacity and wheat production had been destroyed along with 25 percent of the aluminum and pig iron manufacturing. The USSBS survey team also reported that the bombing did have an effect on the civilian population of Japan, and even concluded that the firebombs helped to “convince even the most optimistic persons that Japan’s position was desperate.” The former head of the Japanese air command stated after the war that the “Japanese, to the very end, believed that by spiritual means they could fight on equal terms with you . . . We believed our spiritual confidence in victory would balance any scientific advantages.” It did not.

The United States Strategic Bombing Survey discovered that the primary reaction to the atomic bombs in Japan was “fear—uncontrolled terror, strengthened by the sheer horror of the destruction and suffering witnessed and experienced by the survivors.” Even more, this dread was not a temporary phenomenon. Part of this stemmed from the limited attacks that had visited Hiroshima and Nagasaki prior to August 1945. Many people in both cities believed that they would be secure from catastrophe, very few believed that they were being spared for “something big.” Statistics indicated that prior

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262 Ibid, 69, 86.
263 Ibid, 86-87
to the bombing, inhabitants of both cities felt better about the war than did people in other areas of Japan. It was only after the bombings that a feeling of inevitable loss in the war began to settle into the populations of Hiroshima and Nagasaki. There was some indication of hatred expressed at the Americans for the use of the bomb, but the survey teams found this to be relatively low. Reaction to the bomb tended to be fairly localized to the areas immediately affected by the bombs. It was suggested that outside of the targeted cities, the effect was “subordinate to other demoralizing experiences.” The survey also discovered that the fighting spirit of the Japanese was not equivalently destroyed, even in the remains of Hiroshima and Nagasaki. The report contended that the bombs “were tremendous personal catastrophes to the survivors, but neither time nor understanding of the revolutionary threat of the atomic bomb permitted them to see. . . .a final blow to Japan’s prospects for victory or negotiated peace.”  

The USSBS discovered that the use of the atomic bombs had a far greater impact on the government of Japan than on the average citizens. Yet, the survey was quick to point out that it “cannot be said, however, that the atomic bomb convinced the Japanese leaders who effected the peace of the necessity to surrender.” Rather, the steps that led to the decision to terminate the war had been taken months before the bombs were detonated, although the nuclear weapons certainly accelerated the process. Fear of more bombings, including the prospect of the remains of Tokyo being targeted, weighed on the minds of the Emperor’s Cabinet. Still, members of the Japanese military did not believe that the atomic bombs made the defense of the Home Islands untenable. Voices to continue the war were heard, but their numbers were diminishing, and by August 10,

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1945, the Emperor indicated that he was willing to accept the terms articulated by Truman at Potsdam. It was suggested that ‘in the atomic bomb the Japanese found the opportunity which they had been seeking, to break the existing deadlock within the government over the acceptance of the Potsdam terms.”

THE ATOMIC BOMB IN EARLY POSTWAR STRATEGY

President Truman attempted to lay the groundwork for American nuclear policy in a message to Congress in late 1945 that stated his initial views on atomic weapons including a belief that the use of the bomb did not end the war with Japan, but merely hastened its conclusion. Truman wanted to see the science of the bomb be translated into other uses for atomic energy in the United States, and the development of a policy that controlled the necessary raw materials regardless of use for war or peace. He added that atomic force “in ignorant or evil hands could inflict untold disaster upon the nation and the world.” To combat this, Truman wanted Congress to secure the facilities that had produced the bombs, and control all aspects of atomic energy. He wanted a commission to be created to oversee continuing research and the security of resources. Truman believed that the true hope of the future was that the United Nations organization could look into the “renunciation of the use and development of the atomic bomb, and directing and encouraging the use of atomic energy and all future scientific information toward peaceful and humanitarian ends.”

269 Harry S. Truman’s Message to Congress on Atom Bomb, Papers of George M. Elsey, Harry S. Truman Administration, Subject File, (National Defense, Armed Forces Unification-Atomic Energy), Box 88, HST.
any scientific or technical information without his authorization. His early postwar American policies had an implicit acceptance of U.S. primacy in nuclear weapons and the international leverage that it created. Arguably, this allowed the United States to establish absolute control in the immediate postwar Japan at the same time the he condemned Soviet control of Eastern Europe.

THE ATOMIC BOMB IN THEORY

As Truman spoke of the peaceful purposes of nuclear power, the United States military was about to enter a period of intense and often bitter disputes over the control of atomic bombs, respective missions, and the future of the Armed Forces. The Truman administration invested political capital in an effort to streamline the military, excise wasteful expenditures, and trim the overall budget. While this was important to Truman, it created greater long-term problems as the Army Air Forces and the Navy began to publicly wage a war of words and deeds to prove the superiority of their respective nuclear strategies, and the value of total war in the nuclear age. The use of atomic weapons against Japan in 1945 did more than hasten the end of the war, it fundamentally altered the direction of American military expenditures and the overall defense strategy of the United States. From the White House down to Capitol Hill and the Pentagon, it appeared that atomic weapons evolved from limited, experimental weapons capable of the wholesale destruction of an enemy's homeland, to the primary offensive weapon in the American arsenal. What once took a thousand bombers to destroy, could now be

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demolished literally in the blink of an eye; the fulfillment of nightmarish dreams had come true. Man had finally obtained the ability to destroy himself. As a result, nuclear weapons were perceived as an effective tool to enforce U.S. policy in a global context, and the new strategy of the postwar world was centered upon long-range bombers armed with nuclear weapons.

The Joint Chiefs of Staff (JCS) stated that the “relationship of atomic weapons to other weapons and means of war in the nation's defensive armament, should be the subject of constant scrutiny in the light of changing conditions and new knowledge.”

In other words, all other weapon systems were obsolete in the light of an atomic detonation. Yet, between 1945 and 1949, there were too few atomic bombs to affect the outcome of a possible war with the Soviets. The first generation of atomic bombs were too complicated for mass production and too limited in numbers. In fact, the two weapons expended in Operation Crossroads, the 1946 atomic tests at Bikini Atoll, had been taken from the strategic arsenal. Even as late as February 1947, the JCS reported that the supply of atomic weapons in the arsenal was "not adequate to meet the security requirements of the United States." It was estimated that in 1947 there was a total of thirteen nuclear components and twenty-nine mechanical assemblies that combined made only thirteen complete atomic weapons. However, each of these weapons could level a Soviet city, while several could theoretically destroy the Soviet Union’s base of

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273 Operation Crossroads was both surface and subsurface tests of atomic weapons at Bikini Atoll in 1946. The tests were to determine the power of the bomb against naval vessels.

production and disrupt their war making capacity in hours, rather than years. Because nuclear weapons became the cornerstone to the defense of the United States by the late 1940s, the arsenal increased to over six hundred by 1950.\textsuperscript{275}

PEACE IS OUR PROFESSION: THE RISE OF STRATEGIC AIR COMMAND

Arguably, the most striking symbol of American power after World War II was the fabled Strategic Air Command (SAC), and its perceived capability to bomb the Soviet Union in defense of American policy. Images of SAC’s majestic silver bombers graced magazines and recruiting posters in the late 1940s and 1950s, and even had a starring role on the movie screen in Jimmy Stewart’s 1955 film, \textit{Strategic Air Command}. Impressively filmed in color, the movie showcased the B-36 Peacemaker, the style of training missions and patriotic duty of those in SAC to protect the United States from the Soviet Union.\textsuperscript{276} In the real SAC, the Air Force envisioned large numbers of bombers armed with atomic weapons that would either strike deep into the heart of an enemy nation, or deter the outbreak of World War III. The SAC herald depicted an iron, or armored fist in the middle of parted clouds against a blue background. In the fist, SAC held lightning bolts and an olive branch, symbolic of its own view of its mission and purpose. For almost forty years, this adorned scores of bombers, tankers, fighters and other assorted aircraft and support vehicles that were part of the organization.

SAC was established by the War Department on March 21, 1946, as a reorganization of the Army Air Forces under the direction of General Carl Spaatz. In


\textsuperscript{276} Valentine Davies and, Beirne Lay Jr., \textit{Strategic Air Command}, directed by Anthony Mann, 1955.
addition to SAC, the Air Defense Command and the Tactical Air Command, were also created as separate combat commands within the USAAF, but it was SAC that would garner most of the press. Its mission was “to conduct long-range offensive operations in any part of the world either independently or in cooperation with land and Naval forces.” This included offensive strategic attack, ongoing training of personnel, and the use of the latest and most advanced weapons, which of course, included the atomic bomb. For some critics, SAC was known as a “$310,000,000-a-year business, a top priority task force with 1,100 planes, some 60,000 pilots, crewmen, and groundmen.” For others, it was the epitome of the weapons and tactics that had burned Japan and destroyed Hiroshima and Nagasaki. General George Kenney was appointed the first commander of SAC, and had brought plenty of wartime experience with him. His headquarters was originally located in the greater Washington D.C. area; however, it would later be moved to the center of the United States in Nebraska, in an effort to preserve it in the event of a Soviet strike on the U.S.

During the formative years of Strategic Air Command, three aircraft in particular were critically important to the mission of SAC, the B-29/B-50 Superfortress, the B-36 Peacemaker, and the B-47 Stratojet. These aircraft developed the tactics and mission parameters on which the American nuclear strategy was premised. In the beginning, the main battery of SAC was the fabled and combat tested B-29, already proven capable of delivering nuclear weapons. The Superfortress was the most advanced bomber in the

world in 1946, but there were several dramatic changes that would push the B-29 from its role as an advanced very heavy bomber to being reclassified as an aging, obsolescent medium bomber. Boeing engineers realized that aviation technology was advancing at a tremendous rate, and therefore it was in the best interest of the company to redesign the Superfortress to make it more suitable for atomic delivery in the modern age. The changes made to the basic bomber resulted in the B-50 Superfortress.

The B-50 featured upgraded engines to provide better range and performance, and the bomb bay was redesigned to allow all B-50s to carry atomic weapons without expensive conversions. The new and improved Superfortresses were equipped with air-to-air refueling modifications that allowed the B-50 to serve SAC until the early 1950s. The final design improvement to the Superfortress was the B-54, a design upgrade that included a longer, single bomb bay for larger atomic bombs, and extended wings for better performance.\footnote{Marcelle Size Knaack, \textit{Encyclopedia of U.S. Air Force Aircraft and Missile Systems: Post-World War II Bombers, 1945-1973}, Vol. II (Washington D.C.: Office of Air Force History, 1988), 161-182.} Despite the promise of this design, the B-54 would not go into production, and the long bomber lineage of the Superfortress would finally come to an end in April 1949.\footnote{The basic wing structure, landing gear, and modified fuselage would also be the basis of the civilian Boeing 377 Stratocruiser, C-97 Stratofreighter, the KC-97 Stratotanker that would serve well into the 1970s. In the Soviet Union, their version of the B-29, the TU-4 would also have a long life in multiple roles.}

Of all the aircraft that have served the United States military in the Twentieth Century, arguably none were as controversial as the B-36, the star of Strategic Air Command, and truly the icon of the Air Force in the late 1940s. It was a combat aircraft that was larger than all that came before or since, with a wingspan that was longer than the length of the first flight of the Wright Brothers in 1903. Its gross weight more than
doubled the B-29, and its range was almost five times that of the B-24 Liberator. When fully loaded with fuel, the B-36 was projected to have an unrefueled range of 10,000 miles, and it could stay in the air for almost two days.\textsuperscript{282} Built by the Consolidated-Vultee Corporation, the B-36 was the epitome of World War II propeller technology because it had originally been designed to go to war against Germany from bases in the United States, and thus it was described as the first true intercontinental bomber. The B-36 project went through several major revisions before the war ended, and as aircraft contracts were being cancelled after Germany surrendered, the B-36 remained on the drawing board. Its mission might now include bombing raids to China or Japan from the United States. The XB-36 prototype was rolled out in September 1945, and it dwarfed even the B-29 and was so heavy that there were only three runways in the world that could handle the immense weight of the Peacemaker.\textsuperscript{283} Unlike the B-29 that was revolutionary on so many levels, the B-36 was an \textit{evolutionary} design, albeit on a much larger scale. In the formative years of the jet era that promised greater speed and power than had been seen before, the B-36 was powered by six piston engines, located on the trailing edge of the wing that turned six extremely large propellers. Like American bombers built during World War II, the B-36 had multiple defensive turrets throughout the long fuselage to protect it from enemy aircraft despite the belief that the B-36 would operate at an altitude which enemy fighters could not operate.

The Peacemaker also had a bomb bay that was larger and longer than any other bomber ever produced, so it had the potential to carry a variety of atomic bombs, or even multiple bombs. Unfortunately the overall speed of the B-36 and its operating altitude

\textsuperscript{283} Ibid, 12-14.
were not significantly greater than the wartime B-29 that some Japanese propeller driven fighters had intercepted and destroyed. Eventually questions were raised about the B-36’s survivability in the postwar world, but it would not reach the public until the after the Peacemaker became the base of the American strategic bombing strategy in the late 1940s. By then, however, it was too late because the B-36 was in full production at the expense of other weapon systems.

The Boeing B-47 Stratojet was the antithesis of the lumbering B-36 Peacemaker because it was small, fast, jet powered and produced in great numbers. The Stratojet program began back in World War II when the Army Air Forces began a study of the viability of jet bombers and several companies came up with different designs to meet the requirements, but it was the B-47 that was put into large-scale production. By the 1950s the Stratojet had become the most numerous bomber in SAC’s arsenal with 2,042 produced in multiple types, including reconnaissance versions. The top speed of the first production B-47 was 600 miles per hour and its cruising speed was more than twice that of the B-36.\textsuperscript{284} The B-47’s performance was impressive enough that when President Truman authorized SAC to conduct a reconnaissance overflight of Soviet airbases in Siberia in 1952, the Stratojet was chosen.\textsuperscript{285}


\textsuperscript{285} American aircraft had flown off the coast of the Soviet Union since the end of World War II in an effort to gauge Soviet radar technology, aircraft response time, and get photos of necessary targets to be hit in the event of war. This resulted in many American aircraft being lost to Soviet action, even well into international waters and airspace. However, there were also a series of flights that did violate Soviet airspace. They were originally done in cooperation with the Royal Air Force. For a thorough examination of these operations please see Paul Lashmar, \textit{Spyflights of the Cold War}, Naval Institute Press (Gloucestershire: Sutton Publishing, 1996) and R. Cargill Hall, "The Truth About Overflights," \textit{MHQ: The Quarterly Journal of Military History} (The Society for Military History) 9, no. 3 (Spring 1997).
THE UNITED STATES NAVY COMES OF AGE

On September 2, 1945, the Second World War came to a close when the Japanese delegation signed the document of surrender on the deck of the U.S. battleship Missouri. For the last time in history, a battleship was the center of international attention. Once the king of the world’s navies, including the American fleet, the battleship’s reign was at its end. The offensive power of the American Fleet was transformed, and carriers had replaced the battleship as the primary destroyer of enemy fleets. U.S. carriers played a key role in the ultimate defeat of Japan. To fully comprehend the role of the Navy in President Truman’s view of strategic airpower, it is essential to examine the Navy’s role in World War II, and how the naval strategists attempted to find a new role for the Navy in the atomic age. The appearance of peace did little to ease the uncertainty about the future that weighed on the minds of many senior U.S. naval officers, because "peace in our time" still was not at hand.

The end of the war did not bring about true reconciliation and contentment in either the world or the American military establishment. Rather, it reaffirmed fears of war leaders including Fleet Admiral Chester W. Nimitz, of a return to “world unrest” and strategic indecision “in the absence of satisfactory treaties and safeguards.”

Challenged with demobilization after the war in the face of escalating international contention with the Soviet Union, many within the Navy believed they still had an active role in international affairs. Traditionally, the Navy had been the forefront of American national security, and it was their responsibility to protect American shores from an

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invasion or attack from hostile nations. Atomic weapons appeared to change that premise, however, as they emerged as the answer to escalating costs in conventional forces and equipment. This concept clashed with critics, however, including members of the USAAF who alleged that large bombers and atomic bombs had replaced conventional naval forces. Nimitz testified that the USN existed for the purpose of “protecting our national interests” and “supporting our national policies” which forced the Navy to defend itself against hostile verbal and budgetary attacks that were aimed directly at the heart and soul of the modern Navy, its carriers.\textsuperscript{287}

Even more critical, the Navy suffered from their appearance as a second tier service in the final defeat of Japan. After all, it was a United States Army Air Forces B-29 that delivered the atomic coup de grace to Japan, not a carrier-based aircraft or naval bomber. In an effort to address that inadequacy, the leadership within the Navy as well as its supporters in Congress began to embrace a nuclear strategy that would on the one hand, provide newer and larger aircraft carriers, and on the other hand, retard the development of non-nuclear options in the event of a war that fell short of a total nuclear exchange. Lt. General Ira C. Eaker, Deputy Commander of the Army Air Forces, warned in April 1946, that the Navy had been approaching demobilized B-29 crews and offering them regular commissions in the Navy.\textsuperscript{288} To the proponents of an independent Air Force, this meant only one thing, that the Navy was intent on achieving a role in strategic bombing. They were, and naval weapons and tactics began to evolve around the delivery

\textsuperscript{287} Congress, Senate, Committee on Appropriations, Subcommittee on Navy Department Appropriations, Testimony of Secretary Sullivan, June 11, 1948; \textit{Navy Department Appropriation Bill for 1948. Hearings, 80\textsuperscript{th} Cong., 2nd Sess,1948}, 26.

\textsuperscript{288} Memorandum for the Assistant Secretary of War for Air from Ira C. Eaker , 18 April 1946, papers of Stuart Symington 1946-1950, E General- Hold, Memo File, Box 5, Correspondence File, 1946-50, E-General, HST.
of atomic bombs at the expense of the traditional role played by carrier and land-based naval aviation.

THE DEVELOPMENT OF THE POSTWAR MARITIME STRATEGY

What follows is not a defense of nuclear weapons or an argument over the merits of service unification, or a criticism of the postwar maritime strategy. The minutiae of these issues are well beyond the scope of this chapter, and have been covered extensively elsewhere. Rather, it is a description of a naval policy that reflected in a naval nuclear mission. This policy strengthened the institutional perspective of the Navy as officers defended their service at the expense of a common defense strategy. National security almost became a secondary interest to the Navy in a partisan conflict with a greater enemy than the Soviet Union, an independent United States Air Force (USAF).

According to Thomas Hone, in his examination of the Office of the Chief of Naval Operations (OPNAV), “the Navy found itself in need of officers whom ‘politics’ had touched. It was not enough for the Navy to be advanced in technology and tactics. The Navy needed shrewd leaders who could win political support for new programs and shield the service from partisan attacks.”

If postwar American strategic plans were to be formulated around the atomic bomb, the Navy would have to include them to remain both an opponent of the Soviet Union in the Cold War, and also a key player within the U.S. military structure. As the Navy moved through the years between 1945 and 1949, the naval bureaucracy became proactive in defining both a mission for the Navy as well as a reason to exist. The

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protection of the Navy Department and its role in the defense of the United States became arguably more important to key officers and civilians within the department than consensus on national security.

Reflective of this new attitude was the decision to establish the Special Weapons Division (OP-06) in the Office of the Chief of Naval Operations in November 1945. In addition, there was a strengthening of the position of the Deputy Chief of Naval Operations (DCNO) for Air (OP-05) and for Operations (OP-03), and the Strategic Plans Division (OP-30) gained stature as it mapped out the future of the Navy. The Organizational Research and Policy Division (OP-23) was created in December 1948 to promote the Navy within the military establishment, and protect the Navy’s missions from rival branches in the American military, from the national press, and from congressmen who argued for increased service unification. Captain Charles D. Griffin, assigned to OPNAV, stated that OP-23 “existed for the principle purpose of gathering information that could be of value to the case of the Navy in convincing the Congress and the people of the function of a navy—why we must have a navy, what a navy does.”

The Navy was determined not to sail into the future of atomic warfare with obsolete, conventional technology and, as late as 1948, Secretary of the Navy John L.

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290 Copy of memo, CNO to All Bureaus, Boards and Offices in the Navy Department, OP-09 ser 8PO9, 13 November 1945, enclosure C, CAPT Steadman Teller, OP-601, to VADM D.C. Ramsey, VCNO, via VADM Arthur Radford, no ser, not dated, box 1, DCNO (Air) Records, Operational Archives, Naval Historical Center.
292 Hone, Power and Change, 23.
Sullivan testified that the Navy was not “preparing to fight yesterday’s war.” Even before the end of the World War II, plans were developed to restructure the Navy to face a new enemy, the Soviet Union. In the fall of 1945, Forrestal testified in front of the House Naval Affairs Committee that the Soviets were devoted to the annihilation of capitalism. As such, the United States prepared for a potential war with the Soviets, a nation without a large surface navy but with a substantial submarine force. Soviet post-war naval build up had reached almost 300 modern submarines by July 1950, about six times as many as Germany had at the outbreak of World War II, and Germany had almost crippled the Allies. To deal with these threats, Sullivan stated that the Navy’s mission included the fight against surface ships, but also against submarines, against aircraft, and against beach defenses. Each of these was a traditional role for the Navy, and nuclear weapons would aid in their effects against the Soviet war machine. In order to attack the Soviets, strategic planners within the US Navy would have to find a mission that could be conducted from their carriers.

THE PURSUIT OF AN ATOMIC DELIVERY SYSTEM TO SECURE THE FUTURE

Although nuclear warfare appeared to be the wave of the future, some ranking military officers disagreed with the use of the bomb. Fleet Admiral William D. Leahy, Chief of Staff to the Commander in Chief during World War II, wrote in his

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296 Extension of Enlistments in the Armed Forces, the Congressional Record, Vol 96-8, 81-2, July 12 to July 31, 1950, page 10983.
297 Congress, House, Committee on Appropriations, Subcommittee on Appropriations for Navy Department, Testimony of Secretary Sullivan, February 14, 1948; Department of the Navy Appropriation Bill for 1949. Hearings, 80th Cong., 1st Sess., 1948, 3.
autobiography: "The lethal possibilities of atomic warfare in the future are frightening. My own feeling is that in being the first to use it, we had adopted an ethical standard common to the barbarians of the Dark Ages. I was not taught to make war in that fashion, and wars cannot be won by destroying women and children..." 298 Others added that “the atomic blitz is a war against the common people…a weapon of indiscriminate destruction and mass slaughter.” 299

Despite the feelings of Leahy and others, the atomic bomb was the foundation of post-war strategic planning. Control of the atomic bomb, therefore, was a guarantee of future funding and an important role in the defense of the United States. Although naval personnel had been involved in the Manhattan Project since the beginning, and had even armed the two weapons dropped on Japan, the Navy was ill prepared for using the weapon. They had no carrier-based aircraft large enough to carry the weapons, nor did they have a carrier that was built to store and arm atomic bombs or even launch large bombers. However, if the Navy could create these weapons and incorporate the bomb, the Navy could effectively fight the postwar demobilization and argue that it had a mission in the atomic age that a conventional navy did not. To senior commanders in the Navy, this mission, addressed in other strategic plans, would transition their task of maintaining control of the seas into a sea-based strategic bombing campaign. This would fuse the mobility of carriers with the weapon of the future, the atomic bomb. The future mission of the Navy, therefore, was projected to be long-range strategic nuclear strikes against the Soviet Union.

298 Leahy, I Was There, 441.
299 Rear Admiral D.V. Gallery, “An Admiral Talks Back to the Airmen” Saturday Evening Post, reprinted in the Congressional Record, 80th Con., 2nd Session., Extension of Remarks of Hon Raymond E. Baldwin, June 23, 1949, 3959. PT 13
In order to accomplish this, the Navy would use an atomic delivery system to solve several problems of the postwar military. The Navy would first have to survive the demobilization of forces after the war, and the best way to accomplish this was to make all of their forces vital to the national security. Large numbers of carriers and aircraft would be needed in this new role, therefore, the Navy had to maintain a substantial peacetime fleet. They also had to find a way to defeat the pending unification of the armed forces, or define a unique mission within the new structure to include a major restructuring of naval forces to include large aircraft carriers and nuclear bombers. Then, the Navy had to find a way to alter the prevailing hypothesis in Washington that stated that the Navy had been superseded as the nation’s first line of defense because only the USAAF could and should deliver nuclear weapons. Air Force General Hoyt Vandenberg went as far as to suggest that the United States could not afford to have duplicate programs “particularly when one involved the use of obsolescing weapons.” 300 If the Navy could bring atomic weapons to sea, they could prove the merit of their sea-based mission and defend themselves against these internal verbal attacks. Finally, the Navy had to define and defend their atomic mission as fundamental to the security of the United States in the Cold War.

Massive reductions in forces, equipment, and funding after the conclusion of a successful war continued an American military reality that dated back to the Revolutionary War. During such postwar periods, every dollar spent, and every program developed by the military came under close scrutiny, and the end of World War II was no different. President Truman was adamant that the United States could not afford to maintain the military at wartime levels with peacetime expenditures. The final victory in

300 Barlow, The Revolt of the Admirals, 128.
World War II meant that contracts for war material such as aircraft, ships, tanks, etc, could be cut back or eliminated all together. Admiral Arthur Radford testified to the Senate subcommittee on Appropriations that the Navy had been “weighing relative values” in postwar plans. It had discarded periodically “valuable portions,” while retaining others which appeared “more vital.” Radford added that “the aeronautical postwar organization … currently being considered, is the best balance we can obtain under the limited funds available…this organization contains the essential elements necessary for complete integration of naval aviation as a part of our active fighting fleet.”

In other words, the priority within the Navy appeared to be their aviation branch. If atomic weapons could be sea based, they could preserve this aspect of the Navy. Atomic weapons introduced cost-effectiveness to the military, and could perhaps even deter large-scale wars because of their destruction.

SURVIVING DEMOBILIZATION

American forces were rapidly demobilized soon after Japan surrendered and peace was finally declared, but there did not seem to be an initial concern about how they impacted American foreign policy or military action. The cutbacks occurred so fast that in October 1945, Secretary of the Navy James Forrestal argued that if it continued unabated there would come a time when neither the Army or the Navy would have

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sufficient trained men to operate efficiently. Furthermore, additional decreases could be considered as “evidence of our intention to recede from our international obligations and commitments abroad.” Leadership within the United States Navy grew alarmed by the cuts to the carrier fleets because the carriers represented the mobile strike force of the Navy. Chief of Naval Operations, Fleet Admiral Chester Nimitz, argued that the postwar American fleet needed to have “in each ocean a strong carrier-striking group.”

Carriers had the range to cover vast areas of ocean and could move over six hundred miles in twenty-four hours to attack geographically dispersed targets well out of the range of land-based air.

Against Japan, carrier-based aircraft were used to destroy enemy naval and commercial shipping, bolster ground forces, support invasions, and disrupt lines of communication. In the future, carrier-based aircraft would have to counter enemy submarine offensives, protect shipping, and when applied in large numbers, neutralize enemy land-based airpower to maintain control of the sea, and would need to have the ability to deliver nuclear weapons. With fewer carriers at its disposal, however, naval leadership was faced with a potential inability to deliver American airpower to important regions around the globe; reducing the carrier fleet made the entire naval offensive forces

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305 Ibid, 3.
306 Memo and attached draft, VADM J.H. Cassady to CNO, 9 May 1952, DCNO(Air) Official Correspondence, Jan. 1950-May 1952, Post 1 Jan. 1946 Command File, Operational Archives (hereafter OA), Naval Historical Center, (hereafter NHC). In 2008 the Naval Historical Center was renamed the Naval History & Heritage Command, however, this was after the author conducted his research. Therefore, it will still be refered to in the text as NHC.
weaker and less vital to the overall defense of the United States. Without a sufficient
number of carriers, the Navy's contribution to the national defense was solely in logistics,
submarine and anti-submarine warfare. Therefore, for every carrier that was
decommissioned, the effective power of the Navy was significantly reduced.
Consequently, if carrier reductions continued unabated, the naval nuclear strategy would
become irrelevant because there would be no carriers left to base the bombers aboard.
The Navy would have to devolve from an offensive Navy to a defensive Navy, which
would be nothing more than a floating Maginot Line of outdated ships that an enemy
could simply bypass on its way to defeat or damage the United States.

DELIVERING AN ATOMIC STRIKE FROM THE SEA

To prevent or deter such a fate, the Navy began preliminary long-term studies of a
carrier-based strategic nuclear bomber and a “supercarrier.” These two weapons would
combine to replace the battleship and conventional weapons as the main battery of the
fleet, and help limit the effects of demobilization on the Navy. It was argued that from
locations in the Atlantic, Pacific, and the Mediterranean Sea, carrier-based bombers could
reach many targets inside the Soviet Union. Additionally, because the carriers are
considered sovereign U.S. territory, the inclusion of atomic weapons into the naval
arsenal would not be affected by another nation's anti-nuclear policy. This allowed for
the Navy's nuclear bombers to be forward deployed while the Air Force's bombers were
based in the U.S. or within countries that agreed to allow the storage of nuclear weapons
on their territory. Without a new carrier class and bomber, the Navy would be compelled
to participate in the postwar world with aircraft and carriers designed and built before and during World War II.\(^{308}\)

Unlike the USAAF that had operated bombers since World War I and had experience with larger and more powerful bombers, the Navy had been limited in the size of its attack aircraft because of the inherent limits of a carrier deck. The Air Force could pursue planes like the B-36 because they could convert air bases across the world to handle the increased weight of the bomber, provide new facilities for maintenance and protected areas to store nuclear weapons. It was not as simple to provide the same amenities aboard an aircraft carrier. Therefore the introduction of atomic weapons into the fleet forced a radical modification of carrier operations and design. Ideally the Navy wanted to get a new carrier design into production that would be built around atomic weapons delivery, but it became extremely unlikely that this would be possible in the austere military budgets of the Truman administration. It was also doubtful that support for the naval nuclear mission would have the active support of the President, the Congress, or even the National Military Establishment.

One of the earliest advocates of a new large deck carrier and a naval nuclear bomber was Admiral Marc Mitscher, Deputy Chief of Naval Operations. Mitscher had been one of the guiding forces behind the Navy’s successes against the Japanese fleets, and had participated in the fabled Doolittle Raid in April 1942. Before the war ended, Mitscher complained that American carrier forces did not have an adequate bombing system and the largest weapon they could deliver was a 2,000lb high explosive bomb that was far inadequate for many fortified targets. It was anecdotally evident that the amount

\(^{308}\) Memo, for Mr. Dan. A. Kimball, Under Secretary of the Navy, OP-03 ser. 0059PO3, encl. B. to memo. RADM Charles Brown to Under Secretary’s Task Force, 14 July 1949, box 4, Ralph A. Ofstie Papers, OA, NHC.
of damage inflicted upon Japan by the USN was dramatically less than that of the USAAF. To counter this in the postwar world, Mitscher began to argue for the creation of a carrier-based bomber with the ability to carry a payload of 12,000lbs. This idea was modified after the atomic attacks on Japan to include an ability to carry nuclear weapons. The rudimentary concept of a naval nuclear bomber was conducted under the heading of Bureau of Aeronautics (BuAer) Design Research Division Study 42 or simply, ADR-42.\(^\text{309}\)

The immense size of the ADR-42 precluded operations from all existing carriers. The priority placed upon the inclusion of atomic weapons into each of the services forced the Navy to continue the plans to make the bomber carrier-based, or it would simply be a redundant system in light of the USAF bombers. Taking the bomb to sea, however, incorporated more than just physically placing the bomber on a carrier because existing ships were neither designed nor built with atomic bombs as an option or priority. Accordingly, none of the extra support facilities that a nuclear arsenal required had been included in the carriers. Weapons magazines, shops, and assembly areas were obligatory for up to three dozen specialists who would assemble the bombs aboard the ship, and there was limited room to add these essential spaces. Even if nuclear weapons could be brought aboard a carrier, existing weapons elevators could not handle the body and weight of the atomic bombs, and without modifications they would have to be stored on the flight deck, or inside the ADR-42. In reality, the larger the weapons and aircraft grew, the less likely existing carriers could be part of the long-term nuclear delivery

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\(^{309}\) Barlow, Revolt of the Admirals, 330.
program and this prompted the need for a new generation of supercarriers to shuttle the Navy into the nuclear future.

The new generation carriers would reflect the increased size of the atomic bombers and jet fighters that would operate from its decks. Even more, these new carriers would be built around nuclear weapons as a foundation, rather than an afterthought. In early 1946 the Bureau of Ships (BuShips) began to design the supercarrier, without a superstructure, to allow for aircraft of virtually unlimited wingspans and weights up to 100,000lbs to operate aboard. Although reluctant at first, Nimitz, with the support of the Assistant Secretary of the Navy for Air John Sullivan, approved the study in early February 1947. From Mitscher’s initial recommendation in 1945, until 1948, the Navy’s General Board examined over 75 design proposals for the new class of carrier, and the Ships Characteristics Board (SCB) worked out the details of the new carrier. Eventually they selected project SBC-6A to be included in the Fiscal 1949 shipbuilding program. As of June 1947, the proposal was projected to cost over $127 million with construction spread out over at least four years. The lead ship of this new class of carriers was called United States (CVA-58). It would take time for the United States-class carriers to come into service, and as a result of this and the possibility that they would not even be built, the Navy began a program to convert existing carriers to meet the needs of its nuclear bombers and the first generation of jet fighters.

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312 Memo, CNO to Distribution List, Shipbuilding and Conversion Program, Fiscal 1949, Encl. (A), 8 September 1947, Strategic Plans Division Records, Subject Titles 1947, (Series V), Box 111, OA, NHC.
THE INTERIM NAVAL NUCLEAR BOMBERS

The evolution of the Navy’s Heavy Attack program began in the late 1940s, concurrent with the advancements in atomic bombs and aircraft carriers. The large physical size of the first generation of nuclear weapons dictated that nuclear capable attack aircraft had to be much larger than the standard carrier-based aircraft that had been in use up until 1945. It would take years, however, for such aircraft to be designed, tested and introduced into the fleet. The Navy did not have the luxury of time, and therefore it had to prove that they could deliver the bomb from the sea. To bridge the gap, two interim naval nuclear bombers, the P2V Neptune and the AJ Savage were brought into service in the late 1940s. The P2V was an obvious choice for the first naval nuclear bomber because it had the ability to carry a large bomb load and it had sufficient range to strike targets deep in the Soviet Union, or others behind the Iron Curtain. The Navy was impressed enough with the Neptune to continue to make modifications to the airframe that would allow it to carry atomic weapons resulting in the P2V-3C.\(^{313}\) Because of its large size, the Neptune could only operate off of the new Midway-class aircraft carriers that were put into service at the very end of World War II. That limited the naval nuclear strike force to three carriers for use in a first strike role. The P2V, however, was never cleared for carrier landings which meant that in the event of World War III, the P2V-3Cs would take off from a carrier, bomb their target and return either to ditch in the sea along side of the carrier, attempt to land at a friendly air base, or as a last resort, bail out over enemy territory. It would be a long time-consuming effort to return

the P2Vs to the carriers, but the Navy ordered 12 P2V-3Cs as the first naval nuclear attack bomber.314

Continuing the attempt to break the USAF monopoly on nuclear strike missions, the Navy gave formal approval for the creation of the Navy’s first strategic bombing squadron, Composite Squadron FIVE (VC-5) and its handpicked crews.315 These men conducted navigational and bomb training, sent crews out for training on nuclear weapons, and commenced collecting whatever intelligence they could accumulate on potential targets.316 By 1948, VC-5 had proven the viability of the P2V-3C as a carrier-based nuclear bomber. They had broken the stranglehold on American nuclear weapons delivery that the USAAF had controlled since the bombings of Hiroshima and Nagasaki only three years earlier. During the same time, while the P2V was being modified for its nuclear role, designers at North American Aviation began work on the AJ Savage.

Unlike the Neptune, the AJ was originally designed to be a carrier-based nuclear bomber, and was a first step in a sustained naval nuclear role. The Savage could be launched and recovered on carriers, refueled and rearmed, then launched onto subsequent missions. Like other aircraft of the immediate postwar years, the AJ was an evolutionary design caught between the old world of propeller-driven aircraft and the future of jet technology. The Savage used two prop-driven engines and a single fuselage-mounted jet engine to provide the extra speed needed to allow the AJ to speed away from the shock waves that accelerated out of an atomic blast.317 A series of engine fires, wing failures

316 Ibid.
and other structural problems, however, haunted the Savage program. It cost the Navy several crews throughout its limited service life, and it was always hampered by a lack of spare parts and ongoing maintenance problems.\footnote{318 Command History, Commanding Officer, Composite Squadron SIX to Office if the Chief of Naval Operations (Aviation History and Research Section), “Historical Report for the Period 1 January1952 to 1 July 1952”, ser. 0019, 18 August 1952, OA, NHC.}

The Air Force paid attention to the Navy’s attempts to get into nuclear arms delivery through the P2V and the AJ Savage. Secretary of the Air Force, Stuart Symington, sent a memo to Defense Secretary Forrestal on May 21, 1948 that stressed the accomplishments of the Air Force bombers and belittled the Navy’s effort. He lamented the Navy’s continued focus on “this type of effort to substantiate its 65,000 ton carrier” request. Symington further stressed that inaccurate statements “made by high Navy officials in testimony before Congressional committees to the effect that the Chief of Staff and the Joint Chiefs of Staff approved this flush deck super carrier” created the greater problem. He accused the Navy of deliberate deception in an effort to proceed “to invade the strategic air position” that was the responsibility of the USAF. Symington also suggested there was a double standard with the Navy in regards to coordination with Forrestal. He added that “as things now stand this issue will be voted on by the Congress on the basis of misinformation” and “when John Q. Public eventually learns the truth about these maneuvers to have him support two Air Forces, he will realize the sucker he has been played for” The result could be disastrous “to all military appropriations.”\footnote{319 W. Stuart Symington to James Forrestal, May 21, 1948, Papers of Stuart Symington, 1946-1950, D General – Democratic National Committee, Box 4, HST.}
THE STRATEGIC TRANSITION FROM THE PACIFIC TO THE MEDITERRANEAN SEA

In addition to needing carriers and an attack bomber, the Navy had to create a scenario that would allow it to participate in a war with the Soviet Union and utilize the mobility of the fleet carriers and carrier-based bombers against land targets deep in Soviet territory. To advance that strategy, the USN needed to implement a plan that placed American carriers within striking distance of the Soviets, regardless of the risk to the carriers and their support ships from preemptive or retaliatory attacks. The logical location for the Navy to concentrate their postwar operations was the Mediterranean Sea. Forward deployments to the Mediterranean and the Persian Gulf would help the United States maintain a presence in several different strategic areas. The oil producing nations of the Middle East would certainly be a primary target of a Soviet attack, and therefore, they had to be defended. To counter a potential Soviet move, U.S. carrier-based aviation would have to strike from the sea into a region largely out of the range of land-based United States bombers.

Naval operations in the Mediterranean Sea also placed an American presence near several nations in Southern Europe that the Truman administration believed were threatened with Soviet sponsored revolution, civil war, or other problems. To restrict Soviet influence in the region, the Navy operated off the coast of a targeted country to project power ashore in the event of war and display American resolve in the area. It was thought that a show of U.S. strength could deter direct Soviet aggression against a neutral or pro-Western state. This became extremely critical because the traditional presence in the Mediterranean Sea, the British Royal Navy (RN) had been greatly reduced in size,
scope, and capability. Growing tensions with the Soviets in the area of Turkey and Iran demanded a stronger American presence. On February 28, 1946, Secretary of the Navy James V. Forrestal asked for and received support from the State Department and Secretary of State James F. Byrnes to deploy a larger naval task force to the Mediterranean.\(^{320}\)

The first use of an American carrier to protect U.S. interests in the region was made from August to October 1946 when a U.S. task force made several port calls in Greece to illustrate America support for the pro-Western monarchy. This was the first of several visits to the troubled nation that faced internal civil war and external Soviet pressure. In 1948 an American carrier, *Valley Forge* (CV-45), made the first deployment to the Persian Gulf to promote American power in the region. From here, it was believed that the Navy could protect the flow of oil and hamper any Soviet move that could threaten the critical supply of petroleum.\(^{321}\) All of these early operations were conducted without nuclear weapons, and with only small attack aircraft and fighters aboard. One carrier air wing against significant portions of the Soviet Red Air Force and Red Army was really not much of a threat. However, once the Navy was able to provide atomic weapons to the fleet, the Soviet Union would have to be aware of American intentions and the threat that it imposed.

**TO THE FUTURE: ATOMIC WEAPONS DELIVERY**

Within months of the decision to use atomic weapons, the ability to deliver nuclear weapons became a source of funding and contention between the fledgling Air

\(^{320}\) Notes from State-War-Navy Meeting, 28 February 1946, Millis, *The Forrestal Diaries*, 141.

Force and the evolving Navy. Both were committed to the defense of the United States and truly believed that they were better prepared to accomplish the mission with greater success than the other. This created a hostile environment between the Services as each tried to create delivery systems that could outperform the other. The Air Force and the Navy also battled to achieve dramatic headlines in the press, and funding in an ever-tightening budget. Between 1945 and 1949, this interservice rivalry and primitive nuclear strategy became the premise of defense spending and planning for the next generation. Regardless of the weapons or delivery systems that were eventually funded, the basic premise of defense spending reflected a growing belief in the targeting of civilian populations as the most expeditious course to win a war or sustain the peace.
CHAPTER THREE

UNIFICATION, THE NATIONAL SECURITY ACT OF 1947 AND THE SOVIET THREAT

This is a critical and disquieting time. Where there had been hope that 1946 would bring an end to military and political conflict, we find an atmosphere of world tension the outcome of which is obscure. F. Trubee Davison, President of the Air Power League.

The Navy have been very smart-slick-in their presentation of a basically unsound idea; whereas we the Army have been blundering and stupid in presenting a sound idea. W. Stuart Symington, Assistant Secretary of War for Air.

To completely understand how profound and pervasive the conviction in nuclear-based strategic bombing was by the Air Force and Navy in the immediate post-war era, one needs to thoroughly examine the battle over service unification and the National Security Act of 1947. It was during this political battle that leadership within the Air Force and the Navy defended the foundation for a defense system based primarily on a “nuclear-first” option with minimal focus on conventional bombing because they truly believed it would work. In other words, during the formative years of the Cold War, the USAAF and the Navy prepared to engage and win a war primarily against a single enemy, the Soviet Union, with only one type of weapon, the atomic bomb. Even more, the concerns over unification had escalated to the point that the real issue appeared to have more to do with which service should deliver the bomb at the expense of the other, instead of achieving the President’s goal of streamlining the federal bureaucracy and reducing costs for domestic and military programs. Arguably, it was no longer

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322 F. Trubee Davison to W. S. Symington, March 22, 1946, Papers of Stuart Symington, 1946-50, A-B General (Folder 1) Box 1, Correspondence File 1946-50, Air Power League, HST.
323 W. Stuart Symington to Ralph Coghlan, 30 March 1946, Papers of Stuart Symington 1946, B General (Folder 2) C General (Folder 3) Box 2, Correspondence File 1946-1950 C General (Folder 1), Box 2, HST.
acceptable to the command structure to assume that there was an alternative to a global nuclear war. Therefore, the testimony presented displayed the conviction that their respective services needed the lion’s share of funding to fulfill the national security requirements of the United States into the 1950s and beyond.

The hypothesis of a nuclear strategic air warfare as an unrivaled offensive or defensive strategy occurred despite reams of evidence to the contrary about the efficacy of bombing, atomic or conventional, to win a war or compel a hostile nation towards peace. There was minimal consideration by the new National Military Establishment to the suggestion that the United States might not engage an enemy in total war. If the latter were the case, it would require training and tactics to deliver conventional weapons with level precision against smaller targets instead of large bombers simply attacking a city. Certainly the strategic and tactical bombers that would be developed in the years following unification would be converted or modified to drop conventional high explosive weapons, but that would not be their primary purpose.

In the end, the battle over unification had far more to do with securing funding in the future for the most critical component of the national defense, the strategic strike force, than anything else. In the past each service could develop their own weapons programs without much interference by the other services. It was not until Truman’s attempt to bring all money spent on defense into a single entity that every dollar spent could be debated by the Army, Air Force or Navy. In a time of budgetary austerity, one can clearly understand why unification was strongly supported by the Air Force, and so vehemently opposed by the Navy. If one service reigned supreme in the public’s eye, the Congressional mind, or the President’s opinion, any attempt at a balanced force structure
was likely lost. Unification and strategic air warfare had become linked to the military policy under President Truman, and the service that won the unification battle would become the vanguard of American defenses against the Soviet Union.

Unlike the United States Navy, which was searching for its soul and its future in the years after World War II, for the United States Army Air Force, the future was now, and unification could finally help them achieve independence from the Army. Many within the USAAF believed that they had been at the forefront of the victory over Italy, Germany and Japan. Strategic bombing, including atomic strikes, remained their primary mission and they should be allowed to implement and promote their version of strategic air warfare centered on long-range atomic strikes into the Soviet Union. It was the belief that the USAF would deliver American style peace by the kiloton and compel the Soviets to yield to the overwhelming superiority of the American air assault. This was to be powered by the B-36 Peacemaker intercontinental bomber, the largest bomber ever produced in the world. It also presented the USAAF/USAF with a position of political strength when the fight over Service unification began in earnest.

Clearly, because the USAAF already had the ability to deliver atomic weapons, they had the advantage in postwar discussions concerning unification. A November 23, 1946 speech by Lt. General James H. Doolittle, the famed leader of the April 1942 raid on Japan, stated that there had been two major lessons from the Second World War. One was the need for air superiority, the capability to control the air over the battlefield or the enemy’s targeted city, and the other was unity of command, the capacity to organize and mobilize all military elements and get them into battle. Doolittle felt, however, that the United States was in a weakened position because it had endless duplication of
“commands, efforts, weapons, and money” and American airpower “must continue to be revolutionary if we are to keep ahead of any potential enemy.” In order to fully accomplish this, there had to be a reduction in the number of agencies that were responsible for developing aircraft and weapons. Research and development had to continue into new forms of weapons, including the nuclear arsenal, but we “must consolidate air weapon research under one agency, directed by the airmen who best know how the medium in which these new weapons will operate.”

UNIFICATION: Finding the Real Enemy Within

President Harry S. Truman began to move towards unification in the summer of 1945, after a request was made by Secretary of the Navy James V. Forrestal to increase the permanent size of the Navy and the Marine Corps after the war. Truman looked into the matter and instead decided to change the system to make it more cooperative in understanding future manpower needs. He was open to the idea of unification of the Services under a single department to streamline the military and make it more efficient. Prior to unification, the Secretaries of War and the Navy held cabinet-level positions and maintained autonomous voices inside the administration. The budgets of both the Army and the Navy were prepared independently, and required separate legislation that kept the level of direct competition for funding very limited. The President did not like the system because he felt it was inefficient and political. Truman also remained suspicious

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324 Excerpt from speech of Lt. General James H. Doolittle, November 23, 1946, Papers of Stuart Symington, 1946-1950, D General Democratic National Committee, Box 4, HST.
about budget requests based on his personal experience in the Army.\textsuperscript{325} If each service could eliminate unnecessary or redundant programs, Truman believed that the War and Navy Departments could free up enough capital to live within limited budgets.

It was apparent from the onset of discussions about unification that the senior leadership in the Navy was opposed to it, and had begun preparations for their own plans for post-war national security. Navy officials felt they had everything to lose and interpreted the “calls for unification as a pretense for dismembering the Naval Establishment—by transferring naval aviation units to the Air Force and the Marines to the Army.”\textsuperscript{326} Army General George C. Marshall first introduced the idea of a unified military command structure in November 1943. In this new unified configuration, appropriations and command would be streamlined through one department, rather than two. He further argued that an “enormous saving can be made in the Navy budget if the duplication of roles and missions” were eliminated.\textsuperscript{327} Naval leadership opposed this, fearing that they would lose a voice in decisions regarding the size and scope of the fleets. Truman disagreed with this opinion because it was in conflict to the long-term goals of unification. He did agree with the Navy “on the need for some means of more effectively meshing military planning with our foreign policy” and the need to “provide long-range plans for industrial mobilization consistent with the civilian economy.”

Truman understood that unification went beyond military reorganization and involved cooperation between the armed forces, politicians, as well as the economic interests of


\textsuperscript{327} Statement of Representative Horan, Congressional Record, 80th Cong, 1st Sess., Vol 94, part 2, 2605.
national security.\textsuperscript{328} In a speech in Chicago in April 1946, Truman called on the senior leadership in the Navy to get behind unification and he gave “valiant support” to the War Department’s views on it.\textsuperscript{329} Truman most likely underestimated how long and hard the road would be to achieve this complicated merger in principle, let alone actuality.

Animosity between the Army Air Forces and the Navy over missions, weapons, and funding extended to their respective support organizations. In August 1946, Congressman Carl Vinson, a Democratic Representative from Georgia, and renowned advocate of the Navy, threatened an investigation into the Air Power League. It was an organization created in 1944 to support or preserve American air strength because it was essential to security of the United States.\textsuperscript{330} Stuart Symington, the Assistant Secretary of War for Air, responded that the Air Power League was comparable to the Navy League and therefore political bias could be cited, and the Air Power League could respond by asking for an investigation of the Navy League.\textsuperscript{331} In October 1946, Symington accused the Navy of successfully lobbying the Veterans of Foreign Wars to reverse its previous position and now the VFW opposed unification. Symington added, however, that the Navy failed to prevent the passage of a bill supporting unification by the American Legion.\textsuperscript{332}

\textsuperscript{328} Harry S. Truman, \textit{Memoirs: Years of Trials and Hope} (Garden City, NJ: Doubleday & Company, 1956), 48-49.
\textsuperscript{329} Memo to the Secretary of War from W. Stuart Symington, 22 April 1946, Papers of Stuart Symington 1946-50, P General –R General (Folder 2), Box 10, HST.
\textsuperscript{330} F. Trubee Davison to W. S. Symington, March 22, 1946, Papers of Stuart Symington, 1946-50, A-B General (Folder 1) Box 1, Correspondence File 1946-50, Air Power League, HST.
\textsuperscript{331} W. Stuart Symington to Colonel Jacob E. Smart, 22 August 1946, Papers of Stuart Symington, 1946-50, A-B General (Folder 1) Box 1, Correspondence File 1946-50, Air Power League, HST.
\textsuperscript{332} W. Stuart Symington to the Honorable J.W. Wadsworth, 16 October 1946, Papers of Stuart Symington 1946, B General (Folder 2) C General (Folder 3) Box 2, Correspondence File 1946-1950 C General (Folder 1), HST.
Early salvoes fired between the Services brought other organizations and businesses into the fray, including Sears, Roebuck and Company and its politically conservative Chairman of the Board, Robert E. Wood. The former Army general and founder of the America First Committee wrote a letter to Symington in December 1946 about a speech that the Assistant Secretary was scheduled to give to the Commercial Club. Symington’s appearance had created a political showdown within the organization because several members had been in the Navy and were opposed to speeches presented on behalf of an independent air force. Some members of the Club were personal friends of James Forrestal, and did not want arguments over unification brought out into the public arena, and even attempted to find a pro-Navy speaker to counter the air force argument. What apparently surprised Wood was “the strength and depth of the Navy objection” and he was concerned that Symington’s speech would have to be called off.\(^{333}\)

The enmity between the two services grew worse and a political battle began in Washington D.C. that caused far more harm than most could have anticipated or imagined. In public displays of anger and remorse, the national security of the United States was debated in congress, the media, and the corridors of the Pentagon.

THE UNITED STATES ARMY AIR FORCE AND UNIFICATION

In an angry letter to President Truman on May 16, 1946, Symington brought to Truman’s attention the fact that in their latest budget proposal, the Navy had budgeted for more spending on aircraft than the Army Air Forces did for Fiscal Year 1947. Symington suggested that he did not believe that “one American in fifty thousand knows any such

\(^{333}\) R.E. Wood to W. Stuart Symington, December 31, 1946, Papers of Stuart Symington 1946-50, Box 14, Correspondence File 1946-50, XYZ General, HST.
condition exits.” He also added that “General Arnold told us before he left statements of Navy people showing that they had long range plans to take over the whole show, with their Air Force, their Marine Army, and their Navy.” Symington facetiously suggested that because the Navy demanded land-based aircraft to protect their ships, the Army should demand their own battleships to protect their troop ships.\(^\text{334}\) Truman replied to Symington five days later and informed him that these “matters will work out, as they should, if we ever get to the point where we can actually get a practical result.” The letter also stated that things were getting better despite statements being made by supporters of the Navy.\(^\text{335}\)

Symington continued to find ways to point out what he felt were absurd positions being taken by the Department of the Navy. In a memo to General Curtis LeMay in September 1946, Symington recommended that “from the standpoint of psychology” that would lead to independence, the Army Air Forces should include some ships in its Fiscal Year 1948 budget. It was justified that the Air Force needed ships as much as the Navy needed aircraft. There was also the possibility of including a submerging “airdrome” as well as air-sea rescue submarines along with a “land air fixed up” carrier and destroyer.\(^\text{336}\) Symington also continued to receive letters that encouraged him to hold the line on the Navy, and perhaps, push even farther. In August 1947, Symington was informed that if he really wanted to have peace, the United States should “greatly strengthen our air force, and divert to you most of the money we are spending for our

\(^334\) W. Stuart Symington to the President, May 16, 1946, Papers of Stuart Symington 1946, B General (Folder 2) C General (Folder 3) Box 2, Correspondence File 1946-1950 Budget Memoranda, HST.

\(^335\) Harry S. Truman to W. Stuart Symington, May 21, 1946, Papers of Stuart Symington 1946-50, Correspondence File, 1946-50, Truman, Harry S, Box 13, HST.

\(^336\) Memorandum for General Lemay from W. Stuart Symington, 3 September 1946, Papers of Stuart Symington 1946-50, R General (Folder 3) –Sims, Box 11, HST.
navy. Russia can’t match our navy—we can’t match their manpower or their army—but we can dominate them in the air.”

Lt. General James H. Doolittle expounded on his feelings about unification and what he perceived were the real issues that motivated the Navy’s resistance. Corresponding with Symington, Doolittle argued that leadership within the Navy argued against a single service secretary because it would be too taxing for one individual to govern. Doolittle considered this argument to be specious because the President already had the ability to oversee the entire federal bureaucracy, and the military was already an aspect of that responsibility. He also countered the Navy’s contention that they would lose their service identity in a unified defense structure because the overriding national goal should be to have the most economical and efficient military in peace and war. The Navy’s system, according to Doolittle, created redundant expenditures for aircraft. In essence, they created a rival air force in the United States that was as unacceptable as having three armies or three navies protecting their own interests as opposed to national requirements. He asserted that competition can be good in business, but in government, cooperation and coordination were far more important because the enemy gives the military enough competition. Uncoordinated competition “in a governmental agency cannot help but be wasteful and destructive.”

Criticism of the Navy’s opposition to unification also came from within the Navy Department. Commander James M. Peters, former head of Carrier Air Group One and Twenty-Two, had previously submitted his resignation in October 1945 in protest against

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337 A.S. Barrows to W. Stuart Symington 27 August 1947, Papers of Stuart Symington 1946, B General (Folder 2) C General (Folder 3) Box 2, Correspondence File 1946-1950 Barrows, Arthur S., HST.  
338 J.H. Doolittle to W. Stuart Symington, December 2, 1946, Papers of Stuart Symington 1946-1950, D General Democratic National Committee Box 4, HST.
naval policy. On July 18, 1946, he sent a memorandum to Secretary of the Navy James Forrestal, Fleet Admiral Chester Nimitz, the Chief of Operations, and other leaders within the command structure of the Navy. Peters claimed senior leaders in the Navy were in favor of keeping control of their fraction of air assets, and this was in contradiction to some junior officers who anecdotally supported the idea of one unified air force. The division of airpower between the services was specious and many naval aviators also agreed with him, and he further argued that he did not believe that aircraft alone could win a war, nor was the Navy irrelevant or unimportant in future wars. Airpower had to develop to its fullest, and naval opposition to this was harmful. Therefore the Navy would be better served by fighting to get their aviators into the Air Force rather than holding out for more aircraft. He even said that any “decrease in efficiency of carrier operations caused by unification of our Air Forces will be more than compensated for by the great increase in efficiency of operations of the air force as a whole.”

THE UNITED STATES NAVY AND UNIFICATION

James Forrestal realized that unification could be imposed upon his Service, and therefore placed himself in the vanguard of the Navy's defense against unification. The Secretary of the Navy bore the initial burden of arguing the Navy's strategic goals against an aggressively independent Air Force, because he understood that the Navy had an essential role for national security. Without a strong Navy, the United States would have a difficult time confronting international threats and enforcing American policy in

339 James M. Peters to Secretary of the Navy, 18 July 1946, Papers of Stuart Symington 1946-1950, Memoranda-General (Folder 3) O General, Box 9, HST.
regions far removed from American air bases. Forrestal had been one of the first to predict the rise of the Soviet Union as the main threat to a peaceful coexistence and because of the importance of the Persian Gulf; he ordered a naval presence in the Mediterranean region. Without Middle Eastern oil, the American military would be paralyzed and the absence of an American presence in the Middle East would invite the Soviets to control the region and its oil. Forrestal argued that the best way to maintain peace was to remain militarily stronger than one's enemies. As a reminder, Forrestal kept a plaque on the wall in his office that read: "We will never have universal peace until the strongest army and the strongest navy are in the hand of the most powerful nation." Therefore, to keep the Soviets in check, the United States had to have the ability to project power far away from North America.

Leadership within the Navy preferred the continuation of the individual Services and a decentralized form of command, but with more joint committees for defense issues. In other words, the Navy preferred coordination along with communication rather than unification. They stressed the need to combine national and military policies through the institution of high-level agencies that allowed the individual services to retain their autonomy and permit each service to develop the weapons and strategy that complemented the best attributes of the Services. This position would also let the Navy develop its own nuclear strategy unrestricted by another Service or a defense secretary. Senior members of the Navy Department also argued that the establishment of an independent air force could strip the Navy and the Marine Corps of their air assets and face the real probability of an Army-Air Force voting bloc versus the Navy on the Joint

341 Truman, Memoirs: Years of Trials and Hope, 48.
Chiefs of Staff. Naval nuclear strategy could be jeopardized by two Services who did not believe in the value of carriers, and saw it merely as a duplication of the Air Force's main task, nuclear bombardment.

The Air Force/Army faction also caused the Navy’s representatives to fear that the Secretary of Defense would come from either of those two services. If that did happen, he would likely not appreciate or understand the unique fundamentals of sea power. Worse, the Secretary could make decisions regarding the role and function of the Navy independent of a naval rebuttal. If the Navy would not be allowed to introduce a carrier-based nuclear delivery system with an atomic strategy, it faced the real risk of being reduced to a simple logistical service in support of the Air Force’s strategic Armageddon, or a member of smaller military operations including “the protection of convoys and warfare against submarines.”

A unified defense system would put the budgetary battles and policy debates that previously took place in front of Congress into the hands of a single presidential appointee. Therefore, each weapon system and strategic plans were at the disposal of a person who might not be prepared or qualified to make a decision that pertained directly to the defense of the United States. Additionally, if the Secretary of Defense was promoted from one of the Services, his loyalty might remain with that branch of the Armed Forces rather than the entire establishment. The President or Congress might not hear all sides of a strategic debate between the Services because their independent voices of support or opposition were replaced with a monotonous "unified" opinion, and roles in

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342 Address of Admiral H.E Yarnell, USN, ret, delivered to the American Veteran’s Committee at Newport R.I., November 17, 1949, reprinted in the Appendix to the Congressional Record, Vol 96 part 13, 81-2, A89.
the defense of the nation would be dictated from above rather than developed from below.

On November 28, 1945, the Navy Department issued a press release about their position on national security, and expressed that the Americans were victorious in the World War II because of democracy’s “great outpouring of national power.” There were deficiencies that the Navy acknowledged in the structure of national defense, because there had been little integration of foreign and military policies outside of the work that had been done on the State-War-Navy Coordinating Committee. Strategic planning and decisions had been excellent; unfortunately there were delays in the process, as well as logistical complications that were exacerbated when it involved Allied cooperation. During the war, the Navy saw that unified command was usually followed in the Pacific Theater, except for the separation of the B-29 Superfortresses from other Army Air Forces units and theater commanders. Gaps in planning and material requirements, and unnecessary duplication in procurement, were problems that had to be addressed, and in future wars, the Navy suggested that there had to be better integration of all components of national security, a central research and development agency, and a central intelligence service.  

It was also recommended by the Navy that there should be a National Security Council that combined the key departments tasked with the defense, intelligence, and foreign policy of the United States. There ought to be a permanent Joint Chiefs of Staff that would establish unified commands, and would create strategic military programs, and an independent air force created “with particular reference to their strategic” roles or

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343 November 28, 1945 Press Release “A Statement of the Navy Position on National Security” Papers of George M. Elsey, Harry S. Truman Administration, Subject File, Box 82, Folder 1, HST.
functions. However, the Navy cautioned “a single military department should not be forced upon the country to establish autonomy for the Army Air Forces” and the Navy must maintain its integrated air units and control of the “Marine Corps and related amphibious components.” ³⁴⁴ It was critical for the Navy to lay the groundwork to support the ideas of unification, and prepare a proper defense of its mission, both traditional and strategic. The Navy had just utilized the epitome of strategic air warfare, the preemptive strike.

President Truman very publicly supported unification for a number of reasons, including cost and efficiency. He still believed that redundancy in mission and weapons was a waste of resources, and in peacetime, not even the United States could afford to squander money. In a message to Congress on December 18, 1945, Truman called for the unification of the armed forces in “the interest of national security and world peace,” and he asked them to pass the appropriate legislation to merge the War Department and Navy Department into a single Department for National Defense. This combined with the proposed Universal Military Training (UMT) would keep the armed forces prepared and ready for rapid mobilization, which made for a safer world. The President added that although the United States had won the last war, it never had a true unified command or unity of operations. It had, however, poor communications, supply and distribution systems that “stemmed from the division of leadership in Washington.” Truman further contended that we had overcome these handicaps in the last war, but now was the time to eliminate the obsolete defense structure and provide for “the future the soundest, the most effective, and the most economical kind of structure for our armed forces of which this most powerful Nation is capable.” It was imperative that this be done as soon as possible.

³⁴⁴ Ibid.
because we “must assume, further, that another war would strike much more suddenly than the last, and that it would strike directly at the United States.” In the next war, the United States would not have the time to recover from early setbacks, or overcome incumbent obsolescence. Truman argued that “strategy, program, and budget are all aspects of the same basic decisions” and trusting the advice of American scientists and intelligence personnel, the United States had to clearly understand “the probable nature of any future attack upon us, determine accordingly how to organize and deploy our military forces, and allocate the available manpower, material, and financial resources in a manner consistent with the overall-plan.”

Truman also addressed airpower, and suggested what many had already known, that it had developed to the “point where its responsibilities are equal to those of land and sea power” within the context of overall strategic plans. He preferred to have airpower contained primarily in one department rather than divided between the War and Navy Departments or between the Army, Navy, and Air Force. The President argued that it should not be the Commander-in-Chief’s responsibility to coordinate between the services, deal with the organizational structure, training, or “the practice of the several branches of national defense” and instead this would have to come from civilian leadership of the Armed Forces at the cabinet level. Truman understood this transition would not be easy; however, the free discussion of ideas would lead to clarification of the problems already identified despite strong opposition from some senior officers and civilians. Truman may have understated the depth of the opposition to unification, but he

345 Message to Congress, December 18, 1945, Papers of George M. Elsey, Harry S. Truman Administration, Subject File, Box 82, Folder 3, HST.
also believed that once it had been set as national policy, those opposed would work to make unification a success.  

Secretary of the Navy James Forrestal and Secretary of War Robert Patterson sent a joint letter to the President on May 31, 1946, that outlined agreements as well as substantive differences between the two agencies. The control of aviation assets was one of the most significant disagreements between Forrestal and Patterson. The War Department envisioned that the responsibility for “the development, procurement, maintenance, and operations of the military air resources of the United States” would be the responsibility of the Air Force, with the exception of “ship, carrier and water-based aircraft essential to naval operations including those of the U.S. Marine Corps.” The Navy contended that it had no desire to “compete with, or to dictate to, the Army Air Forces,” but they remained in opposition to unification because of the “continued efforts of the Army Air Forces to restrict and limit naval aviation. The Navy believed that if the USAAF was successful, it “would seriously impair our sea power and jeopardize our national security” because the Navy would lose its ability to project American power from the sea. Patterson and Forrestal attested that they had explored all avenues in an effort to comply with Truman’s wishes, but the inability to “achieve complete unanimity is due to no reason other than that our respective views on the points of difference are as sincere as they are divergent.”

Truman responded to both men and their respective departments on June 15, 1946, when he acknowledged the work that they had done, and admitted while there were differences of opinions, they were not completely out of line. The President suggested

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346 Ibid.
347 Robert P. Patterson and James V. Forrestal to President Harry S. Truman, 31 May, 1946, Papers of George M. Elsey, Harry S. Truman Administration, Subject File, Box 82, Folder 3, HST.
that, in reality, after many discussions, the two departments were not that far from
general agreement on most issues. Truman also confirmed what had already been agreed
to in principle, and added that there was no desire to adversely impact the “integrity of
any of the services.” They would be expected to perform their individual missions
“under the unifying direction, authority, and control of the Secretary of National
Defense.” Truman closed the letter by asking for their full cooperation in helping get the
bill through Congress.348

In an effort to build support for his unification initiative, Truman released another
letter and the preliminary report on unification from Patterson and Forrestal to the
Chairman of the Senate Committee on Military Affairs, Elbert D. Thomas. It was also
given to Senator David I. Walsh, the Chairman of the Senate Committee on Naval
Affairs, Representative Andrew J. May, Chairman of the House Committee on Military
Affairs, and Carl Vinson, the Chairman of the House Committee on Naval Affairs. In
this letter Truman attempted to define problems within the military structure as he saw it,
and the principles on which unification should be premised. These included a single
military department and three coordinated services that operated in “a common purpose
toward the overall efficiency of the National Defense.” Aviation needs were projected to
be in the Air Force with the exception of carrier and water-based roles for the Navy and
Marine Corps. Those missions should not be restricted as the Navy should “develop its
maximum usefulness” but it would be limited to operations in support of a naval
campaign. A Council of National Defense would integrate foreign and military policies
to allow for better integration of all matters of national security. A national security

348 Harry S. Truman to Robert P. Patterson and James V. Forrestal, June 15, 1946, Papers of George M.
Elsey, Harry S. Truman Administration, Subject File, Box 82, Folder 3, HST.
resources board, the Joint Chiefs of Staff, and a central intelligence agency were also part of the President’s initiative. Truman made it clear that this form of unification had his “unqualified endorsement” and it was his hope that the necessary legislation would be passed as soon as possible.\textsuperscript{349}

Perhaps sensing the growing resentment within the Navy Department, the President wrote a personal note to Secretary of the Navy Forrestal on January 8, 1947, that mentioned that Truman was anxious to get unification agreed to so that it could go in front of Congress with all sides behind it. Truman understood that because of Forrestal’s gravitas within the Navy, he could contribute more towards unification than anybody else, and Truman hoped that Forrestal and Patterson would come to an agreement soon despite the ongoing resistance by the Admirals. Truman reassured Forrestal that he was just as interested in the Navy as he was in the Army and the Air Force, but he added, “no single component of the National Defense is as important as the whole picture put together. I know you can see it just as I can.”\textsuperscript{350} In a hand written reply, Forrestal replied that he was “going to do my best.”\textsuperscript{351}

On January 16, 1947, Forrestal and Patterson sent a letter to the President informing him that they had overcome the impasse that bogged down the unification process back in June 1946. Their recommendations included; a Council of National Defense, a War Council, a permanent Joint Chiefs of Staff (JCS) that would be tasked with providing the direction of the Armed Forces, the development of strategic plans, and

\textsuperscript{349} Harry S. Truman, June 15, 1946, Papers of George M. Elsey, Harry S. Truman Administration, Subject File, Box 82, Folder 3, HST.
\textsuperscript{350} Harry S. Truman to James Forrestal, January 8, 1947, Papers of Harry S. Truman, President’s Secretary’s Files, Subject File, Cabinet (Commerce-2) –Defense-1), Box 156, HST.
\textsuperscript{351} James Forrestal to Harry S. Truman, Papers of Harry S. Truman, President’s Secretary’s Files, Subject File, Cabinet (Commerce-2) –Defense-1), Box 156, HST.
a joint staff that worked below the JCS and implemented their polices and directives. The Secretary of National Defense would be the nominal head of the armed forces. His authority was to “establish common policies and common programs for the integrated operation of the three departments and shall exercise control over and direct their common efforts to discharge their responsibility for national security.” They further agreed that it should be through Presidential Executive Order that the roles and missions of the individual services be defined.  

Truman replied that he was pleased that they had reached “full and complete agreement on a plan for the unification of the armed forces.” The President acknowledged that all sides had made compromises to reach the accord and it was an “admirable compromise between the various views that were originally held.” Truman thanked the men for their hard work and diligence to reach unification that would “contribute greatly to the efficiency of our national defense.”

Although there was an agreement in principle, this did not mean that the Navy would abandon its position on defense or a naval nuclear strategy without a fight.

JOHN PAUL MAHAN HAS NOT YET BEGUN TO FIGHT…

The day after the agreement was reached, a memo was allegedly sent to the Chief of Naval Operations Chester Nimitz entitled “How to Beat Unification Despite the Patterson-Forrestal-Truman Agreement.” The fallacious document had been forwarded to Symington on January 21, 1947 by USAAF consultant W. Barton Leach, a Law professor at Harvard University. Leach claimed to have received it “from a source which I am not at liberty to reveal” and his “delight at the agreement on unification” was

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352 Summary of correspondence between James Forrestal, Robert Patterson and Harry S. Truman, January 16, 1947, Papers of Stuart Symington 1946-50, Spaatz to Travel, Box 12, HST.
353 Ibid.
dampened as a result. In an attempt to cover the real author’s name, or perhaps because the entire document was actually a USAAF ruse, the memo was signed with the name “Rear Admiral John Paul Mahan, Assistant Chief of Naval Operations (Bright Ideas).”

Regardless of the authorship or authenticity of the Mahan document, much of the document arguably does reflect the attitudes that were prevalent among a large number of naval officers. The memorandum opened with the idea that the legislative branch was not committed to this agreement, and it was here that the Navy and its supporters could continue the fight against a shallow agreement. In a shot at Truman, the agreement was referred to as one “which that former Artillery officer imposed upon his Cabinet subordinate and that his Cabinet subordinate secured a reluctant concurrence from professional Navy men only upon the threat that if they didn’t concur in this they would get something worse.” The Mahan memo stressed that a watered down and weakened unification bill was better than no unification. It was hoped the Secretary of National Defense position would be undermined and weakened to the point that “no man of real power and prestige” would take the job or be successful in carrying out his responsibilities because more of the decision making capacity remained in the Congress. This appeared to be the “only means by which we can really keep the Air Force in its place” because of increased naval supporters in the legislative branch that “neither the Army nor the Air Force nor both together can rival or are likely to supersede.”

To combat a strong unification, the Navy had to push for amendments to the President’s plan that would allow the Service Secretaries to remain in the Cabinet, and

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354 The probable alias combines two of the greatest names in U.S. naval history, John Paul Jones and Alfred Thayer Mahan.
355 John Paul Mahan to the Chief of Naval Operations, January 17, 1947, Papers of Stuart Symington, 1946-1950, K Congressional-M General (Folder), Box 7, HST.
allow the budgets of the Army, Navy and Air Force to be submitted individually to the Congress. The legislators had to be reminded that military policy was “lodged in the elected representatives of the people” and not in the hands of a single secretary which would “dilute Congressional control” which was unacceptable. Additionally, the memo contended that there should be a demand to have the terms of the executive order creating unification be supported by legislation which could help the Navy since it was evident that problems could occur because of a “President who has long since shown his preference for the Army point of view.” The reality of a separate Air Force could not be fought and few options remained. These included an increase of Congressional participation in “the formulation of military policy, particularly the budget” and a role in determining the roles and missions of the services. This could result in “whittling down the Air Force down to air defense and strategic bombing, we should have no trouble in keeping them under control particularly as guided missiles gradually supersede strategic bombardment.” These goals could be attained if the naval officers who testified maintained their opposition to unification and repeated that in front of allies in Congress.

If the Navy could prevent the New York Times military correspondent Hansen Baldwin “from spilling over too obviously on the Navy’s side until Congressional hearings take place, we can put him forward as an impartial expert” and it was presumed that Baldwin would agree to this plan. Whatever the intention of this document it did not undermine the President’s unification plan. Instead it dramatically displayed the distrust and animosity that would continue between the services for decades after unification was achieved.

356 John Paul Mahan to the Chief of Naval Operations, January 17, 1947, Papers of Stuart Symington, 1946-1950, K Congressional- M General (Folder), Box 7, HST.
THE NATIONAL SECURITY ACT OF 1947

Although it was far from a perfect bill, after months of heated debates in the House and Senate, Truman signed a final version of the National Security Act of 1947 into law on July 26, 1947. That same day Truman issued Executive Order 9874 that delineated the functions of the Armed Forces. The common mission between the services was to support and defend the Constitution from all enemies, provide security for the United States and its possessions, uphold and advance the national policies and interests of the nation, and conduct integrated operations on the land, sea and in the air. The Army was responsible for land warfare, including airborne and joint amphibious operations, occupation of land areas, and to assist the Air Force and Navy in the accomplishment of their missions. The Navy maintained control of their aviation assets, but were to be trained and equipped “primarily for prompt and sustained combat at sea” along with controlling the sea and suppression of enemy commerce. They were to coordinate reconnaissance, anti-submarine warfare, and the protection of sea-lanes with the Air Force. However, there were no restrictions on the types of aircraft controlled by the Navy for these purposes. They could develop “weapons, tactics, technique, organization and equipment of naval combat and service elements, coordinating with the Army and the Air Force in all aspects of joint concern” and maintain the United States Marine Corps and its missions. The newly created USAF was tasked with “all military aviation forces, both combat and service, not otherwise specifically assigned” and were to organize and train their forces to gain and maintain air supremacy, establish air superiority where required, and conduct strategic reconnaissance missions. Most importantly, they were
considered to be the strategic air force of the United States. They were to coordinate weapons development and tactics with the Army and Navy on “all levels of joint concern and coordinate air defenses among the Services.”

The National Security Act created a permanent role for the Joint Chiefs of Staff (JCS) produced the National Security Council (NSC), the National Security Resources Board (NSRB) and the Central Intelligence Agency (CIA). The NSC and the NSRB were primarily advisory boards for the President. Both organizations had staffs appointed by the President. The NSC was to assess and appraise U.S. objectives, commitments, and risks in relation “to our potential military power and with consideration of policies on matters of common interest to the departments and agencies of the Government concerned with national security.” The President was restricted in who he could name to the Council, but he could invite individuals to meet with the Council at the President’s discretion, and it was considered a Cabinet-level organization, but not a replacement for the Cabinet.

The National Security Act also established an independent United States Air Force (USAF) as a service equal to the Army and the Navy, but it allowed the Navy to retain carrier and land-based aviation assets, as well as the Marine Corps with its air units intact. The cries for an independent Air Force were not new, having dated back to the

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357 Executive Order: Functions of the Armed Forces, Papers of Stuart Symington 1946-50, Spaatz to Travel, Box 12, HST.
358 Confidential memorandum for the President from the Executive Office of the President, Bureau of the Budget, August 8, 1947, Papers of Harry S. Truman, Presidency’s Secretary’s Files, Subject File, Cabinet (Commerce-2) –Defense-1), Box 156, HST.
359 An interesting side note to the creation of the United States Air Force was the selection of their own uniform. Secretary of the Air Force Stuart Symington wrote to the Director of the Bureau of the Budget, James Webb, in December 1947 that the Air Force would use up their former Army uniforms, but the time was of the essence to implement the procurement of Air Force uniforms. W. Stuart Symington to James E. Webb, 26 December 1947, Papers of Stuart Symington B-General (Folder 2) C-General (Folder 3), Correspondence File 1946-50 Budget Memoranda.
days of General Billy Mitchell in the 1920s. Aviation factions in the Army had lobbied for independence from the senior service, but the strongest arguments for independence, however, came after World War II, when the Army Air Forces had proven their ability to perform under war situations. Air Force proponents argued that they had won the war by dropping the atomic bombs. Because this had made other forms of warfare obsolete, all air assets retained by the United States should be turned over to the Air Force. In their minds, the Navy would be used almost exclusively as logistical support for the long-range strategic bombers. The emergence of the United States Air Force created a multitude of possibilities as well as problems. The Truman administration was adamant that the overall military budget be reduced, and the Air Force would have to comply. Previously, personnel within the War department had been responsible for drafting the budget, and work had been done on the Fiscal 1948-49 budget prior to the passage of the National Security Act of 1947.360 This was complicated a bit because the Air Force did not have enough trained personnel to actually prepare the next budget. Therefore, they hoped to garner enough assistance from the old War Department structure so that they would be able to fulfill the requirements under the new unification law.361

The critical component of the National Security Act was the institution of the National Military Establishment (NME) that was tasked with the creation of general policies and programs for the Armed Forces, to extend control over the military, and take suitable measures to eliminate unnecessary duplication in procurement, logistics, transportation, health and research. The NME was to supervise and coordinate budget

360 Memo to the Under Secretary of War, March 10, 1947, Papers of Stuart Symington, B-General (Folder 2), C-General (Folder 3) Box 2 Correspondence File 1946-50, Budget Memoranda, HST.
361 Memo to the Secretary of War from the Under Secretary of War for Air W. Stuart Symington, 15 August 1947, Papers of Stuart Symington, B-General (Folder 2), C-General (Folder 3) Box 2 Correspondence File 1946-50, Budget Memoranda, HST.
estimates and programs, but the Navy and the Air Force would still be able to control the procurement of their respective aircraft because of the uniqueness of the requirements of each service. Congress immediately allocated $2 million to fund the office of the Secretary of Defense, along with the NSC and the Securities Resources Board. Other appropriations were to be used from previous budgets that had been agreed to before the NME assumed its responsibility in September 1947. Orders were also issued to begin the transfer of personnel, aircraft, and other assets from the Army to the new Department of the Air Force.  

The NME was to be administered by a Secretary of National Defense, a person that Army Chief of Staff Dwight D. Eisenhower later described as one who owed no allegiance to any one Service and was tasked with looking at all aspects of national security, and would budget, defend, and explain appropriations not “in terms of ground, air, or sea, or any other factor” but would do so “in terms of security.” The Secretary would also be responsible for overseeing the strategic plan with the Joint Chiefs of Staff, now an agency of the Secretary instead of the President. In reality, the position initially did not hold much power at the insistence of the Navy, who did not want the Secretary to be more than one who unified military policy, integrated budgets, eliminated wasteful duplications or redundancies, and worked to create harmony within the Pentagon. As originally structured, the Secretary of Defense would not have real administrative capabilities to lead the Joint Chiefs of Staff or impose his viewpoint on

362 Minutes of Press Conference Held by Secretary of State James Forrestal on November 12, 1947, Papers of Stuart Symington 1946-50, Spaatz to Travel, Box 12, HST.
strategy or weapons. Secretary of the Navy Forrestal had argued that the size of the defense bureaucracy was more than what one man could realistically be expected to handle and the Secretary of Defense would have to function more as a facilitator or coordinator. Forrestal was appointed by Truman to be the first Secretary of Defense after the Secretary of War, Robert Patterson, turned down the offer in order to return to the private sector. It was more than a bit ironic that Forrestal would assume the office that he had spent much of his time fighting against.

The National Security Act also created the Office of the Secretary of Defense. The office was originally staffed with 90 civilian employees and 16 military personnel who were tasked with the administrative, budgetary, legal, liaison, and public relations work on behalf of the Secretary of Defense. Forrestal issued a memorandum that informed the three Service Secretaries that they were not to issue reports or recommendations to the Bureau of the Budget or the Congress without “inter-Departmental coordination.” If this could not be accomplished, then the matter would have to go to Forrestal to resolve the problem. Unfortunately, from a weakened position, no Secretary of Defense could effectively solve these problems and, as structured, the National Military Establishment appeared to function like a rudderless ship, and without substantive changes, Truman’s goal of true unification would not be possible.

367 Press release, Progress Report Secretary of Defense from September 17, 1947 to November 6, 1947. Papers of Stuart Symington 1946-50, Spaatz to Travel, Box 12, HST.
John L. Sullivan of New Hampshire replaced Forrestal as Secretary of the Navy and brought with him the aviation perspective that he had from his previous service in the Navy Department. He was a lawyer and a Navy veteran of the First World War and had previous governmental service in the Treasury Department and the Internal Revenue Service. As well, he was sworn in as assistant Secretary of the Navy (Air) onboard the aircraft carrier *Shangri La* (CV-38) as it conducted combat operations off of Japan during the summer of 1945. Joining Sullivan in the Pentagon was Kenneth Royall, who was appointed as the Secretary of the Army. Royall was originally from North Carolina, graduated from Harvard, and served in the army during World War I. During World War II, Royall had been promoted to a temporary rank of Brigadier General and served as the Deputy Fiscal Director, Army Services. Like Sullivan, he was a lawyer and had previous government service.\(^{368}\) W. Stuart Symington was promoted to Secretary of the Air Force after serving as the Assistant Secretary of War for Air. He was the former president and chairman of the Board of Directors of the Emerson Manufacturing Company. He was considered an exceptional supervisor, and had great relations with members of Congress, something that would work to Symington’s favor in the future.\(^{369}\) Of the three Service Secretaries, Symington was the most visible during the unification battles that predated the National Security Act and the strategic debates that followed.

Over the next three years these men and their departments laid out the direction of American defenses for decades to come. In particular, Symington and Sullivan approved the decisions that moved both the Air Force and the Navy to accept the philosophy of an

\(^{368}\) Biography of John L. Sullivan and Biography of Kenneth Clairborne Royall, Papers of Harry S. Truman, President’s Secretary’s Files, Subject File, Cabinet (Commerce-2) –Defense-1), Box 156, HST.  
\(^{369}\) Biography of W. Stuart Symington, Papers of Harry S. Truman, President’s Secretary’s Files, Subject File, Cabinet (Commerce-2) –Defense-1), Box 156, HST.
all or nothing war with the Soviet Union. This single-mindedness was the result of
dwindling budgets and a belief in the efficacy of the bomb, but also a confidence and
conviction that their Service was the best equipped in machines and/or doctrine to bomb
the Soviet Union into compliance. The Air Force and the Navy attempted to create a
force in being that would provide deterrence to the Soviet Union, maintain a first strike
capacity, and be able to fly more strategic missions than their sister Service. As nuclear
weapons evolved into smaller and more powerful bombs, both services continued to
develop aircraft that were designed primarily for the delivery of tactical and strategic
bombs. This emphasis was detrimental to all other missions, and created far more
problems for future generations. Jack Broughton, a USAF combat pilot later wrote that it
was this “ironclad party line of stupid and inflexible tactical ignorance” which in part
created “astronomical and unacceptable fighter losses” during the Vietnam War.\(^{370}\)

MY ENEMY’S ENEMY . . . THE SOVIET UNION

There had been many indications of a growing chasm between the United States
and the Soviet Union dating back to at least the Yalta Conference in February 1945.
Problems relating to the interpretations of wartime agreements between the Western
Allies and the Soviets included the fate of Soviet occupied Poland, Eastern Europe and
Iran. Together, these placed a chill of uncertainty across the globe, led to the Cold War,
and forced the United States to take a more active role in world affairs for the first time in
its history. At a 1942 address at Princeton, his alma mater, James Forrestal had argued
that in the postwar period the United States would no longer “be permitted to discard its

\(^{370}\) Jack Broughton, *Thud Ridge*, With an Introduction by Hanson W. Baldwin (Philadelphia: J.B.
arms and to rely upon the protocols of good faith and general statements of goodwill.” 371 There was no certainty as to how or why a war could break out between the United States and the USSR, and if it did, how that war would be fought. It could be argued that a new war with the Soviets would be waged as the last one had, through the mobilization of industrial bases that would certainly favor the United States. Another threat presented by the Soviets was the massive ground forces they could mobilize. When protected by air units, the Soviets could seek to capture critical areas of production “with a view of holding the populations of those areas as hostages.” 372 Regardless of how the war began, it was presumed that any war with the Soviet Union would eventually involve the exchange of nuclear or other weapons of mass destruction, including chemical or biological armaments.

In late November 1946, United States Army Major General Hugh Knerr, the Secretary General of the Air Board, forwarded a document to Stuart Symington that addressed war with the Soviet Union and argued that the United States had been at war with the USSR since May 8, 1945. It was not a war like the World War that had just concluded, but rather it was a war fought over ideology, and a war that was conducted while “diplomatic relations continue in a formal fashion.” Knerr contended that the Soviet Union was using “the façade of this time gaining maneuver” to maximize their resources and technology to “overtake and surpass” their Western counter-parts. Even more, once the secrets of the bomb were breached, the Soviets would become much more confrontational. In the USSR, the ends clearly justified the means, and they were

372 W. Barton Beech to W. Stuart Symington, June 18, 1947, Papers of Stuart Symington, 1946-1950, K Congressional –M General (Folder), Box 7, HST.
prepared to do whatever it took to win the war of ideology. He also believed that the 
Soviet people were willing to sacrifice, and were intensely patriotic in comparison to the 
average American, whom Knerr saw as “so intensely self-centered.”

Knerr predicated his arguments on what was assumed to be a basic Soviet 
strategy: expansionism with the ultimate goal of world domination. While Knerr’s 
predictions might seem to be a bit outlandish, they certainly were not for the time frame 
that they were created. One must remember that many inside the Armed Forces were not 
will ing to let down their guard lest a new type of Pearl Harbor attack drag the United 
States into a war that some felt America could not win. It is easy to see the anti-
Communist hysteria inside this document and simply disregard it as the work of an 
overzealous career officer who was looking after the best interest of his department. But 
Knerr did not have the advantage of six decades of hindsight to draft his document nor 
the comfort of knowing how wrong it was. It is also doubtful that there were many in the 
Pentagon who were willing to risk this type of catastrophe on the assumption that the 
danger was not real, nor possible, if the United States did not respond in some fashion.

Concern about the international situation was evident at the first meeting of the 
National Security Council in September 1947. A Central Intelligence Agency (CIA) 
b briefing document was circulated that framed the position of the United States in context 
with the rest of the world. The CIA affirmed the belief of many that the Soviet Union 
was the only nation across the globe that was actually capable of threatening the U.S., but 
they also contended that the Soviets lacked the “requisite naval and air forces” to be a

373 Major General Hugh J. Knerr to Stuart Symington, Top Secret Memo, 26 November, 1946, Papers of Stuart Symington, 1946-1950, K Congressional –M General (Folder), Box 7, HST.

374 Minutes of the First Meeting of the National Security Council, Friday, September 26, 1947, Papers of Harry S. Truman, President’s Secretary Files, National Security Council Files – Meetings, Index- Subject to Meeting 13, June 17 1948, Box 203, HST.
direct threat to the continental United States. As a result, the USSR was currently incapable of military action outside of Europe or Asia; however their military forces were such that they could overrun the areas near their own borders without much resistance. It was believed that the Soviets did have a number of bombers that were capable of striking the United States, but these were limited to one-way missions that could “be no more than harassing in effect” but if they eventually attained atomic weapons, these bombers could be disastrous. It was not known for certain if the Soviets currently had nuclear weapons, but it was “considered improbable that the USSR has such a bomb or that it can develop one before 1950.”

CIA estimates placed Soviet industrial capacity to be approximately what it had been in 1939 prior to the beginning of the Second World War, and “certainly no greater,” but there was no longer a balance of power in Europe or Asia to offset Soviet interests. This presented the USSR with an opportunity to take advantage of their position of power against their neighbors. The CIA report did not believe at the time that the Soviets would resort to “overt military aggression in present circumstances” because of the stress that the occupation of Western Europe would place on the USSR. The report noted that open aggression would risk a war with the United States that would result in disaster for the Soviet Union because they would be subject to conventional and atomic strikes, and an eventual amphibious assault. Soviet industrial resources and capabilities were inferior to the United States, and they were not in a position to win a short war let alone a sustained,  

375 The Soviets were indeed able to harness the atomic bomb before 1950 as evidence of a Soviet explosion was detected in September 1949. This and the “fall of China” to the communists was one of the driving forces behind the Truman Administration approving the Hydrogen bomb project. Arnold A. Offner, Another Such Victory: President Truman and the Cold War, 1945-1953 (Stanford: Stanford University Press, 2002), 358.
protracted war against the U.S.\textsuperscript{376} If these estimates were correct, it would play to the strength of the American plans for national defense, the strategic bomber and the atomic bomb, if that was in fact the direction of U.S. foreign policy.

The real threat from the Soviet Union was not overt military aggression against American interests, but in the possibility of the Soviets taking advantage of the economic weakness of Western Europe, that could lead to economic collapse, and the “consequent ascension to power of elements subservient to the Kremlin.” It was felt that the Soviets were monitoring the tough economic times that Western Europe was suffering through, and appeared to be ready to benefit from the situation. The policy of the Soviet Union was to continue to avoid war with the U.S. by “relying on the disinclination of the United States to resort to war on its own initiative.” There was the possibility of an accidental outbreak of war, but it was “probable that the USSR would not intend its provocations to lead to armed conflict with the U.S. and will avoid that result insofar as its intelligence provides adequate guidance.” U.S. policy needed then to prioritize the stabilization and economic recovery of Europe and Asia that would counter and contain Soviet influences across the globe. Meanwhile, it was presumed that the Soviets would continue to prepare for war and work to develop an atomic capability along with strategic and naval forces capable of going to war with the United States.\textsuperscript{377}

These concepts or perceptions about covert Soviet intentions, or the possibility of overt aggression, created a dilemma for advocates of airpower. One could not use the

\textsuperscript{376} Central Intelligence Agency, “Review of the World Situation as it Relates to the Security of the United States”, 26 September 1947, Papers of Harry S. Truman, President’s Secretary Files, National Security Council Files – Meetings, Index- Subject to Meeting 13, June 17 1948, Box 203, HST.

\textsuperscript{377} Central Intelligence Agency, “Review of the World Situation as it Relates to the Security of the United States”, 26 September 1947, Papers of Harry S. Truman, President’s Secretary Files, National Security Council Files – Meetings, Index- Subject to Meeting 13, June 17 1948, Box 203, HST.
threat of strategic strikes to counter economic problems or political instability in allied, friendly, or even enemy states. Still, the evidence presented suggested that while there was not an immediate threat of war, the United States could not sit idly and wait until the Soviets were fully prepared to launch a war, because then it would be too late.

THE UNITED STATES PREPARES FOR WAR WITH THE USSR

Against this backdrop of fear and uncertainty, the American military had begun to prepare for the contingency of war with its erstwhile ally as World War II was in its waning days. On June 10, 1945, a USAAF aircraft flew one of the first photoreconnaissance missions over western and southern Europe. This was just over a month after the end of the war. Reconnaissance missions like these, coupled with electronic intelligence gathering by U.S. Navy aircraft in the Baltic Sea or the Pacific Ocean, were essential to knowing the location of Soviet targets and defenses. It was also understood that if all of the American bombs were delivered in a massive strike, the Soviet Union and their satellite states could be crippled. Unlike Germany and Japan, that had concentrated manufacturing centers easily in range of American aircraft, Soviet centers were scattered across Europe and Asia. Cities such as Moscow, Leningrad, Stalingrad, and Kiev included urban, industrial, political, transportation, electrical and petroleum centers and were included in the target lists. Originally there were twenty Soviet cities targeted for the strategic air campaign, and the defeat of these twenty cities

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would result in the estimated loss of 90 percent of Soviet aircraft production, 88 percent of truck production, 86 percent of tank production, 67 percent of crude oil, and 65 percent of refined oil.\textsuperscript{380} By 1948 the list had grown to 210 cities, seventy of which were deemed to be the most important, and atomic strikes on these targets combined with conventional bombing would eliminate or severely restrict the Soviets’ ability to wage war.\textsuperscript{381} Even if 95 percent of the attacking planes were shot down on the way to the target, the remaining five percent of the offensive force could still cripple the Soviet’s military forces, and lead to the erosion of civilian morale as casualties mounted.\textsuperscript{382} The destruction of the Soviet will to resist was “the fundamental objective” of this potential war, and by destroying Soviet means to resist, the United States would force the Soviets to discover that further pursuit of the conflict would be unprofitable.\textsuperscript{383}

There was a disconnect between American nuclear strategy and the fighting spirit of the Soviet Union, the primary enemy in the fledgling Cold War. The USSR had been decimated by the German invasion in 1941, and the subsequent brutal fighting that took place on its own soil during World War II, but they emerged from the war as the second most powerful nation in the world. The Soviets had endured vicious fighting and a medieval style siege around Leningrad for more than 900 days, and as such, support for Soviet Premier Josef Stalin grew exponentially. Soviet citizens rallied around the communist leader in an effort to save their nation, and it appeared that the spirit of the

\textsuperscript{381} JCS 1952/1, 7.  
\textsuperscript{382} Norman Friedman, \textit{The Fifty-Year War: Conflict and Strategy in the Cold War} (Annapolis, MD: Naval Institute Press, 2000), 75.  
Soviet people was indomitable. Perhaps the greatest example of Soviet tenacity in the face of annihilation was the epic battle for Stalingrad in late 1942 and early 1943. In a battle that raged for five months, more than 99% of the city was physically destroyed and the civilian population of the city on the Volga River had been decimated. In its darkest days, the Germans had occupied more than 90% of the city. Nevertheless, from those meager remains in Stalingrad, the Red Army rallied and launched a series of counterstrokes that led to the ultimate victory at Stalingrad, but at a very heavy cost. Of the more than half of a million people who lived in Stalingrad before the battle, only an estimated 9,700 civilians had survived the epic battle.\(^{384}\) It therefore begs the question, if this battle did not crush the will of the Soviets to survive when they faced defeat, why would an atomic bomb, which could do the same amount of damage, albeit in an instant, have a different result? If the Red Army and the Soviet people could stare down starvation, constant bombardment, and bitter cold to hold onto Stalingrad, would they not be as determined to win a war against the United States and its allies?

By the late spring of 1948, the NSC concluded that the best option for the defeat of “Soviet-directed world communism” was not a defensive policy. Instead it was believed that the United States had to take a lead in “organizing a world-wide counter-offensive aimed at mobilizing and strengthening our own and anti-communist forces in the non-Soviet world.” The first steps in this American counter offensive against the USSR included the strengthening of the NME through conscription of military forces, conversion of the arms industry, and the maintenance of an “overwhelming US superiority” in nuclear weapons. The latter idea could be reconsidered if there were an international agreement on the control of atomic weapons. The priority was to safeguard

Western Europe economically and militarily, as well as to take the appropriate steps to conserve other areas that were threatened by the Soviets internationally, and even domestically. It had to be made clear to the Soviets at the proper time that the United States was determined to oppose them and their aggression, to avoid an accidental war “through Soviet miscalculation of how far the Western Powers might be pushed.” Bipartisan support in the United States was essential if these policies were to be put in place and ultimately be effective.\footnote{Minutes of the 12th Meeting of the National Security Council, June 3, 1948, Papers of Harry S. Truman, President’s Secretary Files, National Security Council Files – Meetings Index-Subject to Meeting 13, June 17, 1948, Box 203, HST.}

THE EVOLUTION AND EXPANSION OF SOVIET DEFENSES

The Soviet military had not sat idly by after the end of the Second World War or cowered in fear of American nuclear or strategic supremacy; they understood that the greatest threat to Soviet hegemony in Eastern Europe came from the air rather than from American or Western ground forces. In 1945 the Soviet air defense system was weak and they had not accumulated the experience of defending their nation against strategic bombers. The German Luftwaffe, with the exception of Stalingrad, had used small and medium bombers rather sparingly against Soviet cities, and did not attempt to use strategic air warfare against the USSR. In the years immediately following the war, the Soviets lacked high performance interceptors that were capable of challenging American bombers like the B-29, or their fighter escorts. They also lacked a radar net that allowed for advanced warning of airborne attacks on the Soviet Union itself. To limit their vulnerability to an American attack and the U.S. nuclear monopoly, the Soviets developed their defenses around three major points, new aircraft built with jet engines, an
expanded radar network that closed the gaps that the Americans hoped to exploit, and they perfected an air defense system based around Ground Control Interception (GCI) of enemy aircraft. GCI linked Soviet fighters to ground controllers who monitored radar screens and vectored Soviet fighters to their targets.\textsuperscript{386}

The Soviets had also taken note of one of the fundamental lessons of strategic bombing campaigns of World War II; the vulnerability of bombers to fighter interception. Throughout the war, tens of thousands of allied aircrews were lost when enemy fighters shot down their bombers. This happened because the Allies could not control the air over the targets, and it was only after the introduction of long-range fighters that they were able to wrest control of the air from the enemy and begin to reduce bomber casualties. The introduction of German jet fighters in late 1944 threatened allied air superiority, but the jets were too few in number and introduced far too late to have a substantive impact on the bombing campaigns. The Soviets were determined not to have such a defenseless position, and began to improve their fighter aircraft to defend the skies of the USSR from American bombers.

The Soviets had limited experience in defending their airspace against waves of high altitude bombers, let alone a single bomber with an atomic bomb, because war on the Eastern Front did not involve high altitude strategic bombing. It appeared that the most effective manner of Soviet defense against an air assault prior to 1945 was their ability to destroy the enemy’s aircraft while they sat on the ground.\textsuperscript{387} The inferiority of Soviet fighters at high altitudes meant that, as the United States planned their postwar


strategic bombing operations, it was assumed that American bombers were virtually invulnerable to Soviet interception because it appeared the B-29s could fly higher, faster and farther than anything that the Soviets operated in 1945. This would not remain the case, and American bomber invincibility did not keep pace with reality as Soviet jet technology took a massive leap forward at the end of the war.

When the Red Army pushed through the remains of Nazi Germany in the spring of 1945, they captured reams of German aviation technology including blueprints for jet aircraft, crews, weapons, and most importantly, designers and engineers. The Soviets were able to use this war bounty to bypass the rudimentary development of their own aircraft designs, and begin producing advanced aircraft and engines based on indigenous or German designs. Among the materials captured by the Soviets were two different types of German jet engines that were put into production by the Soviet Union to power their first generation of jet fighters. Though small in numbers, they had sufficient performance to intercept any existing American bombers between 1946 and 1947. In addition to these aircraft, new generations of Soviet fighters were developed with greater performance than previously imagined. Among the new aircraft was arguably the most famous Soviet jet fighter ever produced, the MiG-15.

The Mikoyan-Gurevich (MiG) Design Bureau began work in 1947 on a new anti-bomber interceptor with knowledge gleaned from German experiences with swept-wing aircraft. Features for operations at high altitudes, necessary for the interception of American bombers, were incorporated into the design, including a pressurized cockpit for

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pilot comfort. An unlicensed copy of a British jet engine, which had been sent to the USSR in 1946, and was manufactured in large numbers, powered the new MiG fighter. The MiG-15s were assigned to air defense where they were directed to protect specific regions or potential targets, were well armed, and could take down any known American aircraft if they strayed into Soviet airspace. By 1950, the Soviet air defense had more than 1000 MiG-15s in service, with another 500 in different departments of the Soviet Air Forces. American knowledge of the new Soviet fighter was limited at first, but it was not a complete surprise, as is often reported, to Western personnel when the MiGs were first encountered over Korea in 1950. Photographs and drawings of the basic shape of the aircraft were in American hands in December of 1948.

Referred to in early 1950 American reports as the MiG-14, the new fighter was thought to have a high speed of 587 knots at sea level and 425 knots at an estimated service ceiling of 47,500 feet. Against this, the USAF presumed that the B-36, which “has a top speed today of more than 350 miles per hour (304 knots) and can fly well

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393 W. Stuart Symington to Mr. James G. Lucas, Scripps-Howard News Alliance, April 29, 1948, Papers of Stuart Symington, 1946-1950, K Congressional –M General (Folder), Box 7, HST.
394 See images in RG-342-FH, Box 343, Still Picture Holdings, National Archives, College Park, MD.
above 40,000 feet” would still be able to penetrate Soviet defenses. Later properly identified, the MiG was first encountered in large numbers by the air forces of the United Nations over Korea in 1950, and its performance was better than expected. It outclassed every American fighter with the exception of the F-86 Sabre and had the ability to disrupt Allied control of the air over Korea. Soviet flown MiGs were so effective at intercepting and destroying B-29s over North Korea that, at the directive of the Air Force Chief of Staff Hoyt S. Vandenberg, the B-29s began night bombing operations to reduce American casualties. One could only imagine how the MiG-15 would have fared against a naval nuclear bomber or even the B-36, with performance only marginally better than the B-29, as they attempted to breach Soviet defenses in an actual war.

On the heels of the MiG-15 was an improved design, the MiG-17, one of the most exported combat jets of all time. The newer MiG featured a different wing, refined fuselage, and an improved engine for performance far superior to the previous model, as it could fly at more than 562 knots at an altitude of 45,931 feet with a service ceiling of more than 54,000 feet. In the 1960s, U.S. pilots over North Vietnam who encountered the MiG-17 learned to respect its abilities as a dogfighter with the capability to repeatedly interrupt American control of the air. Even against aircraft that were faster and more sophisticated, a competently flown MiG-17 could hold its own in aerial combat. Against a slow bomber like the B-36, or the early American naval bombers, it would have had the ability to make repeated attacks on the lumbering prop-driven aircraft and would have

396 “Air Progress: A Presentation by the United States Air Force, Papers of Clark M. Clifford, Subject File, 1945-54, National Intelligence Authority to National Military Establishment—Miscellaneous, Box 11, HST.
398 Statistics are for the MiG-17F, the most numerous aircraft that the United States encountered over North Vietnam in the 1960s. Yefim Gordon, Mikoyan-Gurevich MiG-17: The Soviet Union's Jet Fighter of the Fifties (Hinkley: Midland Publishing, 2002), 16.
disrupted the U.S. attempts to control the air over the target area. Examples of this could be seen in the Soviet response to Allied overflights of the Soviet Union that dated to the late 1940s. These operations over the coastal and polar regions of the Soviet Union had gauged Soviet radar equipment and fighter response time. Several flights were done directly over the Soviet Union and numerous American aircraft suffered various degrees of damage, and a number of them were shot down, including several RB-29s, RB-50s, P2V Neptunes, and at least one C-130. If these had been first strike bombers, the chances of successfully winning the war were greatly diminished. Moreover, there were more advanced MiGs in development in the 1950s as well as several designs from the Sukhoi Design Bureau that eventually had sufficient speed and performance to intercept even the famed U-2 spyplane.

SOVIET RADAR DEFENSES

Concurrent with the rise of Soviet jet fighters and interceptors was the second plank of the Soviet aerial defense capabilities, the radar net. The large physical size of the Soviet Union precluded masses of Soviet defenses against all possible routes to potential Soviet targets. The Soviets, however, could calculate with relative accuracy the approximate direction that USAF land based bombers, either from the Continental United States, the United Kingdom, or other allied bases, would have to attack from. Since all of

SAC’s bombers initially lacked an aerial refueling capacity, their range was limited to direct attacks along the shortest routes to and from the Soviet Union, and therefore, a large number of Soviet air defenses could concentrate on probable ingress routes of the American bombers, and ring those areas with radar units and fighter bases. Naval bombers presented a greater problem to defend against because they could be launched from almost anywhere on the periphery of the Communist bloc. The Soviets would not know precisely the exact routes of the Navy’s heavy attack aircraft, so they would have to expand their radar networks to eliminate all potential routes that could be used by such an attacker.

The Soviets expanded the range and abilities of their radar net so that by 1951, the Soviet early-warning radar system began at the western edge of Eastern Europe and ran around the perimeter of the nation. After the Korean War, the Soviets worked to develop an airborne early-warning radar system that could detect bombers from high altitudes all the way down to sea level. Introduced in 1955, this structure was in place, but fairly primitive in ability. There remained gaps, however, until the Soviet experience with their space program bolstered the ability of both the radar and the crews that operated them.\footnote{Alfred L. Monks, “The Soviet Strategic Air Force and Civil Defense,” in \textit{Soviet Aviation and Air Power: A Historical View}, ed. Robin Highman and Jacob W. Kipp (London: Brassey's, 1977), 229.}

To complement the land and air-based units, Soviet naval forces converted old destroyers into radar picket ships\footnote{“Intelligence Briefs”, No. 7, July 1960, in \textit{The ONI Review}, The Office of Naval Intelligence, Vol. XV, No. 1 to 12, (January to December 1960): 337, OA, NHC.}. These could be deployed to cover the expanses of the Pacific Ocean and the Baltic Sea. By 1962, the Soviets employed more than 5,000 radar sets at over 2,000 different locations, and this provided the USSR with radar coverage of up to 220 miles around the perimeter of the Soviet Union. If American nuclear bombers
overflew any of the Soviets’ allies or client states on the way to the USSR, it was presumed that the Soviet defenses would be alerted and prepared to defend their homeland by intercepting and destroying the incoming bombers. The Soviets would also have advance warning about the coming raids and the critical element of surprise would be lost.

Communist jet fighters would be vectored to the targets by the final plank of the Soviet defense system, Ground Control Interception (GCI). To prevent the ingress of hostile bombers to their respective targets, Soviet radar units would send an alert that would launch interceptor aircraft. Once airborne, a ground controller would direct the Soviet fighters to the intruder and oversee its eventual destruction. Soviet and Soviet-trained pilots were well versed in GCI and North Korean and Chinese pilots proved that GCI was effective even at night. Over Korea, GCI was used to direct MiG-15 fighters against formations of B-29s, even those operating under the cover of darkness. So effective were the interceptions that night fighter escorts were provided to protect the B-29s from the communist fighters.\footnote{Gerald G. O'Rourke, "Korean Knights," in Into the Jet Age: Conflict and Change in Naval Aviation, 1945-1975, ed. E.T. Wooldridge (Annapolis, MD: Naval Institute Press, 1995), 189-193.} It was reported that the “sole mission” of Soviet and Eastern bloc MiG-15 pilots was air defense through GCI interceptions, and they were well trained. They were able to maximize the limited range of their MiGs to disrupt American control of the skies over North Korea.\footnote{Warren Thompson, F-86 Sabre Aces of the 4th Fighter Wing (Oxford: Osprey Publishing Limited, 2006), 32.}

In Eastern Europe, GCI could be particularly effective because of the integration and cooperation of the individual air forces into the larger Soviet defense system. The goal of GCI was to bring as many Soviet defenders against the intruders at a point as far
away as possible from a Soviet target. If the bombers were quickly brought under attack, they could be forced to abandon their mission and turn back, drop their bombs before the actual targets, or they could be destroyed in the air if they pressed on to the target. B-36s that were forced to drop their bombs prematurely or even abandon the attacks minimized the effectiveness of the first strike and the chances of winning the war would drop dramatically.

GCI was not perfect because ground equipment was prone to failure and electronic counter measures (ECM) could disrupt Soviet radar coverage. The system could also be saturated if enough bombers hit the radar net at the same time. The efficacy of GCI could also be minimized if the attackers flew at low level, under the radar coverage. This tactic could work for fast flying jets, but not unwieldy propeller-driven bombers. Arguably, the greatest flaw in GCI, however, was the vast expanse of the Soviet Union that allowed for gaps in the coverage in the early-to-mid 1950s. U.S. or Allied tactical aircraft could also strike the Soviet air bases or radar units at the beginning of a war and cripple certain areas of the GCI coverage. An example of this was the Israeli Air Force’s attacks on Egyptian and Syrian airfields at the beginning of the Six Day War in 1967, where the Israeli jets destroyed most of the enemy air forces on the ground and gave them air supremacy for the duration of the war.\textsuperscript{406} The effectiveness of the Soviet GCI system could be reduced in the event of a full-scale war that ignited spontaneously because confusion would encompass the nation in a cloud of war, and this might allow American planes to sneak through undetected. Aircraft with small radar signatures might be able to exploit gaps in the radar coverage, but extremely large aircraft

are easier to pick up on radar. If the Soviets started the war on their own terms, it was probable that the GCI would be at full strength and ready to take on the B-36.

POSSIBILITIES

Only two years after the end of World War II, the United States was attempting to gear up for what many considered the probability of war with the Soviet Union. The idea of unification and the creation of the National Military Establishment forged a new direction for American defenses. With a monopoly on atomic weapons, and the rise of an independent Air Force that could take the war to the enemy as the wartime experience with Japan had demonstrated, the possibilities of imposing American will on the postwar world seemed limitless. It was understood that the skies over the Soviet Union would be hard to breach, but certainly, it could be done. The substantive cracks in unification, the small amount of nuclear bombs in the arsenal, and the growing Soviet defenses created a much different reality from what was being publicly stated. Unlike the war with Japan, where the enemy was stretched to its limit and in the final throes of defeat, a war with the Soviet Union would be much more difficult to win, and it is beyond reason to assume that they would surrender or sue for peace just because a few targets were hit. Even more, as the late 1940s turned into the early 1950s, the chances of American bombers winging their way to victory over the communist state seemed less likely with each passing year. With President Truman and Congress preparing to open hearings on the role of airpower in 1947 and Truman’s demand to reduce defense expenditures, the cost savings appeal of nuclear bombers was clearly understood.
CHAPTER FOUR
DEFINING THE FUTURE: THE PRESIDENT’S AIR POLICY COMMISSION

We need a much stronger air establishment than we now have. The reason for this is that we can no longer follow our traditional procedure of relying entirely on the Navy as our force in being in peacetime. The President’s Air Policy Commission

On August 6, 1945, an airplane bearing the insignia of the United States Army Air Forces dropped an atom bomb on Hiroshima. Militarily speaking, at that same hour the security frontiers of all nations disappeared from the map. Congressional Aviation Policy Board

After a year of internal conflict regarding service unification and the U.S. defense stature in 1947, there was growing pressure on the Truman administration to formulate a policy for American military and civilian aviation for the future. Grave concerns about the economic sustainability and health of the American aviation industry had been raised already in 1945. As late as 1948, it was apparent that aircraft corporations were not interested in committing scarce resources on new or experimental designs. These might not be profitable if an insufficient number of aircraft were ordered. Truman had attempted to address the concerns of the industry, and appropriate governmental authorities, when he ordered the creation of a committee to examine American aviation. In September 1946 the President issued an executive order to create the Air Coordinating Committee (ACC) whose members included representatives from the “State, War, Post Office, Navy, and Commerce Departments and the Civil Aeronautics Board.” This newly

appointed committee was tasked with the examination of “aviation problems and development affecting more than one participating agency” and “develop and recommend integrated policies” that would coordinate the aviation actions of the United States.\footnote{Harry S. Truman, "Executive Order 9781-- Establishing the Air Coordinating Committee," \textit{The American Presidency Project}, September 19, 1946, http://www.presidency.ucsb.edu/ws/index.php?pid=77956 (accessed February 1, 2010).}

However, the political landscape of the nation changed dramatically in November 1946 when the Republicans regained control of the House and the Senate for the first time since the Herbert Hoover administration. The Republicans changed President Truman’s dealings with Congress as he understood that their views of the economy, domestic concerns, the American presence across the globe, the Containment policy, and defense spending were at times dramatically different than his. This placed additional pressure on the President to further define what the American air policy was going to be in the early years of the Cold War.

Reacting to recommendations from the State, War, Navy and Commerce Departments and the Air Coordinating Committee, President Harry Truman authorized another temporary committee in 1947 to examine aviation issues in greater detail.\footnote{The President's Air Policy Commission, \textit{Survival in the Air Age}, V.} Formally called the President’s Air Policy Commission, it held more than 200 formal meetings between September 8, and December 3, 1947. They were to scrutinize all aspects of the American aviation industry, defense needs, and ultimately report their results back to the President. In his letter to the members of the committee, Truman stated that it was apparent that new aviation technologies had outdated many traditional assumptions on airpower and additional national security concerns had been raised.
Another reason for Truman’s decision to further investigate airpower was political. The Republican controlled congress established the Joint Congressional Aviation Policy Board to consider air policy from their perspective as well as that of the districts and industries they represented. The health of the aviation industry was more than an academic discussion to this board because it was their voters who had been laid off by the large and small aviation companies following the reduction of defense spending since the end of the war. Senator Owen Brewster of Maine and California Representative Carl Hinshaw chaired this congressional investigation. The congressional committee met concurrently with the President’s commission and issued a separate report, but it was assumed that both committees would “work in close communication” with the possibility of “conflicting conclusions.” As both committees began their respective analysis of American air policy, both the Republicans and the Democrats would work towards a conclusion that would embrace a strong nuclear strategy as the preeminent American defense policy and a belief in the efficacy of nuclear strategic air warfare.

THE PRESIDENT’S AIR POLICY COMMISSION

By 1947 it was apparent that the international complexities of the Cold War would impact many of decisions made concerning the procurement of American strategic aircraft and their implementation in the advent of war. The Truman administration was forced to deal with deteriorating relations with the Soviet Union, the rise of communist parties in previously pro-western states such as France and Italy, and the slow collapse of

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the Nationalist Chinese forces in their civil war with the Chinese Communist Party. Against this backdrop, the President’s Air Policy Commission was organized to investigate all aspects of aviation for current and future needs, including commercial air transportation, and “aircraft utilization by the armed services.” The final recommendations of the committee were to go “beyond the limits of any one phase of aviation” and should be so broad in scope and purpose that they “will assist in revising old policies and in framing new ones, and will serve as a guide for formulating a carefully considered national air policy.” For five months, hearings were conducted under the chairmanship of Thomas K. Finletter, a lawyer and former special assistant to the previous Secretary of State Cordell Hull.413 Years later Finletter stated that he did not have the “slightest idea” why he was selected for this position, as he had no previous relationship with aviation or the President. He also added that he assumed that “somebody suggested my name. I don't know whether I had demonstrated any particular qualifications for it, I really have no idea. I can't answer the question.”414 One could speculate that if Truman wanted a committee that would counter the Republican congressional investigation, but also one that would not have much influence on the President’s ultimate decisions regarding defense spending, a relative unknown like Finletter would make perfect sense to chair the President’s Air Policy Commission. Another assumption could be that Truman hoped that an individual with no preconceptions about airpower or which service should be primarily responsible for strategic bombing would make the best choice for the committee.

The editor of the Denver Post, Palmer Hoyt, joined Finletter on the committee along with Arthur D. Whiteside, the president of Dunn and Bradstreet, George Baker and Henry Ford II. Ford resigned from the committee before the work was completed and was replaced by John C. McConé, who functioned as the committee’s advisor on national security. He later served as an Assistant Secretary of the Air Force and director of the Central Intelligence Agency.\(^\text{415}\) Finletter hoped to get Archibald Cox to serve as the Executive Director of the Committee, but the future special prosecutor was not available, and therefore S. Paul Johnson, a Navy captain and former deputy director to the United States Strategic Bombing Survey, filled the position.\(^\text{416}\)

For the duration of the work, the Finletter Commission held court on the United State’s aviation policies, inspected factories, aviation facilities, and even an operational aircraft carrier. They produced thousands of pages of testimony on the future of aviation in America.\(^\text{417}\) Commission witnesses were asked to file statements in advance of their testimony. Other individuals who were not credited with formal testimony provided background information and assistance to the commission, both in oral or written testimony. Because civil air transportation and manufacturing are outside the realm of this dissertation, and have been covered in other works they will not be reexamined here. Focus instead will be on relevant arguments concerning the link between American security, international policy and airpower. Testimony from Air Force and Navy

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\(^{415}\) The President's Air Policy Commission, *Survival In the Air Age*, 160.


witnesses confirmed the belief of those Departments in the efficacy of strategic bombing, and the delivery of atomic weapons, as the most expedient way to win a war.

It should be noted that the Finletter Commission was not the first Presidential examination of airpower in the United States. The first was conducted two decades earlier under Dwight Morrow on order of President Calvin Coolidge in 1925. Secretary of the Navy James Forrestal briefed Truman on the work of the Morrow Board, and forwarded a copy of the report to the President on April 20, 1945.418 The findings of the Morrow Board reflected confusion and disagreements between the Army and Navy about a variety of issues. However the report also stated that “national policy calls for the establishment of the air strength of our Army primarily as an agency of defense” and naval air forces were to be on par with other nation’s naval air assets. The Morrow Board suggested that the air strength of “any particular power should be considered in relation to its anticipated value in the scheme of national defense of that power and in relation, likewise, to the remainder of the military establishment.”419 Unfortunately for the American military in the late 1940s, the belief in the bomb and the ability of each service to deliver that weapon in support of American national policy trumped a balance of power within the Pentagon and created a sense of chaos and disunity at a time when the international situation demanded greater unity of purpose in the name of national security.

THE ARMY’S POSITION

418 James Forrestal to Harry S. Truman, Memo, 20 April 1945, Papers of Harry S. Truman, 249 Misc. (1951) 249 Official (1948), Box 858, HST.
419 Report of the President’s Aircraft Board, November 30, 1925, Papers of Harry S. Truman, 249 Misc. (1951) 249 Official (1948), Box 858, HST.
The opening days of the President’s Air Policy Commission were focused on air transportation, manufacturing, research and development and governmental organization. On Armistice Day, November 11, 1947, the Army Chief of Staff, General Dwight D. Eisenhower opened hearings that dealt with air policy in relationship to national security. It is important to understand the position of the Army in regards to airpower because they represented one third of the Joint Chiefs of Staff, and could sway any decision that resulted from an Air Force versus Navy divide. Eisenhower testified that America was a force for peace and the strength of the United States is a “defense of stability and of order and of peace.” Ike suggested that if the U.S. believed in the ability of airpower to deter war, or in its retaliatory capacity, it needed to be a force in being, not simply one in blueprints, as it takes time to build such a force. The United States faced an attack with World War II weapons, although the offensive capability of an enemy was certainly going to change in the years ahead. Ike argued that it was time to start building the Air Force that the United States envisioned five years hence.420

Eisenhower did not think that the United States needed to have a tremendous force to deter an enemy, but a modern, highly trained force that, in conjunction with the ground and naval forces, supported by a healthy “productive capacity” would be an Air Force that would be “respected elsewhere in the world.” Ike argued that to have an effectual Air Force it needed to be supported in three ways, operations, maintenance, and production, and that the absence of one of those elements meant there was no Air Force. In Europe during World War II, the Army Air Forces lost 25% of its combat force monthly, and if that happened again, he argued that the U.S. “must have a great

productive capacity, or the forces with which you start a war are within three months
impotent, and they cannot be used.”\footnote{Statement of General Dwight D. Eisenhower, Chief of Staff, U.S. Army to the President’s Air Policy Commission, November 11, 1947, RG 220, President’s Air Policy Commission, July 1947-January 1948, Box 15, File B19-1 Eisenhower, Dwight General 11/11, HST. 2255-2259.} The remainder of Eisenhower’s testimony reflected his views on unification, tactical airpower, manufacturing, and overall security. The Army Chief of Staff did not appear to take a stand one way or another on strategic air warfare or the control of atomic weapons. He was the epitome of unification and joint operations; certainly he took an apolitical stand.

The antithesis of congenial Eisenhower was perhaps the most polarizing military figure in American history, General Douglas MacArthur, the Supreme Commander Allied Powers (SCAP) who was headquartered in Japan. MacArthur did not appear before the Finletter committee, citing the pressure of his duties in Japan, however, he had his view forwarded to the commission. A top-secret transcript had been prepared by MacArthur’s senior air commander, Lt. General Ennis O. Whitehead, and after its approval by MacArthur, it was sent to Finletter in November 1947.\footnote{Douglas MacArthur to Thomas K. Finletter, 14 November 1947, The President’s Air Policy Commission, RG 220, President’s Air Policy Commission, July 1947-January 1948, Box 38, File MC4-9 MacArthur, Douglas, General 11/14, HST.} While it was not necessarily MacArthur’s words that were in the statement, it certainly appears to have captured his feelings on airpower, and what it took to win a war in the modern age. Even more, the statement referred directly to the Soviet Union as the enemy that the United States had to be prepared to battle.

Whitehead’s report encouraged the maintenance of an atomic striking force, under the command of a single individual, that was capable of destroying “at least the fifty most important targets in the USSR in a single day.” North American bases had to be
adequately defended so that they could launch their retaliatory strikes within 24 hours. They had to be located “close enough to the targets to save the crews, though not necessarily the aircraft, for future missions” and these sites would change as the combat radius of nuclear armed aircraft increased. Air defenses would have to be strong enough to grind down or minimize the efficacy of an attacking force. Included in these defenses would be an early warning network comprised of airborne, naval, and land-based radar networks with adequate coverage for signal communications to control the protecting forces. A strong air transportation network that was “trained and equipped in peacetime for the support of the Striking Force, the Air Defense Force, and for the essential peacetime military airlift and training of the Army and Navy” was also required. The aviation and weapons industry needed to be fully integrated to support combat and transportation units and the long-range procurement and ongoing research and development of new weapons that included “the maximum development of atomic, bacteriological, and other weapons of mass destruction.”

To implement this program the aircraft industry needed to be properly funded, maintained, and dispersed around the nation in areas that were “remote for avenues of probable attack” yet within the support of the available “transportation, materials, electric power, and personnel.” It was understood that an attack on these areas with “weapons of mass destruction would paralyze our country” and there would be no mobilization of industry or the military as confusion “would be the order of the day.” The only choice left would be to deliver a

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“paralyzing blow against our enemy” that would limit its initial success or the United States would be conquered.\textsuperscript{424}

As it was evident that the only nation that could be considered a major enemy was the Soviet Union, at a minimum, the U.S. needed to have an atomic strike force that could cripple the USSR in one retaliatory strike. The United States needed to have the best nuclear weapons that it could produce, and it must be ready to move for a strike “within a space of a few hours to prevent further attacks on the U.S.” It was noted that the United States could not rely on its overseas bases in the United Kingdom, Western Europe, and North Africa for its immediate retaliatory attacks, and although the U.S. could capture bases in Iceland, it would be problematic. This meant that the American response would be centered from bases in Okinawa, Alaska, Northern Canada and Greenland. The Americans would have to move key technicians and equipment needed for nuclear delivery so the transportation network, including commercial air transportation, had to be secured. The United States had to maintain a vital aircraft industry and ample intelligence of the enemy to provide estimates on their numbers and capabilities. It was further argued that the most “economical means of defense” and greatest deterrent to war was a strong USAF that would have to be supported by all means necessary as rapidly as possible.\textsuperscript{425}

The Soviets were not believed to have the ability or desire to start a war with the U.S. until they were prepared; however, the report warned that it was entirely probable that the two nations could stumble into a war, and, as the United States could not match the Soviets in a ground war, the only avenue to victory against the USSR was through

\textsuperscript{424} Ibid, 3-5.
\textsuperscript{425} Ibid, 5-7.
airpower. The defense of the United States depended upon the Army and the Navy with their respective missions. These included defending bases from ground assault and preserving the sea lanes that were “vital to our National Defense and to our National Economy” as well as being able to drive the Soviet fleet from the high seas. It was recognized that there was not enough money to meet all the needs of the Armed Forces to provide “everything considered by them to be desirable” but victory would remain in the hands of the Air Force to deliver nuclear weapons, and the “maximum effort, insofar as National Defense is concerned, should be concentrated on the creation of Air Power in Being.”

THE AIR FORCE’S POSITION

For the United States Air Force, the testimony before the President’s Air Policy Commission presented a great opportunity to lay the foundation for the future of the USAF. By emphasizing the limited success of unification, the inadequate amount of dollars available in peacetime, the threats again the U.S., and the value of strategic bombers, the Air Force could position themselves as the only agency that could truly defend the United States in the developing Cold War years. The Chief of Staff of the United States Air Force, General Carl Spaatz, testified to the Commission in mid-November 1947. From the very beginning he made it clear that the Air Force would use their opportunities in front of Finletter’s committee to address “the role of air power as a power for peace,” the direct needs of the USAF, and the necessity of a 70 group Air Force. This program was a goal of the USAAF in the months that followed the conclusion of the war and was reflected in the first peacetime budget request and its

426 Ibid, HST, 8.
Spaatz stated that it was definitely possible for an enemy nation to develop long-range bombers with atomic bombs. Because the most likely route to attack the United States from Europe was over the Arctic frontier, it was apparent where the strength of American defenses needed to be. This could be seen as an attack on the Navy’s position for the defense of the United States, as the Canadian landmass prevented American aircraft carriers from cruising into the area that would likely be filled with Soviet bombers in World War III. Although Spaatz would not name the Soviet Union as the primary enemy of the United States in his opening statement, his inference was understood and later confirmed in the very first question he fielded from the Committee that dealt directly with Soviet war production.

Spaatz argued that the United States could not afford to reduce or dismantle its defenses and after “the most painstaking study and careful consideration of our current position in this unsettled world,” the Air Force concluded that “the barest minimum necessary for our national security as far as the Air Force is concerned, is our 70 Group Program.” Each group consisted of bomber or fighter squadrons, and support units that were part of the Air Force command structure. The 70 Groups were to be “reinforced by 22 separate and specialized squadrons” and to accomplish this program, the Air Force needed the cooperation of civilian elements, the Air National Guard, Air Reserve and training commands. There would have to be plans and installations for air defenses and an unrivalled program of research and development. Manufacturers would have to be

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427 W. Stuart Symington to Carl Spaatz, 15 March 1946, Papers of Stuart Symington, 1946-1950, Spaatz to Travel, Box 12, HST.  
428 Ibid, 2340-2343.  
429 Ibid, 2353.
included as well as other necessary industries that would be part of a plan into which “has been put the highest order of wisdom and intelligence of which the country is capable.”\textsuperscript{430}

Spaatz testified that the 70 Groups should be have the best equipment and training that could be provided, and ought to be maintained up to their peace time strength. Because the next war could start with a surprise attack with little or no warning, Spaatz felt that if the United States was to survive, it needed to be able to defend itself through its ability to launch a “quick and paralyzing” strike against her enemy.\textsuperscript{431} The Air Force Chief of Staff then moved on to the last important plank of the Air Force’s total defense program, industrial planning, because it was essential to have “a closer communion of the military and the civil” along with the Air Force and the aviation industry. Good planning and cost reductions, through the agencies created by the National Security Act of 1947, would be able to help the Air Force grow from its current plan of 55 combat groups to be active by January 1, 1948, to the 70 groups as soon as possible. In summary, Spaatz reiterated the need for 6,869 combat and training aircraft for the Air Force, 3,212 for the ANG, and the Air Reserve would need a further 2,360. To keep this up to date, manufacturers would need to annually produce roughly 3,200 aircraft and, finally, more than 8,000 aircraft were to be held in reserve. This force, adequately manned and trained, would allow the USAF to contribute to a joint effort to win the next war. Spaatz said that the Air Force did not believe that a single component of the Armed Forces could win a war, but that victory could be accomplished through a well-balanced approach that included land, sea, and air, under the leadership of a single commander.\textsuperscript{432}

\textsuperscript{430} Ibid, 2343-2344.  
\textsuperscript{431} Ibid, 2344-2349.  
\textsuperscript{432} Ibid, 2349-2353.
In the line of questions that followed, the Committee displayed, arguably, their pro-Air Force bias in sensing a crisis within Spaatz’s testimony. The committee focused on a comparison between the numbers that the Soviets were estimated on hand, versus what the USAF currently had under its existing structure or might have if the 70 Group Program were adopted. Spaatz had testified that the Soviets had nearly 14,000 modern frontline aircraft compared to the total of 12,441 aircraft planned under the 70 Group Program, a deficit that appeared worse when it was revealed that many of the American aircraft on inventory were training planes. The total combat aircraft of the Air Force, including the aircraft of the Air National Guard, was closer to 7,000 or 8,000.\textsuperscript{433}

If appropriations were secured in the next budget, it was possible that the additional groups necessary to fulfill the program could be available by January 1, 1949 and the gap in aircraft could be bridged. Anything less, according to Spaatz, would leave the nation vulnerable. Spaatz further testified that the United States had a year or two before it was possible for an enemy to launch a devastating attack on the United States, but the stronger the United States was militarily, the less likely it was that there would be war. Spaatz also acknowledged something that was not widely known outside of the Soviet Union. The United States had evidence that the Soviets had a couple of interned American B-29s and they were now building their own strategic bombers. The threat of the Soviets having B-29s was evident to all on the Committee.\textsuperscript{434} Not only did the Superfortress have the ability to carry a large bomb load great distances, but, it was the airframe that dropped the atomic bombs. If the Soviets had the bomber and were capable of getting the bomb, the ramifications were potentially ghastly. If mated with atomic

\textsuperscript{433} Ibid, 2367-2371.
\textsuperscript{434} Ibid, 2367-2371.
bombs, the U.S.S.R would have the ability to strike the continental United States on a one-way mission.

SECRETARY OF THE AIR FORCE W. STUART SYMINGTON

Nine days after Spaatz appeared before Finletter’s committee, Air Force Secretary W. Stuart Symington took his turn. General Hoyt S. Vandenberg, an unrepentant defender of the value of strategic bombing and nuclear weapons, accompanied him. Symington had previously testified before the commission September 9, 1947, and opened his November appearance before Finletter’s committee by stating his agreement with Spaatz. As a civilian, Symington did not feel restrained in any capacity during his appearance before the President’s Air Policy Commission. He stated that the first priority for the Air Force was to overcome the desperate need for aircraft, and the importance of the 70 Group Program for national security. Symington stressed that he did not want to be considered an alarmist or a warmonger, but he did believe that the “world was too small to hold two strong nations in peaceful, if not static equilibrium” and it was up to the strength of the United States to preserve the delicate balance of power.435

Symington confirmed that there were true risks in the world, but the Air Force had done the best job that it could to appraise the risks, and it planned to expand to the maximum force level that the economy could support “on the strictest austerity basis.” Because the Air Force was operating under a cost-conscious premise, it was necessary to save money through cooperation, and “by maximum joint use of facilities and by avoidance of duplication.” They also needed to institute procedures that would provide

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435 Statement of W. Stuart Symington to the President’s Air Policy Commission, November 26, 1947, RG 220, President’s Air Policy Commission, July 1947-January 1948, Box 15, File B24-2C, HST, 2510-2512.
the “the essential element of security at the cheapest possible price to the American taxpayer.”\textsuperscript{436} The USAF had to be prepared to immediately launch an authoritative retaliatory strike, which Symington believed was the greatest deterrent to an enemy attack, and be prepared to “provide for the air forces of various types required in conjunction with the Army and Navy ultimately to achieve the objectives of United States national policy.” It was not possible, Symington acknowledged, to maintain absolute strength to accomplish all of these goals during peacetime, therefore it was necessary to assess the risks in the world so that the forces maintained reflected the proper balance between the force in being, and the mobilization capacity of the nation. It was essential that the aviation industry be healthy enough to support the entirety of the mission of airpower in the United States and, as such, sufficient incentives needed to be present to continue progress on greater aircraft. If the minimum force levels were compromised, the Air Force’s ability to protect the United States and simultaneously retaliate would be minimized and he believed that it would seriously endanger the last best hope for peace in the world.\textsuperscript{437}

Symington, as Spaatz had alleged in his earlier testimony, contended that the 70 Group Program was developed to be the minimum force necessary to meet the demands of the Air Force, however, under the current budget projections the Air Force would only have 55 groups in service by January 1, 1948. This was an “unacceptable risk” which could manifest itself in an imbalance in “over-all programs which must provide for our security not only this month and this year, but next year and the years to come.” The solution was the 70 Group Program because it meshed all phases of military aviation,

\textsuperscript{436} Ibid, 2512-2516.
\textsuperscript{437} Ibid, 2516-2518.
including the aviation industries and civilian air assets. For Symington, this did not mean that the Air Force acted alone, and the estimates of force requirements were based upon “the best thought of the Services and the State Department as to the nature and of the risks and obligations attendant upon United States policy” as well as U.S. leadership in the world.438

The Secretary of the Air Force replied that the Air Force could not accomplish this goal under current budgetary constraints, even though the USAF had attempted to economize and “utilize our money to the maximum efficiency.” More funds would have to be made available in the future to even stay at the 55 groups, or the Air Force would have to drop down to 40 groups by the fall of 1948, and reductions would start before the end of the current fiscal year. Symington further argued that if the Air Force believed that it could fulfill its missions with 55 groups, that is what they would have asked for, but he did not believe that the USAF could provide “adequate security to the United States based on the assigned mission of the Air Force by the Joint Chiefs of Staff.” If money were no object, it would take upwards of twelve months to get to 70 groups because of the current poor state of the aircraft industry, and the new units would not be fully trained until the fall of 1948. Symington also testified that because of the shrinking defense budgets, the Air Force felt that it had fallen into disrepair in consideration to personnel and modern aircraft. Symington spoke relatively highly about the cost savings of unification and concluded his testimony after roughly an hour and one half in front of the President’s Commission on Air Policy.439 From the Air Force’s perspective, enlarged funding equaled a greater bomber force that increased American national security.

438 Ibid, 2517-2519.
439 Ibid, 2550-2559.
On Monday December 1, 1947, the President’s Air Policy Commission heard from Alexander De Seversky, the author of Victory through Air Power, and the founder of an aviation company that bore his name. He had published articles in the New York Times during World War II and was one of the most visible public supporters of strategic bombing. De Seversky was convinced that air warfare had progressed into a science and developed much farther than land or naval warfare. The last thirty years and two world wars had altered the technology and aeronautical fields and the knowledge gained was far more valuable than what centuries of development had given the Army or the Navy. Failure to properly prepare an Air Force created a risk that was far greater than in previous types of warfare, and this was proven with the events that transpired in the last war. He argued that scientific data led to his conclusions, not lucky guesses or an artistic flight of the imagination, and this same approach was needed to maximize the money available. If not, the United States would find itself in a weakened position because it could not afford to accumulate all “conceivable weapons for all conceivable strategies” and there was not enough willpower in “high places to use the knowledge acquired at vast cost in life and substance to reduce our strategy to a definite, concrete plan implemented by specific weapons.” The failure to do this effectively scattered our “limited resources on multiple strategies and irrelevant weapons.”

De Seversky was confident of his views because, according to his testimony, he had devoted his life to the study of airpower. He had practical experience in the design of aircraft and their use in projecting power against an enemy state. He was also convinced that if he and his fellow airpower advocates were listened to, they could make the United

\[440\] Statement of Major Alexander P. De Seversky to the President’s Air Policy Commission, December 1, 1947, RG 220, President’s Air Policy Commission, July 1947-January 1948, Box 15, File B25-1C, HST.
States “secure and invincible under the shield of adequate and realistic Air Power.” Unlike the end of World War I, the impact of airpower in World War II was clearly evident and its successful conclusion was brought about because of contributions of conventional aircraft that traced their roots back to the Wright Brothers. All of the belligerents “were on the threshold of revolutionary new conditions of flight and propulsion” and these new jet and rocket technologies had even created the prospect of supersonic flight. This meant that aircraft had transitioned from an auxiliary weapon of an army or navy, to “a new military force of strategic character” and had developed into the most proficient weapon to destroy an enemy’s industrial and resource base, and brought the war to an end. Rapid technological changes meant that the surplus equipment from World War II was antiquated, the Air Force did not want to use it as current equipment and that the United States presently did not have the “Air-Power-in-Being” at all. If the 70 Group Program was implemented, it would complete this goal in a strategic sense, however, the strategic forces needed to be self-sustained. They had to have the assumption of freedom of action that would be capable of denying an enemy its war making ability through the direct application of force.

In a direct assault upon the Navy’s perceived role in the postwar world, De Seversky informed the commission that airpower had now transcended to become America’s primary force to carry war to an enemy state and it had displaced the Navy as the first line of defense. This subjugated the Navy to an “important but secondary role in supporting our Air Force” and in the modern age, land and naval forces had become mere

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441 United States Air Force Captain Charles Yeager had already broken the sound barrier on October 14, 1947, although it would be months before it became public knowledge. Also, Yeager used a special aircraft to accomplish his mission, not a combat aircraft. Walter J. Boyne, *Beyond the Wild Blue: A History of the United States Air Force, 1947-1997* (New York: St. Martin's Press, 1997), 123.

442 Ibid, 2608-2611.
auxiliaries to airpower. Although this went against tradition and “sentimental loyalties” for the older Services, only the Air Force had the capability of guaranteeing victory in a war, and the more independent it was from reliance on the Army or Navy combined with the “maximum autonomy of action,” the greater was the Air Force’s capability to win the war. De Seversky argued that appropriations for the Navy and its programs did not create a “Sea-Power-in-Being” but rather was being spent on superficial improvements that brought the Navy up to date while the Air Force, unlike the Army or Navy, had to be built from scratch and it would take a national effort to achieve the goal.  

To survive in this age, the United States had to have an Air Force in being, not one in planning, and to be the front line of defense, the Air Force had to accomplish this in five years as opposed to the centuries that the Navy had to develop the modern fleet. The time was now to build this force as rapidly as possible. It was also imperative that two main elements, an intercontinental long-range striking force and continental air defenses, had to be maintained. The American strike force needed would be determined by the size of an enemy’s industrial infrastructure and capacity to replace losses. Bases inside the United States were needed because it was not probable that overseas air bases could be defended or supported in the event of war. Any American air base within range of an enemy’s strike force had to be protected or it would be demolished. It would be far too expensive to build a force to defend these bases, so, De Seversky recommended that American airpower should be “independent of reliance on overseas bases and geared for direct attack on the enemy’s industrial set-up from continental United States.”

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443 Ibid, 2611-2613.
444 Ibid, 2612-2618.
directly saying it, De Seversky was staking the ground for the continued development and purchase of the B-36 Peacemaker.

De Seversky stated that he supported unification, however, he further contended that he felt that it was unfortunate it did not completely merge all aviation assets into the Air Force. The Navy should only retain those aircraft that were necessary for the support of the surface fleet. If any aircraft flew a strategic mission and was “capable of sustaining an air battle,” it belonged to the Air Force. If it was designed to “enhance the efficiency of ships and naval task forces” then it belonged to the Navy. The Navy’s plan to get into strategic bombing created such bewilderment that it would “make the confusion at Pearl Harbor seem minor by contrast.” Unlike the Navy, which apparently focused upon three equal components of national defense, De Serversky believed that in the future, it would rest “primarily on a single pillar—Air Power—with the Army and the Navy as supporting elements of its base. He did not believe in the team approach to defense, because not everybody on a football team is capable of scoring a touchdown, and real teamwork “means that the player best able to do a certain job be given a clear field to do it.”445

The aforementioned Air Force testimony, as well as other witnesses on their behalf, continued to link national security to the idea of strategic bombing. In 1947, this was reflected in the power and size of aircraft like the B-36 and nuclear weapons. What the Air Force testimony lacked, however, was the concept of flexibility in weapon systems or strategy and equipment for a limited war. It did not seem important at the time to focus on anything less than a total war with the Soviet Union. The Air Force clearly displayed a bias toward nuclear weapons first and foremost as the solution to

445 Ibid, 2618-2621.
virtually any crisis that threatened the United States. It was this concept and strategy that did not change in the immediate future that led to other aircraft purchases in the 1950s based on their ability to primarily deliver atomic ordnance against Soviet targets. Older aircraft that did not fit the modern concept of strategic air warfare were scrapped or transferred to other air forces across the globe. For example, after Truman’s decision to supply military aid to the Greeks and Turks as part of his containment policy, the Air Force transferred almost 200 obsolete aircraft to Turkey in 1948. There was also strong encouragement from the Air Force and the State Department for the Turks to build airbases that could handle B-29s and allow air strikes at Soviet petroleum production centers in Southern Europe.\

The Air Force approach to strategic air warfare also reflected the political realities of the Cold War on the domestic front, which meant reduced funding for all military branches, especially in regards to conventional forces. The National Military Establishment believed that a war with the Soviet Union would become cost-prohibitive the longer the war lasted. Therefore, the Air Force embraced a strategy that would target and destroy Soviet cities in an effort to create a paralyzing blow to the communist government and its defense apparatus. To be fully effective, the bombs had to be dropped immediately instead of during a long, drawn out campaign that would give the Soviets any form of respite from the atomic assault. However, it needs to be noted that this strategy was only effective if the bombers could actually reach their targets and successfully drop their bombs. If they could not, then the strategy that was being pushed

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so aggressively by the Air Force would not work and the United States would be forced to fight World War III in a far different manner than what they had planned, trained and equipped for.

THE NAVY’S POSITION

Unlike the USAF witnesses who had made the case for the Air Force’s priority in any strategic bombing campaign and American air policy, the Navy had a more difficult time explaining their strategic view of the world and the uniqueness of their mission. If the future of the Navy was in nuclear delivery, they had to be able to sell that mission without sounding like they advocated an inferior or redundant system. Naval experts could not use the Finletter committee as a sounding board against unification, or they would seem obstructionist at the time when Service unity was critical to the President and his view of national security. Instead, they had to define their mission as exceeding traditional operations and link aviation to all aspects of the modern Navy. In an effort to accomplish this goal, the Navy witnesses also came to see nuclear weapons delivery as essential for the health of their Service and the overall security of the nation, and the Navy would make many of the same mistakes regarding policy that they accused the Air Force of doing.

The Assistant Secretary of the Navy for Air, John Nicholas Brown, went before the President’s Air Policy Commission on September 9, 1947, and reiterated the importance of the commission’s work. He reminded the committee of the Navy’s commitment to offer key personnel to testify and the great interest that the Navy had in its work. Brown linked the importance of naval aviation with the victory in World War
II. The overall mission of the Navy that now extended beyond just fleet operations and American airpower was composed of all branches of civil and military aviation. Brown maintained that airpower was the primary feature of national defense, and therefore, all aspects of aviation needed to be funded or subsidized for the overall health of American national security. Brown contended that the budgeting requests of the National Military Establishment were made with austerity as a goal, and not national defense or a strong Navy. Under the terms of unification, the Secretary of Defense would prepare the overall military budget which was supposed to reflect the requirements of all three services, and their strategic needs, instead of the individual departments making appropriations requirements on their own. There was, however, a silver lining to this change. Under a new principle from the Bureau of the Budget, the individual services would get a figure for its budget, and then be able to allocate those dollars as the Services saw fit. This meant that the Navy technically had the discretion to spend their allocated money on strategic plans outside the influence of the other Services. As we will note later, this was not the case.

Brown also testified that the Navy’s mission included the portion of airpower that had “to do with the sea, and the use by the Navy of its mobile airfields, the aircraft carriers, in the quick retaliation of an attack” that Brown considered “one of the greatest roles and missions of the Navy.” He further elaborated that this concept of naval power included the “part of air power which operates over the sea, and from the sea over the land for a reasonable distance.” This meant that many other ships needed to be available

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448 Statement of John Nicholas Brown, Assistant Secretary of the Navy for Air to the President’s Air Policy Commission. September 9, 1947, RG 220, President’s Air Policy Commission, July 1947-January 1948, Box 18, File C2-7 Brown, John Nicholas (Asst. Sec of Navy for Air), 9/9, HST, 230-232.

449 Ibid, 245-250.
to support and protect the carriers, support amphibious operations, anti-submarine warfare and ground support for invading ground troops. For Brown, sea power was “intimately bound up with air power.” Brown also contended that the national security of the United States could be greatly improved if the Navy could secure more funds for aircraft that would also support the manufacturing base of the aviation industry. As succinctly as could be done, Brown testified that the present and future of naval aviation was premised on retaliatory strikes that included missions and weapons systems founded upon the belief in the atomic bomb’s ability to alter or end wars.

FLEET ADMIRAL CHESTER W. NIMITZ, CHIEF OF NAVAL OPERATIONS

On November 13, 1947, Fleet Admiral Chester W. Nimitz, the Chief of Naval Operations, took his turn before Finletter’s commission. Nimitz believed in the offensive capabilities of naval aviation, and that the “self-contained strength inherent in a carrier task force makes it the foremost example of a highly mobile air force capable of prompt utilization when required.” The CNO contended that it did not matter if enemies of the United States did not have fleets with which it could challenge American control of the seas, because the size and scope of the oceans require the United States Navy to be able to protect shipping, provide military support, and ensure economic aid in times of crisis across the globe. If aviation was removed from the Navy, Nimitz warned that they would become a defensive force, and the war that could develop would merely be a war where

450 Ibid, 257-265.
both sides exchanged long ranged attacks on cities and vital installations that would be 
indecisive.\(^{451}\)

Nimitz argued that it was essential that the Navy maintain aviation assets to 
protect the seas from submarines, and have carrier task forces that were necessary to 
provide the offensive firepower that had been proven in World War II. New aircraft and 
missile designs made the postwar carriers far more capable than the ones that had ground down the Japanese navy in the early 1940s. In the future, carrier-based naval aviation 
assaults would begin at “ranges and speeds greatly in excess of those of the past, 
unhampered by past limitations of their striking power” and that because the Navy 
operated in international waters, it did so “without infringement of the rights and interests of other nations.” The CNO testified that he was committed to see that all naval aviation units, both carrier or land-based, were “equipped and trained to make the best use of all new weapon developments of the future, which are adaptable to the aviation arm of the naval service.”\(^{452}\)

Chairman Finletter asked Nimitz if he envisioned elements of naval aviation being part of the total strike force that would be launching counter attacks against an enemy in the event of war. Nimitz reminded the chair that all aspects of naval aviation were vital to the mission of the Navy, and not a separate entity, and he could not distinguish nor accept the idea that naval aviation was part of the Air Force in any capacity. Previous testimony had raised that issue and Nimitz clearly stated that he considered naval aviation “as a part of the Navy.” He regarded the Navy, the Air Force,

\(^{451}\) Statement of Admiral Chester W. Nimitz, Chief of Naval Operations to the President’s Air Policy Commission, November 13, 1947, RG 220, President’s Air Policy Commission, July 1947-January 1948, Box 15, File B20-1 Nimitz, Chester W., Admiral 11/12, HST. 2276-2278.

\(^{452}\) Ibid, 2278-2283.
and the Army as separate legs on a stool, “each one has a definite and distinct mission to perform, definite and distinct responsibilities that have been prescribed in the National Security Act of 1947,” and each service needed to be capable of carrying out its respective missions. Later, Nimitz was questioned about the danger that faced the United States at that time and whether or not it justified greater expenditures of federal dollars in peacetime. Nimitz replied that he felt that, in the short term, the United States was safe from attack by a foreign power for a period of four or five years. He also felt that with the passage of time, the danger would be lessened as “common sense will pervade the world” and although we might be safe from an immediate attack, there was still the possibility that sabotage constituted “a greater danger at the present time than any attack from without.” Nimitz had faith in the future, “but I would want to pack my gun.”

SECRETARY OF THE NAVY JOHN L. SULLIVAN

The Secretary of the Navy had his opportunity to speak to the Commission on December 2, 1947. Sullivan recognized the gravity of the work that Finletter’s committee was tasked with, and its importance to national security could not be exaggerated. National security, health of the aircraft industry and improvements in aviation across the nation were important to Sullivan, but the defense of the United States was the most vital. Because the commission focused on the international situation, Sullivan stressed the enormity of the Navy’s role in defending the nation in the past, and stated that “we now owe to ourselves and to the world, the assurance beyond all reasonable doubt that we will never again let our defenses deteriorate to the point of inviting a third global war.” To face the challenges to peace in the world, Sullivan

453 Ibid, 2283-2301.
reminded them that no one could put a price on how much American security was worth. If there were serious concerns about the “prospect of ensuring peace with the measures we have adopted, we do not have enough security.” Sullivan argued that the scope of the Navy’s function in providing defense “in the event of any miscalculation of the balance between risk and security” should prevent a further draw down of the air and sea power provided by the Navy. Any economic savings at the expense of the operating strength of the Navy would only be a “minor economy when measured against our total cost of government.”

Sullivan testified that the current composition of the Navy was designed for peace, and it was prepared to be a force for stability in an anxious world. It had the capability of providing surveillance across the oceans, protect the sea lines of communication, and guarantee the historically important control of the sea that was vital to the survival of the United States. The Secretary of the Navy did not consider control of the sea to be an anachronism in the modern world, nor would it be irrelevant in the future. The Navy needed to be a strong force in being to prevent or deter any premeditated attack upon the United States. It could then prevent any invasion or, in conjunction with the rest of the armed forces, discourage an “inadvertent act of war.” Properly constituted, a strong Navy meant that the future war would be fought on foreign waters and over the enemy’s land and air, rather than over the United States.

Sullivan believed that the future of the Navy depended upon a national understanding of its traditional, yet vital role in protecting the seas. To continue into the

454 Statement of John L. Sullivan, Secretary of the Navy to the President’s Air Policy Commission, December 2, 1947, RG 220, President’s Air Policy Commission, July 1947-January 1948, Box 17, File B26-3, Navy, Dept of (Sullivan) 12/2, HST, 2690-2692.
455 Ibid, 2692-2693.
future, the USN needed adequate training, enhanced technological skills of sailors, improved aviation and shipping industries, as well as ongoing research and development. This required the Navy to avoid “reliance upon old techniques and old weapons to the exclusion of new ideas and weapons” and the “abandonment of all of the old ideas and weapons in behalf of new and untried ones.” With this statement, Sullivan began to take aim at the strategic bombing myth that was being perpetuated by others in the press, the military, and by politicians enamored with the atomic bomb. Sullivan attacked the belief that the Navy was obsolete in light of new developments by arguing that, throughout its history, the Navy had developed new defensive techniques, weapons and strategies that had “offset and neutralized’ new factors of offense, including kamikaze suicide attacks on naval ships.\footnote{Ibid, 2695-2702.}

The postwar reductions of naval strength had been conducted to reflect the minimum forces necessary for peacetime operations, but Sullivan cautioned the committee that further reductions were being done to cut defense costs at a time when the international situation was deteriorating along with the strength of the Navy. Sullivan made it clear that the “major striking force of a modern Navy” was represented by carrier aviation. If the Navy did not maintain any aviation assets or deemphasized its airpower role, Sullivan believed that the nation would be lulled into a “false sense of security that might be calamitous since land based air alone cannot exercise the necessary continuous surveillance of the sea lanes.” To cement his point Sullivan cited the role of naval aviation within the British Royal Navy and the lack of an equivalent force for the German Navy, that handicapped Germany’s ability to win the Battle of the Atlantic. On the other hand the Japanese naval air forces had allowed the Japanese fleet to remain dangerous
and effectual until its air element was eliminated. Postwar interrogation of surviving Japanese naval officers indicated that when they were forced to rely on surveillance information provided by their army, the information was “entirely misleading, and consequently worse than none.” For the Secretary of the Navy, it was evident that a navy “without naval aviation under its own control is really no Navy at all.”\textsuperscript{457} Since the USAF believed that it should be responsible for reconnaissance of the approaches to the United States, Sullivan’s point cemented the concern that the Navy had about relying upon another service for critical information in a time of war.

Sullivan stressed that with carrier sorties, the United States did not need to resort to diplomatic channels to begin missions that were requisite for land-based aircraft, because all the materials necessary for combat operations were carried by the aircraft carriers. These could move at will, off an enemy coast, in any weather, and conduct operations without having to assault or conquer enemy territory to establish an air base. This allowed the Navy operate with secrecy and surprise against an enemy. Then Sullivan focused on the Cold War and stated to Finletter’s committee that the United States had occupation forces in both Europe and Asia. If war should come, it would be necessary to “evacuate, reinforce, or abandon them.” If they were to be withdrawn, only naval forces were in a position to do this as they could provide their own air superiority over the contested area. Sullivan argued that the time was now to adequately “support our overseas forces” or the United States would be “obliged to write them off” as had been done to some American forces at the beginning of World War II. If the United States waited until war came, it would be too late.\textsuperscript{458}

\textsuperscript{457} Ibid, 2703-2706.
\textsuperscript{458} Ibid, 2712-2715.
Sullivan did not believe that the American people would support a long war of attrition and if the enemy used guided missiles or atomic bombs in the future, it was incumbent upon the Navy to capture the enemy airbases or missile sites, and put them out of service. This would not be possible, however, if the Navy did not have “highly developed carrier task forces” or the ability to support amphibious operations as they had done in the Pacific during the Second World War. When asked if he agreed with the idea that “defense which is necessary is not only the usual technique of defense but also the counter-offensive which should be as immediate and violent as possible” Sullivan replied in the affirmative.\(^\text{459}\) He did not directly address the issue of naval control of nuclear weapons, nor was he asked about it. As well, he did not appear to be a critic of the Air Force or its idea of strategic air warfare. Instead, Sullivan presented the need for a modern navy and the tools that made that service effective in these early years of the Cold War.

ARTEMUS L. GATES

Artemus L. Gates, the former Assistant Secretary of the Navy for Air, and the Under Secretary of the Navy for the last six months of World War II, had his time before the Finletter committee on December 3, 1947. Gates attempted to frame his testimony as an individual who had been sitting on the sidelines during the previous years’ battles over unification and strategy. He immediately addressed his concern over previous testimony that emphasis on the Air Force, and its needs, overshadowed or minimized the requirements of naval aviation. As Nimitz had done before, Gates stressed the need to strengthen all three branches of the National Military Establishment and not weaken

\(^{459}\) Ibid, 2715-2716.
carrier-based aviation because it was important to the nation and was the backbone of the Navy. Gates also added that he could not support a program benefited the Navy at the expense of the Air Force, or created an imbalance.\textsuperscript{460}

It was imperative to Gates that he brought attention to the Navy’s concern over a single weapons system and strategy. He pointed out “that the adoption of a single weapon or type of weapon restricts our own freedom of action and greatly simplifies the enemy’s problem of countermeasures.” Gates believed that it was most beneficial to have the Air Force and the Navy coordinate in areas of common interest, which would lead to mutual benefits. It was up to the Secretary of Defense, therefore, to determine if there was redundancy and to develop a plan to eliminate the duplication. Gates cautioned, however, that there should not be an attempt to consolidate all or most aircraft into the USAF “just because it happens to be the official air arm of the military establishment.” Gates then alleged that it was unsafe to restrict any of the Armed Forces on “how it should perform its mission or to arbitrarily limit it in its use of the weapons it feels it needs.\textsuperscript{461}

Under cross-examination by the commission, Gates was asked specifically about the offensive role of the Navy beyond anti-submarine warfare. Gates replied to the loaded question that he felt that the striking power of a carrier task force was “one of the strongest offensive roles we have in air power today.” He also hoped that the American public and the Congress would not come to the conclusion that the “Air Force is completely responsible for the development of aviation. The Navy has its problem and it must be recognized, and there must be some balance” between the two services.

\textsuperscript{460} Revised Statement of Artemus L. Gates to the President’s Air Policy Commission, December 3, 1947, RG 220, President’s Air Policy Commission, July 1947-January 1948, Box 17, 12/3, HST, 2743-2744.
\textsuperscript{461} Ibid, 2744-2748.
Previously, Gates had testified that the single weapon theory that the United States appeared to pursue was the equivalent of the Maginot Line kind of thinking that had doomed the French war effort in 1940. Asked to clarify what he meant, Gates responded that if too much pressure “is brought on any one arm of the service and it is developed to the detriment of some other part of the service, we might get out of balance” in regards to the responsibilities of the Air Force and the Navy.⁴⁶²

After answering a few more questions about land-based planes for the Navy and the possibility of duplication, Gates’ time with the committee was over. He had stated very clearly that he believed in the offensive capacity of the Navy, not just for the good of the service, but in the overall defense of the nation. Unfortunately for the immediate future of the Navy, they would become caught in the belief in the efficacy of nuclear strikes, and saw their future in the wings of carrier-based strategic and tactical nuclear bombers that would strike unannounced from the sea.

THE SECRETARY OF DEFENSE

The Secretary of Defense, James Vincent Forrestal, began his turn with the President’s Air Policy Commission at 3:10 p.m. on Wednesday, December 3, 1947. For the Commission, Forrestal’s testimony was important because he was the face of unification, as well as the former Secretary of the Navy. Forrestal’s opening statement addressed the link between foreign and domestic policy with national security. In light of the changes in the world around him, Forrestal suggested that the United States was in a difficult position because as “a democracy we do not start wars and therefore can never

⁴⁶² Ibid, 2750-2757.
be in a complete state of readiness” in the event of war. This meant that the United States is “energetically engaged” in seeking all avenues for peace and prosperity across the globe, including leadership within the United Nations, and funding for the World Bank to help reconstruct the war-torn nations of the world as well as occupation of the former Axis nations of Germany and Japan. Forrestal contended that because of the importance of the UN as the “keystone in the edifice of peace which the world is trying to construct” he hoped that one day they would be able to have “not only universal control of atomic power but also world-wide control of arms.” Forrestal also understood that this was not immediately possible because it was premature to discuss disarmament or “to take steps which would reveal the secrets of atomic power, on the part of this country.” Forrestal then transitioned into the composition of the United States military. He believed that the best way to avoid war was to have all enemies understand that the risks of war with the United States outweighed any of their advantages. Strength, not disarmament, offered the greatest prospect of peace, for one does not “eliminate criminals and crime by disarming the police force.” In the past, the United States had invited aggression through neglect of the Armed Forces and therefore it now had to use its military strength “as a force for peace.”

Forrestal next tackled the issue of unification by reminding the committee that he had only been in office as Secretary of Defense for approximately two months, and it was too early to gauge the full impact of unification on all aspects of the military, as it would take years for that to be accomplished. The creation of a permanent Joint Chiefs of Staff greatly enhanced the ability of the Armed Forces to coordinate strategic plans throughout

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463 Statement of James V. Forrestal, Secretary of Defense to the President’s Air Policy Commission, December 3, 1947, RG 220, President’s Air Policy Commission, July 1947-January 1948, Box 17, File B27-2, Defense, Secretary of (Forrestal) 12/3, HST, 2761-2764.
the National Military Establishment, and promote greater teamwork and balance among the military departments. The NME would have to continue to have this benefit as it examined the ever-changing trends in the future of warfare. Forrestal argued that the United States had to avoid a singular weapon approach to national defense, even if it played a tremendous part in the last war. Forrestal toed the administration line on unification, but in a somewhat convoluted manner, the Secretary of Defense defended the Navy’s position against a single weapon defense system.

When Forrestal transitioned into airpower, he felt obligated to mention the clarity of his view that the United States needed to have “air forces sufficiently powerful to protect its own security and territory and sufficiently powerful and versatile to be capable of making swift and effective counterattacks in the event of war.” This would take years to develop, and needed to be under constant revisions about the numbers of aircraft that were needed. Forrestal stated that he believed that the United States needed to prevent the decay of its aircraft industry, and in turn, its airpower assets. Forrestal noted that the early jet engines created many problems including with fuel, limited payload, power, and strategic uses. The evolution of jet-powered aircraft would take some time before they would eventually eclipse piston engines. Forrestal cautioned that the United States could not “go all out for jets and scrap our existing piston engines for the simple reason that we do not have production available yet for manufacturing jets on a quantity basis.”

Forrestal also informed Finletter’s committee that geographically, “the task of the air components has of course increased since the close of World War II” and that while air operations in the former war were conducted across the globe, the “future conflict might extend over an even greater scale, such as operations in colder regions.” Forrestal most

464 Ibid, 2765-2767.
likely referred to planned strategic flights over the Polar Regions to strike at the heart of
the Soviet Union, as it was the shortest distance from the United States to the USSR. He
further contended that unlike in past, the United States had to address the defense of its
land “in view of the development of guided missiles and jet propulsion, and therefore the
defense of our shore does and must play an important role in planning.” 465

After a brief discussion about the aviation industry and the impact of aircraft
procurements on it and ongoing research and development, the Secretary of Defense
moved onto national security. Forrestal testified that national defense did not solely
mean the protection of the United States, or “even the Western Hemisphere alone,
because the prerequisite for world peace is world stability” which directly impacted U.S.
national security. American interests were at stake in Western Europe, the Middle East,
and on the high seas. The administration and Congress had made commitments to
Turkey and Greece, and continued their ongoing support for the “faltering government of
China” and the “restoration of Germany and Japan to the status of nations.” 466

Finletter later asked the Secretary of Defense for an explanation about the level of
consolidation in the Armed Forces and whether or not this would happen in the distant
future. He further queried Forrestal about what would eventually result from the National
Security Act of 1947. Forrestal corrected Finletter by stating that what he meant was
actually integration in “terms of procurement, the common use of services, elimination of
unnecessary plants, and equipment in the interests of getting more for your money.” He
also reminded the committee that it was difficult in these times to have adequate security
of the United States and he felt that it was the greatest disservice for the U.S. to “be under

466 Ibid, 2778.
the impression that new weapons, whether they are atomic bombs, long-range airplanes
or new types of submarines, can give us an impervious and permanently unassailable
security. There is no such thing.  

DRAWING TO A CLOSE: THE END OF THE WORK

At the conclusion of the testimony on December 3, 1947 the committee began its
work on drafting the final report. What was evident from the testimony presented was
the focus of the USAF witnesses on the 70 Group Program and the value of strategic
bombers. Supporters of the Navy, on the other hand, appeared to be a bit disjointed in
their approach to the committee and what was truly needed for national security. Many
appeared to focus on what had been the role of the Navy versus what the role should be
in the immediate and long-term future. To some, it appeared that the Navy’s position
was to prevent a drawdown that benefited the Air Force. The approach of the USAF, on
the other hand, involved a polite denigration of the other services’ view of warfare as
relics of the past or a mere attempt at duplication of the superior strategic air warfare
model pursued by the USAF. In the age of cost consciousness, the Air Force successfully
portrayed their view as a fulfillment of unification, cost-effective, and the only true
offensive and defensive service in the Atomic Age. The Air Force was far more
successful in creating the demand and need for a new direction of national security in the
future. It was a future built upon the stately bomber and its inherent ability to bomb an
enemy state not back to the Stone Age, but out of existence.

Perhaps a greater concern for the long-term national security of the United States
was the coverage of the committee hearings. While not all testimony was presented

467 Ibid, 2787-2789.
under the lights of public scrutiny, much was, and the final report carried much of the ideas, if not the practice, of American defense plans for the immediate future. The administration, the Congress, and the American public, along with potential allies and enemies, were well apprised of the numbers of aircraft currently on inventory, and the contemporary manufacturing capacity of the U.S. Still, the media coverage of the committee hearings was favorable to the work of the Committee and the thoroughness of their investigation.

SURVIVAL IN THE AIR AGE

Published on January 1, 1948, the President’s Air Policy Commission’s report, entitled *Survival in the Air Age*, was released to the press and the public at the cost of 75 cents per copy. Recommendations listed in the first section of the 166-page document dealt with the priority of Truman’s charge, and the committee’s primary responsibility, namely airpower and national security. It should be noted that while the President requested this work to be completed, there was no obligation that he would follow its advice. The report also did not provide for the substantive funding needed to fulfill the recommendations in the era of Truman’s austere budgets, nor did it make allowances for the traditional defense of the United States, or the refuge of isolationism. It boldly suggested that world peace and the safekeeping of American interests at home and abroad were one and the same.

The committee made the assumption that America could not count on the United Nations to secure lasting peace except as the basis of “free communications throughout the world.” The Commission challenged the premise that disarmament was an avenue to
peace, and suggested that it was only through maximum force that America could prevent an attack on its interests at home or abroad. The ability to launch an overwhelming counter-strike at the “earliest possible moment” would be the basis of American defenses. This required the United States to be prepared to fight World War III and not the last war. The report added that it was not the arsenal of weapons or military strength that created a lasting peace, but military superiority that allowed the United States to defend itself against aggressors.\textsuperscript{468}

To prepare for the difficulties of the immediate postwar years, the Committee recommended that the United States be prepared to win an arms race with any potential enemies, and American defenses were to highlight strong naval, ground, and air forces. Special emphasis was reserved for the USAF and naval aviation resources because the nation could not afford to have second-rate air forces that in the event of war were “almost as bad as none.” To the chagrin of the President, the committee acknowledged that for this plan to succeed it required substantial funding immediately, and into the future. In fact, it stated “self preservation comes ahead of economy.” There was evidence presented that between 80 to 85% of the federal budget was used to pay off past wars and provide for contemporary defense. Supplementary funding was needed, and the committee felt that it was not extravagant, as they had scrutinized the military’s testimony and concluded that the additional dollars were necessary for national security.\textsuperscript{469}

The committee concluded that overwhelming airpower was the basis for national defense. It needed to be stronger than it currently was and the commission felt that there

\textsuperscript{468} The President’s Air Policy Commission, \textit{Survival In the Air Age}, 3-7.
\textsuperscript{469} Ibid, 8-9.
would be insufficient time to build up forces necessary to win the next war. Naval supremacy could no longer guarantee American security because enemy airpower could bypass the seas and attack over the polar ice caps to strike the American heartland. It was realized that the United States could not maintain its monopoly on nuclear weapons, and therefore the potential danger of these strikes could not be underestimated. There was no way to accurately determine when an enemy would have nuclear weapons although it was possible that could be accomplished by the end of 1952. This required that the United States have maximum forces, at this time, to prevent an atomic or even biological attack on the U.S. The military should be prepared to use not only weapons of mass destruction but also more powerful conventional weapons that were still effective as “the cities of German and Japan testify.”

Finletter’s committee recognized in the short term that no nation had the weapons necessary to impose air supremacy over the United States, and the most dangerous weapons that the enemy had were bombers that were reduced to one-way missions against the United States. The report suggested that currently the enemy planes were “relatively slow compared with the supersonic planes of the future and were subject to interception by the faster moving jet fighters and in other ways.” This is an incredibly ironic statement at this juncture, because the same time as *Survival in the Air Age* was being released, the USAF was preparing to purchase large numbers of piston-engined B-36 bombers that had a performance envelope that was not much greater than the B-29s.

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471 This is a reference to the TU-4/B-29 aircraft that were entering operation in the Soviet Union. The United States intimately understood the performance capabilities of the B-29 and the effectiveness of one-way suicide missions from the wartime experience of dealing with Japanese Kamikazes.
472 The President's Air Policy Commission, *Survival In the Air Age*, 16.
It was only two years later, during the Korean War, that the folly of slow, prop-driven bombers attempting to attack enemy targets in the face of jet fighters became evident. The commission acknowledged that there was currently little concern about enemy use of sabotage, or preplaced weapons in the event of war, but guided missiles were a threat because they could not be intercepted. The committee assumed that by January 1, 1953, an enemy would be able to attack the United States with atomic weapons from supersonic and subsonic bombers and long-range missiles that would come over the Arctic. This reality compelled the committee to recommend that the U.S. be fully prepared to defend itself against this contingency by 1953. There was a sense of urgency because the National Military Establishment could not count on a long build up to the war as had happened during both World Wars. While there was the possibility of blundering into a war, it was understood that previous wars had been started because of aggression, and once the U.S. monopoly was abridged, an enemy would take advantage of this and begin the next war.473

Knowing this possibility, the President’s Air Policy Commission recommended that the U.S. maintain sufficient force not only for defense, but to also take the war to the enemy. The current composition of the Air Force, 55 groups, was considered insufficient to accomplish all the missions assigned to the USAF, and it was recommended that the 70 Group Program be adopted. This would provide at least 700 strategic bombers, a minimum number of interceptors, an effective early warning radar network, and support from an active Air National Guard and Air Force Reserve system. The United States could not simply rely solely on radar as a defense, because it could create a mentality that was defensive in nature and not offensive. To counter this, the committee stated that the

473 Ibid, 19-23.
best defense against atomic attack was “the counteroffensive striking force in being.” It was noted that the number of bombers to accomplish this was fairly small compared to the roughly 14,000 conventional bombers of the USAAF and the Royal Air Force in the European theater of World War II but the new bombers would use “the best equipment and the latest techniques” to succeed. The Air Force would have to have substantial expenditures to build up its forces to the necessary levels by the beginning of 1953, although they would be able to use the surplus equipment remaining from the last war to accelerate the process.\footnote{Ibid, 20-27.}

The Finletter committee saw the USAF as the main striking force of the United States, and truly the only force in being, that was truly necessary to both prevent and win a war. The Navy, according to the report, would face a far different future than its traditional missions of the past, because enemy states did not maintain large surface fleets, the Navy would have to transition into a department that provided the means to take and occupy bases near enemy shores with which ground and air operations could commence. Carrier aviation was necessary until sufficient bases were secured that would provide land-based air support. The Navy would also have to keep the sea lines of communication open, and needed adequate air assets to accomplish that mission. New aircraft types would need to be procured and funding needed to build the required aircraft, or the United States would “face the danger of seeing our great carriers tied to the docks because of lack of planes.” The report did not address the role of the Navy in strategic or other air based offensive operations against an enemy state.\footnote{Ibid, 27-28.} Survival in the Air Age did not list new aircraft carriers as a priority or, in fact, at all and this oversight
would be amplified in the two years that followed the release of the report. With recommendations on aircraft manufacturing, research and development, the President’s Air Policy Commission clearly downgraded the overall mission of the Navy, and much to the fear of the Navy Department, funding would become problematic as more defense dollars were allocated to fulfill the 70 Group Program that had been endorsed by the committee. This would be another reason for the Navy to continue to develop a strategic air mission that would provide for a portion of overall defense funding.

NATIONAL AVIATION POLICY: A REPORT OF THE CONGRESSIONAL AVIATION POLICY BOARD

Two months after the release of *Survival in the Air Age*, the Congressional Aviation Policy Board released their report. Much smaller than the former document, the Congressional report was based off much of the same testimony that was given before the Finletter commission to save “time and expense by Government and witnesses alike.” It had been created in July 1947, and had its first meeting in September of the same year. Senator Owen Brewster of Maine who had famously taken on Howard Hughes over government contracts during World War II chaired it. California Representative Carl Hinshaw served as Vice Chairman and was the highest-ranking House member on the board. Both men were Republicans and theoretically could counter the work of the Democratic President’s commission, and come to separate conclusions concerning airpower and its application in the defense of the United States. But the Board also took a decidedly pro-Air Force approach to their work and acknowledged that there were extensive differences in policy between the Navy and the Air Force over future procurements and missions. While this seems at first to be a statement of minimal
substance, the truth was that it was a major fracture in the unified defense that Truman wanted and would lead to far greater problems in the immediate future. Unfortunately, it appeared that the answer to these problems was a force structure that was based upon the application of nuclear weapons delivered by the respective services.

As had been stated in *Survival in the Air Age*, there was a belief in Washington, from the White House to the Pentagon, and even Capitol Hill, that the next war would begin without warning. This would be catastrophic to the cities and production centers across the United States. Traditional defenses would no longer be sufficient to protect America, and therefore, vast changes needed to be made immediately to begin preparing for World War III. Stockpiling of weapons of mass destruction “in quantity, and the means to deliver them in overwhelming force, if attack comes, is judged the best and surest protection against defeat and slavery.” Effective air policy for the United States dictated a massive effort of civilian and military agencies to prepare for war, because it was folly “to pretend that this world does not live under a sense of impending tragedy.” New weapons in the hands of American enemies made the next war “an open invitation to annihilation.” The report suggested that that answer to this quandary was “a Magna Carta of world defense, a ringing declaration of moral challenge to match the danger. This should come from the united voice of the major powers implementing their joint will through the United Nations.” It did not appear that the Congressional board believed that the U.N. would actually be able to accomplish this goal. Because the Brewster Board was only interested in securing American freedoms, “the United States has no other course to follow but to maintain such a military air force and civil air effort that no sudden attack upon American people can succeed” and the American response would
result in “swift and awful retribution in overwhelming volume with effective and
devastating weapons.”476

The recommendations of the Congressional Aviation Policy Board virtually
mirrored the counsel of the President’s commission, but the Brewster committee took the
Joint Chiefs of Staff to task for not supplying a unified defense plan at the request of the
committee. It was understood that it took time for missions, aircraft, procurement, and
target assignments to be created and it was essential that this work be accomplished as
expeditiously as possible. Frustration was expressed that this type of study had not been
conducted since the end of World War II, and the committee was “at a loss to
understand” why this was the case. It was also evident that service representatives of the
JCS were not working for unification, but for their own service missions, but this was
detrimental to the overall security of the United States. The JCS, the Secretary of
Defense, and even the administration, shared the blame for this. In particular, the
strategic differences between the Air Force and the Navy were the result of conflicting
legislation, Executive Orders, and the National Security Act of 1947, over service
missions. The committee suggested that the USN appeared to interpret the laws in such a
way as to allow the Navy to develop any weapon and delivery system that it wanted,
including atomic weapons. The Air Force countered the Navy’s interpretation of the laws
and orders to see their exclusivity to the nuclear role at the expense of the Navy. The
Brewster Board recommended that clarification on roles and missions was essential to
make the National Military Establishment far more efficient.477

477 Ibid, 6-7.
Because there was not a unified plan of action, the committee attempted to view airpower under recommendations made separately by the Air Force and the Navy under the idea of “Plan A” and “Plan B.” The former included the 70 Group Program recommended by the leadership in the Air Force, and more than 14,000 aircraft for the Navy. Production and procurement would level off in 1953, and a more moderate program that would follow this point. Plan B was essentially the same idea of preparation without the maintenance of the reserve aircraft, and would take one more year than Plan A to be implemented, before the United States had a force ample enough to withstand a crippling attack on the U.S. It would also provide a “strong Territorial defense” as well as an immediate, but not sustained, offensive retaliation. Without mincing words, the Brewster board also stated the “primary objective of modern warfare is no longer the armed forces of the enemy” but rather the industrial capacity and resources of an enemy state. The Board also believed that any nation that developed the atomic bomb would not use it against the United States until it felt that it could “cripple us beyond early recovery by a surprise attack.”

In a critical recommendation, the Brewster board suggested that the Secretary of Defense should “revise the public relations policies of the armed services in the interest of national security” because it was evident that the USAF and the Navy inflated the performance of their aircraft and missions. This was a conscious effort to win the support of the administration and congressional leaders, as well as the American public, and there was concern that misleading information could create a false impression of the quality or quantity of U.S. defenses. Publically stated accurate information would also be extremely beneficial to American enemies. The Board focused on reports of an

478 Ibid, 7-10.
American bomber, which could only be the B-36 that had the capacity to fly 10,000 miles, which was roughly five times greater than the range of the B-29. This seemed impressive, but the Board was quick to point out that it was not a combat ready aircraft, and in fact, had been stripped down for the flight. Its actual range on a real mission would not be half of what was publicized. It was even acknowledged that the radius of action of a bomber is approximately “one-third of its range” unless the aircraft was on a one-way mission or conducting a shuttle operation where it would stop at another base for fuel. There was also the problem of escorting bombers with extreme range because they could outdistance any known fighter. Unless airbases were secured much closer to the enemy targets, the bombers would have to fly to their targets alone. Another issue of concern was the published high-speed performance of aircraft that were often deceptive. The Board suggested that it was fine for the “services to have pride in their accomplishments but security and public faith must not be violated.”

This warning would go unheeded as both the USAF and the USN would attempt to outmaneuver their service rivals through tales of their superior aircraft, and the inferiority of their opposition, both in the United States and abroad.

Upon their publications and release, there appeared to be clear support for their respective recommendations. Acclaim for *Survival in the Air Age* came from inside and out of the aviation and defense industries. The chairman of the Aircraft Industries Association, Eugene E. Wilson, sent a telegram to the *New York Times* in which he commented that the current “foreign problems make the public aware of the soundness of the report’s military recommendations. The Air Force which demonstrated its decisive character in war now looms as an equally decisive factor in keeping the peace.”

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479 Ibid, 14.
M. Allen, the president of Boeing, added that the “best way to preserve peace is to be strong—in the air” and that he agreed with the committee’s recommendation that support for the aircraft industry “is sound economics to put us completely secure in the air.” The chairman of the board for Lockheed stated that his company could “serve the public interest best in peace as in war when we know what the people want. The report provides the basis for reflection by the public on what may well be its greatest future problem.” Leon Swirbul, of the Grumman Aircraft company, added that the “Finletter report is a forceful document. Our military air power is the best insurance that our freedom, our prosperity, and our security shall be preserved.”

Many of those who praised both reports had a vested interest in their respective conclusions because the aircraft and aviation component manufacturers had been gravely concerned about the decline in purchases since World War II began to wind down. In June 1947, Thomas Mullaney reported that the aircraft industry was approaching the worst crisis in history. He warned that government action was necessary to establish a “long-term plane-procurement program” and support for the development of new types of aircraft. The manufacturers had been bleeding red ink since 1945 and were no longer in a position to underwrite the costs of newer projects. Experts in the field contended that there was a “90 percent shrinkage in their industry since 1944” and they feared a return of the dark days that followed the demobilization from World War I.  

Air Force officials fanned the fear of the collapse of the aviation industry and the striking capacity of the USAF because of the limited number of aircraft that were being procured. They suggested that the deficit in attack capabilities could be alleviated through long-range

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strategic bombers that were “strengthening rather than weakening our current hitting power.”

It was also confirmed in December 1947, that the previous twelve months had seen a record decline in aircraft production and financial losses for the industry. These were two trends that could be reversed if the recommendations of both reports were followed and the nation moved to adopt a policy that would “halt the discouraging deterioration of air power” witnessed in the previous two years.

The transcendence of airpower as the cutting edge of American foreign policy was dependent upon new aircraft and a healthy aviation industry, but simply purchasing new aircraft does not necessarily mean that a nation can impose its will over others, or that national goals can solely be attained through the air. Perhaps the greatest disappointment in both the Finletter and the Brewster reports was the limited view and scope of airpower and its applications in war. Neither committee appeared to have seen a role for airpower beyond continental defense, transportation, or strategic counterstrikes. Unlike the multiple roles that airpower played in the Second World War, it emerged that atomic strikes remained the only option for the United States to pursue in the event of war. There were limited allowances made for tactical strikes in support of ground forces, or the establishment of air superiority over enemy territory. Airpower was again seen as it was during the atomic strikes on Japan, the ultimate arbiter of war.

The administration, Congress, the aviation industries, and military personnel all played critical parts in the process that created a military policy that was extremely inflexible in a changing world. The Truman and Eisenhower administrations certainly followed many of the concepts of airpower that were presented to both committees in

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1947. Even during the difficult years of the Korean War, both administrations continued to fund an overall defense strategy premised almost solely upon nuclear weapons. This was not only because of cost savings compared to conventional forces, but also because of the belief that they would work to deter or ultimately win a war with the Soviet Union. The Kennedy administration eventually began to look for other alternatives to this version of strategic air warfare after the Cuban Missile Crisis in October 1962. However, it would take time for equipment and strategy to be developed that would match Kennedy’s goal of flexible response. Unfortunately, the first American airstrikes of the war in Vietnam would begin less than two years later, in the late summer of 1964. Therefore, the aircraft, pilots, and tactics that were used during these first strikes also reflected the limited possibilities offered in the hypothesis of strategic air warfare that was presented before the Finletter committee in 1947. The results of this policy would not be evident to the world until the failure of Operation Rolling Thunder to bring North Vietnam to its knees between 1965 and 1968, two decades after the President’s Air Policy Commission concluded its work.
CHAPTER FIVE

SURVIVAL IN THE AGE OF TRUMAN AND THE BATTLE OF THE BUDGET

Boys, we are going to be peaceful on the earth here, or we are going to blow your goddamn capitol city up there to pieces. Then if you still don’t get peaceful, we are going to blow a few more of them to pieces until you get peaceful. Then we will start having a working relationship on this, but no one else but us is going to have these damn bombs here. We are going to maintain peace. Peace is going to be on this earth. We could afford this.

Lt. General Archie Old, Jr. 484

It is improbable that bomber fleets will be capable, for several years to come of making two-way trips between continents, even over the polar routes, with heavy loads of bombs. It is apparent then that in the event of war within this period, if we are to project our power against the vital areas of any enemy across the ocean before beachheads on enemy territory are captured, it must be air-sea power; by aircraft launched from carriers.

Fleet Admiral Chester W. Nimitz 485

The publication of two air policy reports in early 1948 ushered in a new year that, for President Harry Truman, would become arguably the most a critical year of his presidency. The long-term prospects of peace in Europe were being forged in multilateral discussions that would lead to the creation of the North Atlantic Treaty Organization (NATO) in early 1949. The American commitment to the Berlin Airlift signaled Truman’s anti-communist resolve during the first major confrontation with the Soviet Union over wartime agreements. The President also risked the wrath of the Arab world and signaled a commitment to the Middle East with the formal diplomatic recognition of the state of Israel and despite the risks to his political future, Truman addressed these issues head on. At the same time, his re-election hopes appeared to be

485 Fleet Admiral Chester W. Nimitz, Memorandum to the Press, January 6, 1947, Papers of Stuart Symington, 1946-1950, K Congressional- M General, (Folder), Box 7, HST.
disappearing as fast as defense dollars were being cut from the federal budget in the name of fiscal responsibility. Each of these decisions would have a dramatic impact on the posterity of the nation and the role of the United States across the globe.

It was the future of airpower in the U.S. that perhaps vexed the President the most because the release of the complementary reports on air policy had done little to clarify mission roles and promote a greater sense of unification in the military. The United States Air Force continued to push for the 70 Group Program and the Navy continued to press for a sea-based nuclear mission but both services were in for a relative shock when briefed about the President’s budget for Fiscal Year 1949. Truman had attempted to solve budgetary problems through unification and implementing cuts to force levels that he believed would provide adequate security at a reduced cost. However, Truman also increased U.S. military and diplomatic commitments across the globe at the same time and this ultimately placed more pressure on the already strained budget. The President believed that there was national strength in a healthy economy and he and Secretary of Defense James Forrestal did not want to squander this in the pursuit of exorbitant weapon systems that the nation could ill afford. Yet this would be a difficult task for the President as his attention was rapidly being turned to a campaign he was not likely to win. In this vacuum of leadership, the battle for airpower was being waged in the press; both houses of the Republican controlled 80th Congress, and corridors of the Pentagon. Witnesses to this very public debate were Representatives John F. Kennedy of Massachusetts, Lyndon B. Johnson of Texas, Richard M. Nixon from California, and Senator Henry Cabot Lodge, Jr. of Massachusetts.

AUSTERITY AND DEFENSE

The battle over the FY 1949 budget had everything to do with strategy as much as it did dwindling military budgets. Since 1945, when the United States had roughly 12 million men and women in uniform, the numbers of conventional forces had been condensed dramatically, down to 1.5 million by 1947. Annual military spending had also been reduced from approximately $90.9 billion in 1945 down to about $10.3 billion in the same time frame.\textsuperscript{487} The reductions occurred at the same time that American commitments abroad were significantly increasing. President Truman became increasingly dedicated to containing the expansion of communism across the globe. He announced to Congress and the world in March 1947 that the United States was going to fill the void left by the decline of the United Kingdom in the Mediterranean and provide substantial military aid to nations like Greece and Turkey who were being pressured by internal insurgencies or external threats originating in the Soviet Union. Granted, much of the military aid that was dispatched was World War II surplus rather than new equipment, but it still remained a substantial American outlay.\textsuperscript{488} This was in addition to the resources invested in the European Recovery Program that had also been announced by Secretary of State George Marshall that same month. This linked American military and diplomatic policies with economic containment aimed at curbing or rebuffing Soviet behavior towards its neighboring states.\textsuperscript{489} With containment and reduced budgets as


chief goals for the Truman administration in 1947, one can better understand the pressure on each of the services to be not only relevant, but be absolutely necessary for national security.

It was evident in late 1947 that even before the report of the President’s Air Policy Commission was released that Truman had disagreed with the proposal for the 70 Group Program. Supported by the Director of the Bureau of the Budget, James Webb, Truman’s fiscal conservatism over the next budget created a dilemma for the Services in this era of austere government spending. Each dollar that was budgeted had to be spent wisely and the economic value and supposed efficacy of strategic bombing and nuclear delivery seemed to trump common sense from the military as the budget was being prepared. On December 16, 1947, Secretary of the Air Force Stuart Symington took his concerns to Webb and Forrestal and he claimed that the Air Force proposal for the 70 Group Program was actually a minimum force requirement that was “imposed by the position of the United States in the modern world.” The projected level of 55 groups would be attained by the first of the year, but “it falls far short of meeting the requirements of our National Security.” This trend would continue into the next year and in the end this would have “grave implications which should be thoroughly understood before the estimate is submitted to the Congress.” He maintained that the Air Force wanted a balanced military but he felt that “the Air Force ultimately prescribed must be completely manned and operational and the entire Air Force structure balanced to provide the greatest possible effectiveness.” Without the additional funding necessary to attain the 70 Group Program, Symington warned that in reality the Air Force would only have enough for 40 Groups that would be fully operational “plus the maintenance of a
structure for potential mobilization.” If it was decided to continue to pursue the funding for a 55 Group Air Force, then the USAF would be forced to submit a request for supplemental funding in an effort to provide the minimum requirements for national security.\textsuperscript{490}

The Secretary of the Air Force forwarded a copy of the previous letter to the Secretary of Defense along with another note asking for Forrestal’s position on the 70 Group Program and funding the minimum defensive stature for the United States. This had been supported in a study conducted by the Joint Chiefs of Staff and Symington argued that this could not be accomplished with the projected appropriations for the next fiscal year. He also acknowledged that there were other pressing and expensive foreign policy issues but with the rising favorability of the Republican Congress, “the press and the people with respect to the position of air power, and any common sense strategic concept as to how to get at Russia, we are more shocked at this decision” than anything since Symington came into federal service.\textsuperscript{491} Clearly agitated over the limited funding, Symington would pressure the President and the Bureau of the Budget for more funding and refused to be a team player when it came time to defend the budget to Congress. In addition to attempting to find additional dollars by building a consensus for the direction the Air Force wanted to go with strategic air warfare, Symington began to look at the dollars that were spent by the other services and attempted to have redundant programs cancelled to free up more capital for the Air Force to invest in the future.

\textsuperscript{490} W. Stuart Symington to James Webb, 16 December 1947, Papers of Clark M. Clifford, Subject File, 1945-54, National Intelligence Authority to National Military Establishment – Miscellaneous, Box 11, HST.

\textsuperscript{491} W. Stuart Symington to James Forrestal, 16 December 1947, Papers of Clark M. Clifford, Subject File, 1945-54, National Intelligence Authority to National Military Establishment – Miscellaneous, Box 11, HST.
Concerns over defense expenditures led the outgoing Chairman of the Senate Armed Services Committee, Republican John “Chan” Gurney of South Dakota, to write a letter to the Secretary of Defense in December 1947. Forrestal’s response clarified his view of military expenditures and stated that, at the present time, they were “below the levels which our military leaders must in good conscience estimate as the minimum” needed for national security. This was being done to free up funds to assist in the recovery of Europe that was, according to Forrestal, a calculated risk “in order to follow a course which offers the prospect of eventually achieving national security and also long-term world stability.” Within the uncertainty of the world in 1948, there were only four things which Forrestal could state as military fact, they were, the preponderance of Soviet conventional power in Europe, the predominance of American naval power and control of the seas, exclusivity of American control of the atomic bomb, and the productive capacity of the United States. As long as the United States could “outproduce the world, can control the sea, and can strike inland with the atomic bomb, we can assume certain risks, otherwise unacceptable in an effort to restore world trade, to restore the balance of power – military power – and to eliminate some the conditions which breed war.”

Forrestal, either consciously or unwittingly, clarified the position of the atomic bomb on American foreign policy. He stated that they allowed for a reduction in conventional forces and freed up capital to combat the Soviet Union in non-military ways. Any attempt to restrict military expenditures logically created concerns for the Service secretaries and admonitions of an imminent disaster, which was about to afflict the

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United States. This catastrophe would be a result of the scourge of international communism or Soviet domination.

Despite the dire warnings coming from the Pentagon, President Truman continued to push for reduced expenditures and within days of receiving the Finletter Committee’s report, the President asked the Congress for at least 50% of the Fiscal 1949 defense budget to be earmarked for the benefit of the United States Air Force. Included in the monies appropriated was funding for new aircraft including fighters and bombers and increased training and he continued to pare down the cost of the military and he reduced appropriations from the other services to increase the funding for the Air Force. While the Air Force garnered half of the new budget, the Navy was reduced to approximately 1/3rd of the total. This meant that the Navy would have to find alternative sources of funding to pay for their planned supercarrier and naval nuclear bomber. This could include the cancelling of other shipbuilding projects and diverting that money for the new projects but unfortunately for the Navy, they would soon learn that they did not control all the purse strings for the money that was allocated for their department.

As much as the Air Force believed in the strategic bombing, they disagreed with the concept of supercarrier in principle and carrier-based aviation in general. William Bradford Huie, an Air Force supporter and anti-naval aviation zealot, contended in The Reader’s Digest that naval aviation was “short-ranged” and “useful only on the seas” and it was “comparatively worthless since our enemy has no reason to fear it. Against Russia what role is there for a carrier-based air force?” Others within the Air Force further

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argued that carriers were archaic relics in the vanguard of atomic warfare and that they could not survive against a land-based power with a superior air force. It was also questionable whether or not carriers could survive the age of Truman as the expenditures for the National Military Establishment were cut even as the Berlin Airlift was beginning and the Truman administration was participating in the negotiations for an expanded U.S. presence in Europe as a result of NATO. Every dollar that was spent on aviation assets was a dollar that was going to be fought over with apparently as much vigor as the difficult political campaign that the President was waging to keep his job.

DEFENDING THE 70 GROUP AIR FORCE

On April 2, 1948, correspondence from Secretary of Defense James Forrestal to the Senate Armed Services Committee was released to the press and in it, Forrestal attempted to answer questions that he and the other Service Secretaries were not prepared to when they appeared before the committee on March 25, 1948. In particular, a question was raised about the annual cost of the 70 Group Program envisioned in the final report of the Finletter committee. According to Forrestal it would cost $18 billion more than the previous year’s budget for the National Military Establishment, but the appropriations would make the Air Force “fully effective in combat.” It took time to build the necessary aircraft and he had become alarmed “with the rapid depletion of our war surplus stocks of airplanes in storage” and to maintain the NME at the current levels proposed for the Fiscal 1949 budget would require “utilizing stocks of supplies, facilities and equipment left over from the war.” Forrestal was convinced that the budget estimates prepared by the NME reflected the requirement to “insure maximum return for the military tax dollar”
and that this budget had “the interests of national security and with due consideration for
the national economy.”

Active discussion over Truman’s budget cuts and the 70 Group Program also carried over into meetings of the National Security Council. On March 23, 1948, the NSC met for the eighth time to discuss among other things, the authorized strengths of the Departments within the NME. Secretary of State George Marshall chaired this meeting in the President’s absence. Forrestal stated that he had received some inquiries from members of Congress about the cost of adequate funding for the military to create an “adequate defense” and in light of the President’s address to Congress, what should be stated by the military in “terms of specific figures.” Forrestal added that during the peak of the Second World War defense expenditures was estimated at $75 billion, which represented about “45% of our total annual product” but Marshall made it clear that the President was not willing to exceed the current authorized strength of the National Military Establishment. The Secretary of State added that the question that remained was whether or not the military felt that “they must convince the President to take other action” although Marshall felt that if political involvements could be avoided, the nation would be in a stronger position.

Marshall indicated that Truman’s intent was to convince the Soviets of the American determination “without entering into an all-out war effort” and it must be decided which steps to take to prevent or deter the Soviets from making further moves. It was acknowledged that the United States could not make it impossible for the Soviets to

495 James Forrestal to Senator Chan Gurney, April 2, 1948, Papers of Clark M. Clifford, Subject File, 1945-1954, National Intelligence Authority to National Military Establishment – Miscellaneous, Box 11, HST.
496 Minutes of the 8th Meeting of the National Security Council, March 23, 1948, Papers of Harry S.
Truman, President’s Secretary Files, National Security Council Files – Meetings Index-Subject to Meeting 13, June 17, 1948, Box 203, HST.
move in the coming two to three months and therefore it had to be determined what could
be done to deter the Soviets and “have a maximum of encouraging effect upon the other
countries of Europe.”

Marshall asked Forrestal what the NME considered to be essential “beyond what
is authorized” to which Forrestal replied that more aircraft were needed. The Secretary
of State cautioned Forrestal that if he asked for too much, they might not get any.
Forrestal, however, felt that one more move by the Soviets would “make Congress
agreeable” to an increase in the military budget for 1949. Then Symington reminded the
Council that the USAF was anxious to attain the 70 Group Program however,
appropriations for additional aircraft were being reduced by the administration over the
last several years. The current 55 groups were being funded at a cost of $3 billion and
the lowest appropriation recommended by the Presidential and Congressional Air Policy
Boards was $5 billion. The Air Force Secretary felt that there was sufficient support in
Congress for additional appropriations. However, the questions for the Air Force
remained whether or not it should ask for what it truly needed and was now the time to
get new aircraft because the only planes in the arsenal that were not obsolete were the B-
29s. Symington added that the Soviets were qualitatively ahead of the United States in
jets and about equal in bombers and they had a large base across the Bering Sea that was
equipped with the latest Soviet military hardware. From these bases he believed the
Soviets could launch two-way missions that could wipe out all American aircraft
factories except those in Texas.

497 Ibid.
498 Ibid.
What is not clear is what type of bomber Symington was referring to because the only strategic bomber in the Soviet air force at this time was the Tupolev TU-4, a duplicate of the B-29. However, the TU-4 would not go into full service until 1949, a year after this meeting of the NSC.\textsuperscript{499} Even if they had been available in large numbers in 1948, the TU-4s did not have the range to hit targets in the U.S. on two-way missions any more than the USAF B-29s could do the same to the Soviet Union. What Symington was talking about is unclear and at best, he was uninformed, at worst, he was lying to the NSC in an effort to expand the Air Force budget. Yet, one could still find comfort in Symington’s warning if you believed it, the factory building the B-36 was located in Fort Worth, Texas and would therefore be out of reach of the Soviet two-way bombers.

In the G.O.P controlled Congress, including Symington’s father-in-law, Republican James Wadsworth, bipartisan support for the 70 Group Program with an emphasis on long-range bombers was evident in the House in early April 1948.\textsuperscript{500} With a unanimous vote, the House Armed Services Committee recommended full support for the increase from a 55 groups to a 70 group Air Force, a proposal that was forwarded on to the President, the Speaker of the House, and the Secretary of the Air Force. Carl Hinshaw, the Vice Chairman of the Congressional Joint Air Policy Board maintained this defense concept as he informed his colleagues in the House that if “we are going to have the air power to preserve the peace of this world, we have got to start now.” Hinshaw argued that aircraft production had to be doubled if the United States was going to even get to 55 combat groups in the Air Force. If the United States wanted to be ready for war


by 1952 or 1953, time was of the essence and decisions needed to be made immediately in the interest of American national security.\textsuperscript{501} On April 14, 1948, with the passage of more than $2 billion for airpower, William Randolph Hearst, Jr. sent a letter to Symington confirming he and his papers supported the Air Force and Symington’s effort to keep “the Untied States Air Force the dominant air force of all the world. Unquestionably, the next war will be fought in the air.”\textsuperscript{502} Symington had no doubt about the latter concept and he affirmed his goal of improving the “chance of having an adequate Air Force by the time the Russians have the bomb” and he pledged that “every effort will be made to purchase these planes to the very best interest of the Government and the taxpayer.”\textsuperscript{503}

On April 21, 1948, the Secretary of Defense released to the press a statement that he had given to the Senate Armed Services Committee that attempted to clarify his position on the 70 Group Program and the funding of the National Military Establishment as a whole. He did not promote the Air Force plan or any programs advanced by the Army or the Navy and instead presented his position as advocating balance between the services with all of them being in a state of “readiness to accomplish assigned objectives.” This did not mean that Forrestal perceived equal spending or manpower evenly divided among the services, but rather each of them would be maintained enough to allow them to complete their respective missions and it was up to the Joint Chiefs of Staff to determine and assign appropriate forces to complete them. Forrestal contended

\textsuperscript{502} W.R. Hearst, Jr. to W. Stuart Symington, April 14, 1948, Papers of Stuart Symington, 1946-1950, E General-H Hold (Memo File), Box 5, HST.  
\textsuperscript{503} W. Stuart Symington to John Tabler, April 15, 1948, Papers of Stuart Symington, 1946-1950, C General (Folder 4) Cost Control, File: Correspondence File, 1946-1950, C Congressional, Folder 2, Box 3, HST.
he would continue to rely on “any recommendations the Joint Chiefs of Staff may make, with regard to the proper composition of a balanced force” and he was confident that the “President, the Joint Chiefs of Staff, the Secretary of Defense, and the Secretaries of Army, Navy, and Air Force—as well as the Senate and the House of Representatives” were all in agreement on the desirability of a “balanced military establishment” in line with the 70 Group Program.

Forrestal stated that he understood the fiscal restraints that the program would place on the American economy and he hoped that arguments made for or against the budget would be made in a “rational and organized manner, and not on a basis of emotional reaction” and he cited a recent comment made by Air Force General Spaatz as an example. Spaatz argued that despite increased funding, the USAF was unable to “undertake mass bombing of enemy cities from American bases” and the Air Force had not yet reached a point where it could sustain the necessary long-range attacks that many thought were necessary to win the next war. While Spaatz was angling for increased Air Force funding, Forrestal attempted to study all procurements to make sure that they were in line with the goals of the JCS and the President. Forrestal closed his statement by suggesting that all of the services understood the value of airpower and it was “likely to be the decisive element in our national strength.” In order to bring that element of American policy to bear, the JCS were unanimous “in the opinion that strong ground and surface forces are necessary in order to enable the Air Force and naval aviation to employ air power effectively and decisively.”

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Symington also continued to promote and defend the idea of the 70 Group Program with all the vigor and tenacity that had been his trademark since he became Secretary of the Air Force. In late April 1948, Symington clarified the future of the program in terms of types of aircraft that would be needed to fight a war once the Soviets had the bomb, the prediction of which varied from 1951-1952. He stated that it was necessary to convert production facilities and plants to begin to fully modernize the Air Force to levels that were inline with the 70 Group Program. Symington contended after all that it “takes just as much Army and Navy to support a 70 group obsolete Air Force - probably more – than it does to support a 70 group modern Air Force” and that rather than trying to “balance the money between the services” there should be an attempt to “balance the program” between the Armed Forces.505

Symington also understood the value of public relations and standing behind those who had reciprocated their support for the Air Force and in May 1948 Symington sent a letter to Lt. General E.R. Quesada requesting that he show every courtesy to Congressman Lyndon Johnson at Bergstrom Air Force Base in Texas because he “did as much to weld the success of the Air Force in its recent effort to get the 70-group program as any man in the United States.”506 In November 1948, the Secretary of the Air Force dispatched a B-36 bomber to Denver where it was visited by a large number of people. The display served two purposes, the first to physically display the immense size of the aircraft and its performance in a manner that newspaper editorialists or military commentators could never accomplish. The B-36 was also sent as a thank you to Palmer

505 W. Stuart Symington to Mr. James G. Lucas, Scripps-Howard News Alliance, April 29, 1948, Papers of Stuart Symington, 1946-1950, K Congressional –M General (Folder), Box 7, HST.
506 W. Stuart Symington to Lt. General E.R. Quesada, 8 May 1948, Papers of Stuart Symington, 1946-1950, p General – R General (Folder 2) File: Correspondence File 1946-1950, Q-General, Box 10, HST.
Hoyt, the editor and publisher of the Denver Post and key Air Force supporter on the President’s Air Policy Commission. Hoyt stated in a thank you letter to Symington that “the voters, after they look at a B-36, will unconsciously realize what the score is.” This sentiment was the very reason that the Peacemaker was sent to Denver in the first place.  

AMENDING THE BUDGET

Throughout Washington D.C. questions were raised and public debates in Congress and the press continued about the logic in reducing the military budget at a time when it appeared the international involvement of the United States was increasing. Truman was not blind to the debate, and had attempted to allow the Secretary of Defense to bring his military chiefs in line with administration policy. The Joint Chiefs of Staff had concluded that the 70 Group Program for the Air Force would cost an additional $9 billion beyond what the President had proposed. They were willing to back a supplemental bill for $3.5 billion which would be directed at the Air Force to allow them to get to 66 groups, but this was still short of what Symington had argued was needed. Eventually the supplemental request was reduced to roughly $3 billion, which Truman agreed to as long as the NME did not attempt to spend it all. The President also let the military know that he was establishing a limit of $15 billion for the next fiscal year. He gave each of them a written directive to follow the proposal with “good spirit, and

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507 E. Palmer Hoyt to W. Stuart Symington, November 30, 1948, Papers of Stuart Symington, 1946-1950, E General-H Hold (Memo File), Box 5, HST.
without mental reservation” and he expected everyone in the administration to support it “fully both in public and private.”  

The Secretary of Defense issued a press release on April 8, 1948 that attempted to address the growing concerns about the budget and national defense, and announced that the administration called for a supplemental budget of almost $3 billion. This was not to be seen as unbalancing of the American force structure in favor of the Air Force. Forrestal added that the President had originally called for an Air Force that consisted of 55 combat groups, and the 70 Group Program had not yet been approved or disapproved by Forrestal’s office or Truman. National security was dependent upon balanced forces, and Forrestal added that careful study must be taken to fully understand the impact of additional military expenditures on an “already practically fully employed and tight economy” which could result in “explosive inflationary consequences.” Military demands “must be within the limits of our capacity to produce, or, alternatively, we must accept those controls that are found necessary to channel manpower and materials necessary to insure the desired production.”

It is evident from such statements about fiscal restraints where the appeal of nuclear weapons to solve the financial constraints of each of the Services began. The actual ability to deliver weapons on target is irrelevant to the promise of the capability to accomplish such a mission better than a sister Service. In other words, this was the reason for the Air Force to develop strategic and tactical nuclear bombers, the Navy to

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have large carriers and sea-based bombers, and even for the Army to develop an atomic cannon.

PETULANCE AND PREPAREDNESS

The passage of the National Security Act of 1947 and the completion of competing investigations into American air policy had done little to stem the debate over mission roles, atomic weapons, and an overall U.S. Cold War strategy. The disputes between the Air Force and the Navy arguably appeared to be getting worse in the months following unification rather than better. As the Navy continued to press for a role in the atomic missions, the USAF continued its public relations campaign for increased funding and presence within the National Military Establishment. What followed for several months were what appeared to be a series of public temper tantrums, as both the USAF, and the Navy, attempted to have their views heard and responded to at the expense of the other service. As Secretary of Defense, James Forrestal endeavored to find a compromise through a series of conferences between 1948 and 1949. Although he had fought against a strong Secretary of Defense during the unification arguments, Forrestal came to understand that as structured, the military could not properly function, and the publicity generated by the mission disputes was detrimental to American national security.

As more focus was being devoted to the Air Force and the B-36, the Navy continued to believe that they had a better option under development, and in his farewell
address as the Chief of Naval Operations, Fleet Admiral Chester W. Nimitz publically advocated for the use of carriers to take the next war to the heartland of an enemy state. He believed it was the responsibility of the Navy to take the war to the enemy “so that it will not be fought on American soil.” Nimitz contended that the Navy’s most recent experience during World War II had demonstrated that naval aviation and sea-based assets function on the cutting edge of an assault. When their initial attacks were completed, the Navy was able to transition their strike force to one that participated against the “destruction of those vital centers on Okinawa and the home islands” despite the concentration of Japanese air assets. If an air attack comes over the polar ice caps, the Navy had to be prepared with fighters and interceptors for defense, as well as, long-range bombers that are coordinated with “military and naval air power launched from land and carrier bases, and of guided missiles against important enemy targets.”

Perhaps intentionally provocative, the outgoing Chief of Naval Operations added that until long range bombers were developed that had the capability of “spanning our bordering oceans and returning to the continental North American bases, naval air power launched from carriers may be the only predictable means of bombing vital enemy centers in the early stages of a war.” The carrier task force was as complete as any land base, and carriers had the “unique attributes of secrecy and surprise” which assisted in both offensive and defensive operations. The Services should be assigned broad missions, according to Nimitz, and be allowed to develop the weapons needed to

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510 Fleet Admiral Chester W. Nimitz, Memorandum to the Press, January 6, 1947, Papers of Stuart Symington, 1946-1950, K Congressional- M General, (Folder), Box 7, HST.
complete their assignments. The potential of each service should not be neglected in the overall scheme of national security.\textsuperscript{511}

Nimitz had successfully raised the ire of Air Force Chief of Staff Carl Spaatz, who responded that the Navy did not appear to be upholding their responsibilities under the unification agreements and that the American public did not understand that there was going to be only one Air Force. The Nimitz speech, according to Spaatz, was aimed at undermining previous agreements because the Navy did not “consider binding the Executive Order of the President, issued after the passage by the Congress of the National Security Act.” He further suggested that the Soviet Union was prepared to “meet and destroy” American carriers that approached the USSR. Spaatz articulated that the experience in World War II had indicated the necessity of winning control of the air before successful bombing operations could be completed because you “don’t fight the air war with something that has to sneak in and out” whether it was carrier aircraft or USAF bombers. This is particularly interesting, because the idea of the B-36 was just what Spaatz said would not work.\textsuperscript{512}

The B-36 Peacemaker, with the projected 10,000-mile range that the USAF kept promoting, would out distance any friendly fighters that could help establish American control of the air that Spaatz argued was necessary to win the air war. For the United States to win in the air, Spaatz argued that it required gaining air bases closer to the targets. Then, with the engagement of American fighters, the Air Force would make sure that “the enemy’s air is knocked to hell.” Spaatz feared that the Navy’s pursuit of a rival air force, at a great cost, had watered down the effectiveness of the USAF. These

\textsuperscript{511} Ibid.
\textsuperscript{512} Carl Spaatz to W. Stuart Symington 7 January 1948, Papers of Stuart Symington, 1946-1950, Spaatz to Travel, Box 12, HST.
ongoing problems with the interpretation of unification, according to Spaatz, presented
naval officers in a bad light, and it compromised U.S. security.513

In an apparent shift in tactics, the Air Force altered their attacks on the naval
nuclear strike program by attacking the vulnerability of aircraft carriers in a modern war.
In a response to an editorial in The Evening Star, Spaatz wrote a letter that was first
forwarded to the Secretary of Defense by Stuart Symington. Symington claimed that he
did not ask Spaatz to write the letter, but Spaatz had his full support.514 In the editorial,
Spaatz raised serious questions about the Navy’s claim that, with a supercarrier and a
nuclear bomber, they would be able to strike targets deep in enemy territory within the
decade. Spaatz contended that air bases within the United States, as well as bases
secured overseas, allowed the Air Force to conduct those missions and destroy the whole
industrial area of an enemy “on a scale greater than could be accomplished by ten or
more such carriers.” Better bombers and guided missiles in the future would also change
the dynamic of an attack, and Spaatz questioned whether or not a carrier-based attack
plan could succeed against a “continental empire which possesses a first-rate air force.”
The Air Force Chief of Staff suggested that the Japanese Air Force that confronted the
USN during World War II was “well below first-rate” and as the Americans moved
against Japan during the Okinawa campaign, heavy losses were inflicted by the
“practically emasculated” Japanese who possessed only a 10th rate air force. Unlike
aircraft carriers, land based airbases could withstand damage and be repaired to operate
again fairly quickly, but a single bomb could put a carrier out of action. It did not even
have to be an expensive atomic bomb, but an ordinary bomb was sufficient. Carriers

513 Ibid.
514 W. Stuart Symington to Secretary Forrestal, 28 January 1948, Papers of Stuart Symington, 1946-1950,
Spaatz to Travel, Box 12, HST.
were easy to detect at sea, and with an aircraft operating at modern speeds, the carrier appears to be not moving at all, “and it sinks when it is hit properly.” Spaatz suggested that much of the “prevalent misdirection of thought and effort could be eliminated if the Naval Air Force became a part of the United States Air Force,” an idea that had not gone away since unification.515

In his letter Spaatz made no mention about the possibility of overseas air bases being removed from U.S. custody in the event of a war, an enemy attack, or even a shift of governmental leadership by the host nation. Spaatz made no allowance for nations that might prohibit the United States from storing nuclear weapons on their soil, nor did he acknowledge that the 10th rate Japanese Air Force, supported by an effective radar net that alerted the Japanese air and ground defenders, contributed to the destruction of 360 B-29s that were lost by the USAAF during World War II.516

A further example of the level of petulance between the Services was a request made by Air Force Secretary Symington. He wanted a rough estimate of converting a B-29 into an anti-submarine patrol bomber to counter the Navy’s attempts to adapt the P2V Neptune to a nuclear bomber.517 This particular Navy plan had been bothering Symington since at least October 1946, when he had complained to the Secretary of War Robert Patterson that the Navy had purchased upwards of 100 of them, and this was “nothing more or less than a long-range patrol bomber.”518 Symington also forwarded a complaint to James Forrestal that decried Navy press releases about the ability of carrier-

515 Carl Spaatz to The Evening Star, 28 January 1948, Papers of Stuart Symington, 1946-1950, Spaatz to Travel, Box 12, HST.
517 W. Stuart Symington to General Vandenberg, 23 May 1948, Papers of Stuart Symington, 1946-1950, Spaatz to Travel, Box 12, HST.
518 W. Stuart Symington to Robert Patterson, 15 October 1946, Papers of Stuart Symington, 1946-1950, P General-R General (Folder 2), Box 10, HST.
based naval aircraft to intercept and shoot down enemy aircraft. Others displayed the fear that the Army and the Air Force were outmaneuvering the Navy because they could impose a majority rule over naval interests. Another naval press release suggested that the role of airpower “merits the study of every American who has a part in determining the composition of our future military establishment” and even more inflammatory, it also contended that airpower “is not just strategic bombing by huge fleets of B-29s.” It instead involved the establishment of air supremacy over “any hostile air force at any point of conflict,” a point of emphasis for the Navy who saw a fundamental role for naval aviation in this realm. It was also suggested that there were those who were attempting to gag the Navy, which was a “flagrant violation of the spirit of the unification program.”

Symington replied to these attacks by noting that the Air Force had great admiration and respect for its sister service, but the USAF regretted the ongoing attacks on the Air Force by the Navy.519

Some might consider Symington’s ongoing war with the Navy to be a sign of an obstinate public official, or a tireless advocate for his service. Regardless of the view posterity has for the first Air Force Secretary, he remained fiercely loyal to the USAF, and he never deviated from his belief in the role of strategic air warfare. Still, he made Forrestal’s life miserable with his constant complaints about the Navy and mission roles.

The aforementioned disputes made it apparent to some that unification seemed to have failed, and the overall goals of national security and the responsibilities of the National Military Establishment were in apparent tatters. Secretary of Defense Forrestal faced further difficulties in March 1948, when the Congressional Aviation Policy Board

519 W. Stuart Symington to James Forrestal, 9 June 1948, Papers of Stuart Symington, 1946-1950, E-General-Hold (Memo File), Box 5, HST.
released their report that buttressed the belief in airpower as the best avenue for securing a lasting peace. In that same month, a coup in Czechoslovakia signaled a hardening of Soviet attitudes towards not only the West, but also its own bloc. If the problems between the United States and the Soviet Union could not be resolved, the war that would come was going to bring many proxy nations across the globe. This could stretch the dwindling American conventional forces beyond their breaking point and the last thing that Forrestal and the NME needed now was an inconsistent message regarding military preparedness or missions. In apparent frustration, Forrestal had advised the President that no substantial progress had been made by the JCS to solve the problems of roles and missions and the Secretary of Defense gave them until March 8, 1948 to come to a decision. When no solution was reached, Forrestal called for a conference of the JCS to find a resolution to the problems of unification and mission roles. It would take place in Key West, Florida from March 11 to March 14, 1948. It was hoped that this would lead to a resolution on the issues that divided the military, and provide a level of harmony between the Services.

THE KEY WEST CONFERENCE

At the time of the Key West Conference, the Joint Chiefs of Staff was composed of Admiral William Leahy, the Chairman of the JCS; the Chief of Naval Operations, Admiral Louis Denfeld; U.S. Army General Omar Bradley, and Air Force General Carl Spaatz. Spaatz and Bradley were both previously outspoken in their views of strategic bombing and the necessity of the Navy to conform to the missions it was assigned, not

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520 James Forrestal to Harry S. Truman, Memorandum, 27 February 1948, Papers of Harry S. Truman, President’s Secretary Files, Subject File, Cabinet (Defense – 2) – (War), Box 157, HST.
what it wanted. Denfeld was new to the JCS, as he was sworn in on December 15, 1947 to replace Fleet Admiral Chester W. Nimitz, who had only served one term. Denfeld did not bring the years of leadership during the hard times of World War II, or even name recognition. Instead, he appeared to be the choice for CNO because of his experience in naval bureaucracy, and his great rapport with influential members of Congress. With their key deputies involved in the conversations and planning, the JCS worked to find a solution that would be pleasing to most, and publically palatable for both sides to declare victory.

A press release from Forrestal’s office announced to the world what was accomplished during the three days of the Key West conference in terms of decisions regarding the assignment of missions among the three services. A staff paper created at Key West clarified that each Department was “assigned specific functions in which that Service has a clear-cut responsibility,” and that would be considered its primary responsibility. Forrestal contended that there were also collateral responsibilities, and each branch of the Armed Forces was required to “support and supplement the other Services, in carrying out their primary function, whenever such participation will result in increased effectiveness and will contribute to the accomplishment of the over-all military objective.”

Strategic air warfare was declared to be the primary responsibility of the Air Force, and the Navy was “assigned as a primary function the conduct of air

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523 The definition of strategic air warfare as agreed by the Joint Chiefs of Staff is as follows: *Air combat and supporting operations designed to effect, through the systematic application of force to a selected*
operations necessary for the accomplishment of objectives in a naval campaign.” There were provisions for the Navy to participate “in the over-all air effort as directed” by the JCS, as well as conduct anti-submarine warfare as a primary function. Most importantly, the Navy was *not* prohibited from attacking inland targets that might be necessary for the completion of its assigned missions. The Air Force was also given the collateral duty of anti-submarine warfare. The Key West Agreement declared that because the Air Force had the responsibility for strategic bombing, the Air Force Chief of Staff would present the requirements for all forces necessary for the employment of strategic air warfare before the JCS. It was also determined that the secondary missions would not “be used as the basis for establishing additional force requirements by any service” and that “unnecessary duplication or overlapping among the services will be prevented.”

Interpretation of the preceding clause created many of the problems during the next several months of 1948. Any issues that could not be solved by this agreement, or by the JCS, were to be forwarded on to the Secretary of Defense for resolution. Ironically, this would mean that James Forrestal, the man who had insisted upon a weakened position for the Secretary of Defense, would not have the ability to solve all of these problems. This resulted in the Air Force belief that they maintained sole possession of strategic bombing because it was assigned to them as a primary mission. They were

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*series of vital targets, the progressive destruction and disintegration of the enemy’s war-making capacity to a point where he no longer retains the ability or the will to wage war. Vital targets may include key manufacturing systems, sources of raw materials, critical material, stock piles, power systems, transportation systems, communications facilities, concentrations of uncommitted elements of enemy armed forces, key agricultural areas, and other such targets systems. Listed in “Functions of the Armed Forces and the Joint Chiefs of Staff”, Papers of John H. Ohly, Department of Defense File, Subject File, War Council – Vol. II, [1 to 4] to Welfare and Recreation, Box 84, HST.*


525 W. Stuart Symington to James Forrestal, Draft Memo, July 28, 1948, Papers of Stuart Symington, 1946-1950, E General-H Hold (Memo File), Box 5, HST.
currently the only Service that could accomplish the objective, and they had the ability to state what was, or was not, needed from the other Services to successfully complete strategic bombing. It was agreed that the Navy would not build a supercarrier “on the basis of its contribution to strategic air warfare,” but it might still be built if the Navy could justify the carrier on the basis of its naval function, “plus the contribution which it could make to the strategic air missions.”526 The problem that remained for the Navy was the Air Force responsibility of determining what was needed for strategic air warfare. The USAF had made it clear that there was no need for the supercarrier and a naval nuclear bomber because they were redundant. Leadership within the Navy maintained that the supercarrier was not actually forbidden by this agreement and they were committed to build it because it was a vital part of the Navy’s required missions. The Navy would also continue to design and test the concept of a naval nuclear bomber even as Air Force criticism of the idea continued unabated as if there had been no agreements on roles reached at Key West.

A month after the Key West conference, Senator Owen Brewster, chairman of the Congressional Aviation Policy Board, gave a speech at a private aviation club that claimed that unification had not worked to alleviate the conflict between the Air Force and the Navy. The nation could not afford “the luxury of two air forces” and the Navy now appeared to be “air minded with a vengeance” and its battles with the Air Force was troubling. He contended that the Joint Chiefs of Staff were not appreciative of the economic implications of their work and he was intrigued by the idea of the naval nuclear bomber. It was a plan that could be excellent if, Brewster argued, it was economically

feasible. Congress was entitled to examine the idea, with experts on the cost and usefulness of the program, keeping in mind that the military expenditures could “obviously approach the breaking point if care is not exercised.

Brewster’s counterpart on the Congressional Aviation Policy Board, Carl Hinshaw, aired his concerns about the concept of the supercarrier in June 1948, during the Congressional debates on the new naval weapon system. He suggested that perhaps it was time to convene a Congressional subcommittee or a board “composed of relatively disinterested persons” to make a decision on the feasibility of the project. The overall cost of the new carrier had to reflect the support ships and aircraft that were necessary to support the supercarrier. He added that if it was built, the new carrier could only handle a small number of “strategic-type aircraft” that were limited in size and range although the range issue could be mitigated by moving the carrier closer to enemy territory, but then it would be vulnerable to enemy efforts and could be “sunk or rendered uninhabitable” by radioactive fallout. He contended that the Joint Chiefs of Staff had not approved the new carrier because of the opposition from the Air Force on the JCS, and insinuated that the real reason the Navy wanted this carrier was because the “Navy Department believed that unless it engages in strategic bombing it may lose its preeminence among the armed services.” There was the real possibility that the money to be spent on the supercarrier and support ships could be “entirely too expensive an undertaking.” The reality of the Key West conference was that it really solved nothing regarding unification, and both the Air Force and the Navy began new assaults on the other’s assumed primary mission.

527 Carl Hinshaw’s words were attached to a memo sent from USN Captain Fitzhugh Lee to John Sullivan, 7 June 1948, Papers of John Sullivan, Subject File, 1942-1976, Aircraft Carriers (Role of in U.S. Defense 1948-49) to Miscellaneous Newspaper Articles and Editorials, 1945-1976 [1 of 2], Box 10, HST.
THE ONGOING WAR OF WORDS

Stuart Symington went so far to protect the mission of his Service, that he had the Air Force’s Director of Public Affairs, Steve Leo, monitor the press for indications of a bias against the Air Force or the B-36. In particular, they paid special interest to the *New York Times* military reporter Hanson Baldwin, a former graduate of the Naval Academy. Among the many things highlighted within Leo’s twelve page memo, were comments made about the MGM movie *Command Decision* that showed the “high price of sending bombers beyond the range of fighter support,” something that the B-36 was going to have to do, and “Congressmen appear in none to favorable light.” There was also concern that this movie, along with some other items in the media, could lead to a “press reaction that one-weapon theme of air power is being overplayed as against 3-service teamwork” and the “disquieting words ‘air lobby’ appear again.” The Air Force kept prodigious amounts of information on the Navy and they have been included within the files of the Secretary of the Air Force. These included speeches, testimony, and even press clippings that were monitored in an effort to keep the USAF informed or for possible use as political leverage. However, the Air Force denied operating a particular section of specialists devoted to promoting Air Force propaganda.

In July 1948, Symington drafted a memo to Forrestal that outlined further grievances with the Navy, and he boldly claimed that the USAF was under assault from the Navy in the court of public opinion. The Secretary of the Air Force took exception to

528 Steve Leo to W. Stuart Symington, 8 August 1947, Papers of Stuart Symington, 1946-1950, K Congressional –M General (Folder), Box 7, HST.
529 6 April 1949 Memorandum, Papers of Stuart Symington, 1946-1950, E General-H Hold (Memo File), Box 5, HST.
530 Stephen F. Leo to David Lawrence, Editor, U.S. News and World Report, 7 December 1949, Papers of Stuart Symington, 1946-1950, K Congressional –M General (Folder), Box 7, HST.
claims by Rear Admiral Ralph A. Ofstie, a former member of the United States Strategic Bombing Survey for Japan, and the Deputy Chief of Naval Operations (Air). Ofstie had suggested that the “carrier task force was the only way we can deliver bombs to targets overseas,” which Symington took out of context. The speech that so angered Symington was entitled “The Fast Carrier Task Force” and was presented by Ofstie to the Metropolitan Section of the Aviation Writer’s Association on June 10, 1948. It highlighted the performance of carriers and their support ships as they conducted their missions during World War II and into the postwar period. Ofstie argued against one of the hallmarks of the Air Force, strategic bombing, in a scathing critique of the raison d’être of the USAF. He claimed that area bombing was “unquestionably a mistake” because it “costs more than it pays off.” The bombing did force an enemy to invest time and effort in aerial defenses and could cause a rise in worker absenteeism, but the reduction of “war production is not commensurate with the percentage of total war effort which this bombing represents.” Ofstie maintained that in the future, conventional bombing “must be directed against target systems to be decisive” and it must be “real precision bombing and not the prodigious expenditures of explosives of the past if it is to be within the capabilities of a country’s economy in another war.” Target lists should include oil, steel, communication, electric power generation, and other items that are essential to maintain a nation in war, objectives that were easier to strike with smaller aircraft than bigger bombers.531

Ofstie made a prescient point that would certainly ring true during the mid to late 1960s, when he argued that in gauging the “tactical effectiveness of an air force it is not

531 Ralph A. Ofstie, “The Fast Carrier Task Force”. Remarks made before the Metropolitan Section of the Aviation Writers Association, 30 June 1948, Papers of Stuart Symington, 1946-1950, Memoranda – General (Folder 3), O General, Box 9, HST.
the volume of the effort but the attainment of the objective and the cost of the results that counts.” Each target has to be measured individually and not treated the same in types and tonnages of bombs expended, a point sorely missing in the debate over atomic bombs and missions. He further antagonized the pro-USA elements involved in the debate when he suggested that the “Carrier Task Force is on an equal footing with any other air force” in its ability to conduct conventional attacks against “an enemy target anywhere on earth within the combined range of the carriers and their aircraft.” He agreed that nuclear weapons were the main weapon in the American arsenal, and he felt that they could only be useful if they “could be delivered to the right spot” by Air Force or naval aircraft. The problem was that in the event of war, both atomic and conventional bombs had to be delivered to targets that were a great distance from the United States. In mid-1948, the U.S. did not have a plane in squadron service that could carry atomic weapons “or other useful bomb weights from the U.S. to many possible targets overseas.” If the United States was not able to acquire bases closer to the targets, then in these circumstances, the carriers and naval aircraft were “the only way we can deliver bombs to targets overseas.” Naval strike aircraft could complement the attacks of land-based long-range bombers, and could hit targets that were harder to reach for the big bombers. They could also hit them multiple times and were a major component necessary to win a modern war.532

Despite the logic displayed in Ofstie’s criticism of strategic air warfare, Symington continued to praise it as the way to win a war, and further argued that the Air Force did not wish to get into a prolonged and “unprofitable discussion on ‘who won the last war’” but, apparently he did. He also criticized a memo that the Assistant Chief of Naval Operations, Admiral Dan V. Gallery, released that proposed that strategic bombing

532 Ibid.
was the primary mission of the Navy and not the Air Force. The Vice Chief of Naval Operations, Admiral Arthur Radford, went one step further, and stated that any target in the world lies within 1,500 miles of carrier based aircraft. This meant a more rapid response with fresh naval aircraft and crews instead of waiting for land-based bombers to cross the ocean, or polar ice caps, to strike a target. Symington felt that these types of vitriolic statements violated instructions that Forrestal had given to “all Departments emphasizing the necessity for minimizing public evidence of friction among the services” and the Navy continued to do this in spite of the Defense Secretary’s order. He also believed that the Navy’s statements raised questions about the Air Force’s doctrine on strategy and tactics “which not only reflect unfavorably on Air Force capabilities but which are designed to justify Navy participation in the strategic bombing function” despite the agreements reached at the Key West Conference. Symington then pondered why officers within the Navy were insistent on making these provocative statements that might seem beneficial to the Navy, but harmful to the nation as a whole. He reiterated that these arguments were wasteful, and the USAF remained “convinced that a major deterrent to aggression in the world today is the proven capability of the United States to deliver an atomic bomb now.” After all, it had “been done in 1945 and can be done again if necessary.”  

Symington took his concerns, about funding and missions, to the President in a letter on May 24, 1948. He felt that he needed to respond to the Navy’s accusations that the Air Force was unbalancing the economy, and the entire military structure. Rather than defend the USAF from these allegations, Symington attacked the variety of

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533 W. Stuart Symington to James Forrestal, Draft Memo, July 28, 1948, Papers of Stuart Symington, 1946-1950, E General-H Hold (Memo File), Box 5, HST.
proposals that had been presented by the Navy to the Finletter and Brewster committees. Symington also contended that the Navy had not changed its program since before the Key West Conference where the JCS was “supposed to have eliminated unnecessary duplication in roles and missions among the services.” He was also apprehensive about whether or not the Air Force would be allowed to spend up to the recommendations of the two Aviation Policy Boards, as the Navy was prepared to do. The United States found itself in a difficult position of trying to stave off communism across the globe at the same time it was “staggering under its present debt load.” This allowed the USSR, according to Symington, to sit back, and “watch us throw our money around with grim satisfaction, knowing that the easiest way to get control of America is not through war, but by keeping the world in a state which will result in a debt structure the capitalistic system cannot support.” The overriding cost of the Navy’s carriers, aircraft, crews and support vessels created an unnecessary burden on the American taxpayer who was being asked to support “without any strategic justification, and because of barnacled heritages” two air forces instead of “one Air Force and a Naval Air Arm.”

The sniping between the Air Force and the Navy began to bother others in the administration, including the Secretary of the Army Kenneth Royall. On September 7, 1948, he sent a secret memo to James Forrestal, and forwarded copies on to Sullivan and Symington, that addressed his concerns about the ongoing public fight between the Air Force and the Navy. He stated the obvious when he informed the Secretary of Defense that “it is going to be difficult to reach any satisfactory solution as to military air power” unless it was “placed under one Department.” For the Air Force, this was exactly what

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534 W. Stuart Symington to Harry S. Truman, 21 May 1948, Papers of Stuart Symington, 1946-1950, Spaatz to Travel, Box 12, HST.
they wanted to hear, for the Navy, it was a nightmare. Royall clarified the point when he informed Forrestal that it could be done by abolishing the Air Force, and assigning all the missions to the Navy, or to merge naval air into the Air Force as a single Department, and let the Navy maintain and protect the carriers on “somewhat the same basis that the Army services and protects the land airfields.” He added that neither solution was agreeable to the Air Force or the Navy, and the problem “transcends in size and importance” in regards to “finances, national resources and military planning” in addition to the other problems already created by unification. Therefore, the Army Secretary suggested that the matter be placed before the Congress during the next session.\textsuperscript{535}

THE NEWPORT CONFERENCE

Sensing that the Key West agreements had failed to settle the differences between the Air Force and the Navy, Forrestal convened another conference in August 1948 at the Naval War College in Newport, Rhode Island. Joining the Secretary of Defense were Symington, Sullivan, and Royall. The Joint Chiefs of Staff and their assistants also participated in the discussions and this included Admiral Louis Denfeld and Vice Admiral Arthur Radford, General Omar Bradley and Lieutenant General Albert Wedemeyer, the new Air Force Chief of Staff General Hoyt Vandenberg and Lieutenant General Lauris Norstad, and finally, Alfred Gruenther, the Director of the Joint Staff. In Newport, the Key West agreements were “reexamined with regard to certain provisions which have been subject to different interpretations since its preparation.” It was agreed at this conference that the Service that had the primary function for a mission “must

\textsuperscript{535} Kenneth C. Royall to James Forrestal, September 7, 1948, Papers of Stuart Symington, 1946-1950, D General-Democratic National Committee, Box 4, HST.
determine the requirements for the performance of that function, but in determining those requirements must take into account the contributions which may be made by forces from other services.” A press release announced some of the conclusions reached at the conference and noted that the responsibilities of each Service did not preclude participation of other services in conducting those missions. In contrast, the JCS agreed that it required “the fullest consideration and use of any available forces, regardless of the service, if they add to the effectiveness and economy of the operations.”

Decisions regarding control of access to the atomic arsenal were deferred until studies could be completed. It was suggested that a naval nuclear strike mission should be included in areas that benefited from such missions. In return, the primary mission of strategic bombing was confirmed in the Air Force, however, the Navy would be allowed to participate in the offensive. Inferred in the discussions was the supercarrier United States (CVB-58), which was already budgeted, named, and ordered by the President.

As a follow-up to the decisions made at Newport the Secretary of Defense, and the Joint Chiefs of Staff, issued statements on August 24, 1948 to clarify their views on the conference and its results. Forrestal suggested that there were a wide range of topics that were discussed and there was clarification of “the position of the Air Force in the field of strategic air warfare and the position of the Navy in that field.” The exchange of ideas between the Services had given way to an understanding. Forrestal said that the top levels of command regarded the “exclusive role of the Air Force in the field of strategic air warfare and conversely the intent of the Air Force not merely to permit but to seek all

537 Barlow, The Revolt of the Admirals, 129-130.
the help it can get from Naval Air in the use of airpower, either strategically or tactically.” The Navy also understood that it might require the help of the Air Force to conduct its anti-submarine warfare duty, and it would “invite all the help it can get from the Air Force in carrying out this mission.” Forrestal claimed that this agreement was neither a victory, nor a defeat for the USAF or USN, but rather it was a reflection of the Secretary of Defense’s views and “if followed through with sincerity and tenacity, will mean a victory for the country.” He cited many of the economic and international problems that impacted the United States, and that the American military policy was related to the economy of the United States. Deviations from the agreements previously reached at Key West or at Newport would “contribute nothing to the country’s welfare, but actually detract from our world standing.”

In addition to Forrestal’s comments, members of the JCS also addressed the issues raised and considered at Newport. The Chief of Naval Operations, Admiral Denfeld, contended that the JCS reiterated that strategic air warfare remained the primary responsibility of the Air Force. He added that the USAF was responsible to the JCS and a “higher authority” for creating plans for its implementation. The Air Force also recognized “that the Navy will be able to make significant contributions to any Strategic air plan” and that the USAF would “include Naval contributions in all Strategic Air Plans” and within their overall force requirements.” General Vandenberg, the Air Force Chief of Staff, added that prior to this “more definitive” agreement, each of the services has been more or less on the defensive to prevent possible encroachment into its sphere of interest.” This had led to problems that created an unhealthy and occasionally

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unfriendly competition between the Services. The Newport agreement obligated the Air Force to consider possible contributions from the other Services and seek out aggressively their contributions “when they will add to the effectiveness of the job that we are doing.” Vandenberg felt that this agreement must be supported “actively by good will and a desire to make our armed forces” satisfactory to the responsibility of national security.\footnote{Ibid.}

PUBLIC DISAGREEMENTS ON THE AGREEMENTS

In spite of the apparent good will publically expressed after the Newport Conference, the bickering and intra-service rivalries continued well into 1949. In November 1948, Symington again raised the alarm of naval intrusion upon the mission prerogatives of the Air Force. This time, the Navy was attempting to garner support for their mission or gain more influence on the press through advertisers, which Symington felt was “un-American in concept.”\footnote{W. Stuart Symington to James Forrestal, Memo, 22 November 1948, Papers of Stuart Symington, 1946-1950, D General-Democratic National Committee, Box 4, HST.} One of the offenders that so upset Symington was Navy Captain James Thatch, a well-respected air strategist and a “consummate fighter pilot.”\footnote{John B. Lundstrom, \textit{The First Team: Pacific Naval Air Combat from Pearl Harbor to Midway} (Annapolis, MD: Naval Institute Press, 1984), 28.} Thatch stated “there were two kinds of air, land-based air and sea-based air; and that land-based air was like a boxer with his feet embedded in concrete.” What Thatch meant was aircraft carriers offered mobility what made it difficult for enemy aircraft to immobilize while conventional air bases were easy to find and disrupt. Symington also took offense that he was often the target of naval barbs, and that it was considered unethical for uniformed officers of one branch to attack a civilian secretary of...
another service. He argued that Admiral Arthur Radford had made it clear that no
civilian was “going to tell him what he is going to do with respect to the Navy” and that
Radford felt that the Navy’s future depended upon these ongoing attacks upon the Air
Force. Symington informed Forrestal that he had contacted Navy Secretary Sullivan
regarding this impropriety, but Sullivan had not called him back.\textsuperscript{542}

That same month, Symington also sent a letter to Ferdinand Eberstadt, the
Chairman of the Committee on the National Security Organization, in which the
Secretary attempted to defend his institution from naval intrusion. He accused the Navy
of engaging in an “unwarranted attack against the Air Force” in regards to agreements
reached between the Services as well as the “capacity of the Air Force to perform its
assigned mission.” The Navy challenges to the efficacy of Air Force strategic bombing,
in an effort to promote carrier aviation, created the inevitability “of putting all military
airplanes in one service” and Symington claimed that the Air Force was against this
concept and had informed Forrestal of that truth repeatedly.\textsuperscript{543}

In November 1948, speculation arose in Washington that, in light of the President
Truman’s surprise reelection victory, both Forrestal and Symington might be on their
respective ways out of Washington, as Truman prepared for his second term.\textsuperscript{544} Forrestal
had displayed signs of fatigue and physical deterioration throughout most of the year, and
it appeared that he was becoming paranoid.\textsuperscript{545} He had also refused to provide campaign
contributions to Truman’s reelection. Louis A. Johnson, the Truman campaign’s finance

\textsuperscript{542} Symington to Forrestal, 22 November 1948, HST.
\textsuperscript{543} W. Stuart Symington to Ferdinand Eberstadt, 1 November 1948, Papers of Stuart Symington, 1946-
1950, E General – Hold (Memo File), Box 5, HST.
\textsuperscript{544} 6 April 1949 Memorandum, Papers of Stuart Symington, 1946-1950, E General-H Hold (Memo File),
Box 5, HST.
chairman, was not afraid to let people know, including the President, about Forrestal’s failure to financially aid the President when it mattered the most. Conjecture that Johnson would replace Forrestal as the head of the National Military Establishment, continued through the remainder of 1948, and into early 1949. Symington as well, had appeared to anger just about everybody outside of the USAF. He had clearly alienated himself from Forrestal, and more importantly, from Truman. In late July 1948, Forrestal had approached the President to inform Truman that he had decided to ask for Symington’s resignation, because of very critical and public statements made by the Secretary of the Air Force that were aimed at Forrestal and the policies of the NME. Despite the Air Force Secretary’s verbal war with the Navy, the Secretary of Defense and the President’s budget requests, Symington would survive and had tremendous impact on the future of strategic air warfare.

STRATEGIC AIR WARFARE AS U.S. POLICY

It was evident at the close of 1948, that some direction and public statements needed to be made by the administration regarding the testing of nuclear weapons, and where they fit in American policy. Stories and editorials had kept the issue alive for most of the year. The August 16, 1948 issue of Life magazine featured an article by Air Force General Carl Spaatz. In this second of a two-part series, the former Air Force Chief of Staff reiterated the Air Force position on atomic weapons and air policy. He argued that

547 6 April 1949 Memorandum, Papers of Stuart Symington, 1946-1950, E General-H Hold (Memo File), Box 5, HST.
548 Hoopes and Brinkley, Driven Patriot, 376.
Soviets were the enemy of the United States and Congress needed to pronounce that “airpower shall be the hard core of American defense” and the last war had proven that “a determined air attack always gets through.” The ability of airpower to win wars was also apparent to the Navy and Spaatz asserted that their pursuit of a nuclear bomber and supercarrier meant that airpower had “made its final convert.” The quest for the control of the sky was costly and approximately half of the defense budget was being spent on aircraft and this created gaps in American defenses that could be exploited by the Soviets. Spaatz contended new technologies would make dramatic changes to the offensive capabilities of the United States and even though many have over emphasized the impact of nuclear weapons, they remained a force multiplier of each bomber “on the order of hundreds to one.” If a solution was not found to create a lasting peace, the reality of an atomic war may “end in the most tragic of paradoxes: the good society, in attempting to destroy evil, may destroy itself.”

As Truman prepared for his second term, he had to provide direction to the military, as well as American allies and enemies about the use of the atomic bomb to attain U.S. international goals. Dr. Vannevar Bush, the former wartime director of the Office of Scientific Research and Development, was asked by James Forrestal to provide some insight for the administration about the role of atomic weapons and their impact on world. Bush responded on December 28, 1948 in a letter directed to the Secretary of Defense, with a copy going to the Office of the President, which discussed the merits of releasing information regarding the results of the atomic tests at the Bikini Atoll. He transitioned into thoughts on nuclear weapons, and suggested that a statement of public policy regarding the atomic bomb, and other weapons of mass destruction, would be

constructive. He added that a “factual statement about the possibilities and limitations of these weapons” would replace fear with a “calm determination to face unpleasant facts” and unlike the military personnel who were hailing the definitive nature of nuclear weapons, Bush suggested that “none of these weapons is determining in the sense that it is overwhelming.” If another World War broke out, it would be an awful war, but “I have no reason to believe that it would be more fearful than the last one in its over-all consequences.” He did not feel that another war would lead to the end of civilization. Unlike the fear mongering that was coming from the Pentagon and Capitol Hill, Bush contended “that if the good people of this country, the sound, common sense people everywhere, had the reasoned factual basis for understanding this matter they would face the future with confidence and determination.”

Bush recommended that a clarification of national policy in regards to the use of atomic weapons needed to be articulated. He did not doubt for a moment that if the United States, or her Allies “were attacked by a powerful aggressor” that the U.S. would use atomic weapons, albeit reluctantly and against military targets. Bush also felt that if there were hesitation or a decision to only use them in extreme circumstances, it might be too late for them to have an impact. The United States, therefore, had to have a clear statement of policy that indicated atomic weapons would be used in an effort to preserve American freedom. In contrast to what the Air Force was projecting with their city busting B-36s, or even the firebombing raids of 1944-1945, the U.S. would not “undertake to use any means of warfare aimed at wiping out the population of an enemy, but rather we would attack him by means calculated to destroy” their military might.

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This latter view was much more in line with the ideas of strategic air warfare that came out of the Navy Department. Bush informed Forrestal that the relationship of the weapons to American policy is clear as evidenced by the “relative positions which they occupy with respect to the entire military research and development program” and they were “adjuncts and not central features in the present military program.”  

An examination of Bush’s letter by the NME indicated that many of the issues he raised had already been scrutinized or were in the process of being reviewed. In May 1948, the Secretary of the Army had requested that the National Security Council formally develop the American position on the bomb, and its use in warfare. The NSC submitted a report entitled (NSC 30) that “argued that the risks of public controversy and resulting foreign speculation” that followed the “announcement of a decision as to the use of the atomic bomb in the event of war outweighed the advantages of a present decision.” NSC 30 concluded that it was recognized and understood that in the event of war, the NME “must be ready to utilize promptly and effectively all appropriate means available, including atomic weapons, in the interest of national security and must therefore plan accordingly.” The report also indicated that the decision to use such weapons would be made by the President when he considered it necessary.

What is not clear from this work, or from other comments outside of the Pentagon, was the reluctance to declare the intentions regarding nuclear weapons in the event of war. One only needed to look at any of the major papers during the unification debates, or the ongoing battles over service roles and missions, to discover how all

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552 Ibid.
branches of the military viewed the new weapons and where they fit within the context of American military policy. As 1948 came to an end, the debate over nuclear weapons was not over, and it was about to get much uglier in 1949. Before that next year was over, the current Secretary of Defense would be dead, the Chief of Naval Operations would be fired for insubordination, the supercarrier would be canceled, more B-36s would be ordered, and the Soviet Union would display to the world their atomic bomb and delivery system. In light of these events, once can clearly see the goal of nuclear weapons and strategic air warfare, and how they came to dominate American foreign and domestic policy in the remaining years of the Truman administration and beyond.
CHAPTER SIX

KILLING THE SUPERCARRIER AND THE BUILDING THE INFERIOR BOMBER

I am an advocate of air power. It is a dominant force in our military structure. I am also a proponent of strategic air warfare. . . Furthermore, I maintain that the initial air offensive is not solely the function of the U.S. Air Force. Admiral Louis E. Denfeld, Chief of Naval Operations, October 13, 1949.554

I’m not begging the question of whether it is our ultimate aim to inflict such destruction, and I realize that you may win the war, and lose the peace. However, we are all aware of the awful penalty if we lose the war. Your military planners must plan to win. There is no second prize for the runner up. General Omar N. Bradley, Chairman, Joint Chiefs of Staff, October 19, 1949.555

Preparations for the Fiscal 1950 budget continued unabated during the Presidential race in 1948 and President Harry Truman continued to reject the opinions of both Air Policy commissions. He disregarded the repeated cries of poverty and danger from the leadership inside the United States Air Force and the Navy, because of his ongoing effort to streamline the military budget. Truman had lost patience with the inability of the American military to actually achieve unification as the administration began to look at the Cold War as a long-term conflict, rather than an immediate threat. The President did not want the military debate to spill out into the public because it could anger the American electorate who could demand greater defense expenditures than

554 Statement of Louis E. Denfeld, Admiral, United States Navy, Chief of Naval Operations, Navy Department, Washington D.C. before the Armed Services Committee of the House of Representatives Investigating the B-36 and Related Matters, October 13, 1949, Papers of Francis P. Matthews, Secretary of the Navy, House Armed Services Committee Investigation, The B-36 and Related Matters, (Oct 10-17, 1949), Box 56, HST.
555 Statement of General Omar N. Bradley, Chairman, Joint Chiefs of Staff Before the Armed Services Committee of the House of Representatives, October 19, 1949, Papers of Francis Matthews, Secretary of the Navy, House Armed Services Committee Investigation of the B-36 & Related Matter, (October 18-21, 1949), Misc Speeches, Box 57, HST.
Truman believed were prudent. The administration also believed that the U.S. nuclear monopoly reduced the Soviet threat to a political menace rather than military one.\footnote{Norman Friedman, \textit{The Fifty-Year War: Conflict and Strategy in the Cold War} (Annapolis, MD: Naval Institute Press, 2000), 129.}

Placed directly in the middle of the political battles over the budget between the Services, the White House and the Congress was the Secretary of Defense, James Forrestal. By the middle of 1948 he had fallen out of favor with the President who publically supported him even as rumors swirled of his imminent departure from the Pentagon. Forrestal continued to feud with the Secretary of the Air Force Stuart Symington, was verbally assaulted by some members of the press, and had clearly lost the confidence of the Navy over his failure to take a firm stand on the responsibility of nuclear roles and missions. Despite his problems, Forrestal continued to identify issues that he believed had to be addressed if the United States was going to have an effective national defense. He remained convinced that “the size and character of our future Armed Forces depend upon a prior determination of our basic national objectives, and the roles which the military strength and other non-military activities” would factor in the achievement of American international goals. The preparation of the budget and final decisions regarding its size, and the different projects that it would support, should be based on the recommended analysis. Forrestal urged the President to give this matter the “highest possible priority” as he considered the overall budget and the force levels that Truman wanted to maintain to meet American global commitments.\footnote{James Forrestal to Harry S. Truman, 10 July 1948, Papers of Harry S. Truman, President’s Secretary Files, National Security Council Files – Meetings, Meeting 14, July 1, 1948 to Meeting 27, November 23, 1948, Box 204, HST.}

On July 10, 1948, Forrestal sent a memo to the Executive Secretary of the National Security Council, Sydney W. Souers, entitled “Appraisal of the Degree and
Character of Military Preparedness Required by the World Situation.” This document was forwarded on to the rest of the NSC as Forrestal attempted to grasp the direction of U.S. policy in relation to the military requirements projected in the next budget. Forrestal contended that because of the time factor necessary for a military build up, these estimates would “materially affect our capabilities” until the next budget cycle, which would begin on July 1, 1950.\textsuperscript{558} American national security was dependent upon the proper “size, character, and composition” of military forces that would be set after “careful analysis of existing and potential dangers to our security and upon decisions that as to the methods by which such dangers can best be met within the limitations of our resources.” Threats to U.S. security could be military or non-military in nature, and therefore the composition of the military and other American responses including foreign aid, had to fit within the overall framework of national policy. Forrestal added that once these objectives were determined in addition to the military strength required to achieve them, then it was time to “consider the share of our national resources which must be allocated to support military activities” within the confines of such resources. The types of threats also determined where the allocations of military expenditures would be directed, including funds for research and development into weapons and strategy, stockpiling resources, attaining bases overseas, and possibly even joint military planning and support for American allies.\textsuperscript{559}

\textsuperscript{558} It is important to note that on July 1, 1950, the United States was at the very beginning of its involvement in the Korean War that began on June 25, 1950. When the budget debates were dragging through 1948 and 1949, the possibility of involvement in a war like Korea seemed extremely remote to those in the State Department as well as the Pentagon.\textsuperscript{559} James Forrestal, Memorandum for the Executive Secretary, National Security Council, 10 July 1948, Papers of Harry S. Truman, President’s Secretary Files, National Security Council Files – Meetings, Meeting 14, July 1, 1948 to Meeting 27, November 23, 1948, Box 204, HST.
Like many others inside Washington D.C., Forrestal believed that there was no real threat to the United States, besides the Soviet Union, within the next decade. This did not mean that there would not be smaller wars of aggression that could require the United States to “use military force to protect its own security or to prevent a breakdown in world order.” All contingencies needed to be examined, including the possibility of an accidental war with the USSR and/or her allies, and continued communist expansion through military or political means, before an effective assessment of a military force structure became evident. Forrestal recommended that a “comprehensive statement of national policy be prepared, particularly as it relates to Soviet Russia, and that this statement specify and evaluate the risks, state our objectives, and outline the measures to be followed in achieving them.” This statement would provide the necessary direction for the NME, the type of budget that it would require, and assist Truman in “determining the proportion of our resources which should be dedicated to military purposes.” It was NSC that had the responsibility for such a statement, and Forrestal argued that the State Department should also contribute by creating the first draft of the statement which would become the discussion point, and then be “altered or modified to reflect military considerations” and resources.  

An attempt to create direction for the NME came from a top secret report entitled “U.S. Objectives with Respect to Russia,” prepared by George Kennan, Chairman of the Policy Planning Staff of the State Department and presented to the NSC in August 1948. Within the pages of the 52-page report, Kennan and his staff attempted to clarify American goals vis-à-vis the Soviet Union in war and peace because the Soviets were

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560 James Forrestal, Memorandum for the Executive Secretary, National Security Council, 10 July 1948, Papers of Harry S. Truman, President’s Secretary Files, National Security Council Files – Meetings, Meeting 14, July 1, 1948 to Meeting 27, November 23, 1948, Box 204, HST.
identified again as the “outstanding problem of U.S. foreign policy” and there were grave concerns in the United States because of the “aims and methods of the Soviet leaders.” This required the U.S. government to respond appropriately to change or modify Soviet policies and “to alter the international situation” which had been created by the USSR.\footnote{“A Report to the National Security Council by the Department of State on United States Objectives with Respect to Russia,” NSC 20/1, August 18, 1948, Papers of Harry S. Truman, President’s Secretary Files, National Security Council Files – Meetings, Meeting 14, July 1, 1948 to Meeting 27, November 23, 1948, Box 204, HST.}

The United States found itself in a non-traditional position in that it was engaged in a political war, with “more defiant and militant objectives” towards the Soviet Union during a time of peace. The U.S. understood the “desirability of gearing our war effort to a clear and realistic concept of the long-term political objectives which we wish to achieve.” These goals could be attained in a war, but the requirement of finality, like the end of World War II, might not be necessary. If the American people were expecting a demand of unconditional surrender with the idea of a long-term occupation of conquered territories, they might feel that anything short of that would be a failure or no real victory at all. In addition, Kennan argued that the U.S. had to understand that Soviet goals remained constant, and were little affected because of war, or in a time of peace. The Soviets felt that there was a chasm between themselves and the rest of the world and their relationship was “one of permanent antagonism and conflict, taking place sometimes within a framework of formal peace and at other times within the legal framework of war.”\footnote{Ibid.}

Kennan also highlighted some of the problems that democratic states had about identifying objectives in peace or in war. If there was a smaller gap between “peacetime
and wartime purposes,” it was far more likely that “a successful military effort will be politically successful as well.” If the objectives were firmly linked to national interests, they were worth “consciously formulating and pursuing in war as in peace.” Kennan added that objectives that were the result of “wartime emotionalism” were not prone to reflect “a balanced concept of long-term national interest.” For the Policy Planning Staff, this was the reason to articulate American goals in advance of a prospective war, and to “define our present peacetime objectives and our hypothetical wartime objectives” in relation to the Soviet Union, and to reduce the gap between those aims. Kennan’s group felt that there really were only two real objectives and they were the reduction of the power and influence of the Soviets so they no longer constituted a threat to the “peace and stability of international society” and to bring about a change “in the theory and practice of international relations observed by the government in power in Russia.” In peace, therefore, it would require the United States to encourage and promote a measured reduction of Soviet power and influence from their current “satellite area” with all means short of war. As well, the U.S. had to advance the emergence of independent eastern-European nations, as well as the “revival of the national life of the Baltic peoples.” The image of the Soviet military had to be changed to encourage the entire world to “see and understand the Soviet Union for what it is and adopt a logical and realistic attitude toward it.”

In the event of war, Kennan projected that there were several items that needed to be understood before American objectives in war could be properly identified. It was not practical for the United States to assume that they would be able to occupy and administer the entirety of the Soviet Union, nor was it likely that the Soviet government

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563 Ibid.
would surrender to the U.S. unconditionally. There was also no guarantee that even a concerted military effort would completely eliminate all vestiges of the Soviet government in the expanses of the Soviet nation. Previous experience, including the battles between the Soviet Union and Nazi Germany, indicated the tenacity of the Soviets and the difficulties of subduing such a large span of territory. There was the possibility, however, if extreme care were taken “within the limits of military feasibility, not to antagonize the Soviet people by military policies which would inflict inordinate hardship and cruelties upon them, there would be extensive disintegration of Soviet power” during a war with the United States. In the aftermath of the war, it would be difficult to rebuild the territory along American ideals of democracy in a nation that did not have much experience with Western thoughts or foundations. It was possible, but it would take time, however, and “we could not expect to create an authority in the former Soviet territory that would be “entirely submissive to our will or entirely expressive of our political ideals.”

The United States had to recognize that it had to achieve a settlement that was politically negotiated, and not imposed by military order. Still, the attainable military goals should be to destroy the influence of the Soviet military in areas outside of the Soviet Union, as well as to eliminate the “structure of relationships by which the leaders of the All-Union Communist Party have been able to exert moral and disciplinary authority over individual citizens, or groups of citizens, in countries not under communist control” or domination. The U.S. had to make sure that the communist power base was destroyed, so that the war making capacity of the USSR was incapable of waging war against enemies inside or outside of Soviet territory. Kennan recommended that it should

564 Ibid.
not be the policy of the United States to attempt to reconfigure borders, assure “the independence of the Ukraine or any other national minority,” or assume the responsibility of determining the government of the liberated USSR, or to use the American military to carry out a “large-scale program of de-communization.”\(^{565}\)

An additional top-secret paper was also prepared by the Policy Planning Staff and circulated among the members of the NSC on August 25, 1948. It addressed the factors that mitigated against “the likelihood at this juncture of international, planned Soviet armed action” that would trigger an American response. It was suggested that the last two World Wars had indicated that unless a European power was able deal “a decisive blow to the North American military-industrial potential” in the initial phases of the war, they could never be certain of a victory, and currently the Soviets did not have that capacity. The Soviet Union had not yet recovered from the physical destruction that had been inflicted upon them during the Second World War, which was much worse than had previously been considered. The Policy Planning Staff was skeptical that the Soviet industrial capacity had reached pre-war levels and that large-scale reconstruction remained an imposing burden on the Soviet economy. Many of the segments of Soviet industry and transportation suffered not only from war damage, but also were in “a state of serious backwardness and obsolescence.”\(^{566}\)

The population of the USSR was considered to be extremely war-weary, and this had to be factored into any decision the Soviet government made concerning military action. Their government had a “traditional preference for political means as opposed to

\(^{565}\) Ibid.

\(^{566}\) “A Report to the National Security Council by the Department of State on Factors Affecting the Nature of the U.S. Defense Arrangements in the Light of Soviet Policies,” NSC 20/2, August 25, 1948, Papers of Harry S. Truman, President’s Secretary Files, National Security Council Files – Meetings, Meeting 14, July 1, 1948 to Meeting 27, November 23, 1948, Box 204, HST.
military action” to gain control over foreign territories. They were considered to be extremely cautious in starting military endeavors on their own terms, and Moscow maintained the principle of a “maximum of power with a minimum of responsibility.” This doctrine might prevent them from taking action when they could not control the reaction. Any move against the West would result in occupation of conquered territories, and it was not clear if the morale of the Red Army could be sufficiently maintained in a long occupation. Finally, the Soviets believed that time and history were on their side, and events around the world could shift in their favor. The report indicated that the Soviets overrated “the political prospects of the (Henry) Wallace movement and the isolationist wing of the Republican Party, and feel that an accretion of strength on the part of either one would be to their advantage.”

The aforementioned information may provide an image of the Soviets remaining docile, and the Americans were the aggressor, however, the report cited reasons why the Soviets might begin military action against the United States. It was reported that the Soviet leadership might feel that they would never be stronger than they were in 1948, and Western Europe was also relatively weak. This could have been the time to strike and if the political situation in Europe had moved away from Moscow, the Soviets might “resort to armed action at this juncture, in order to prevent recovery in the west and to ensure an immediate extension of communist power in that region, as a means of defending Soviet power in eastern Europe.” Other reasons for a Soviet move could include a miscalculation of the Truman administration’s resolve, or “its willingness to resort to force to protect the integrity of existing international agreements.” There was also the prospect that the Soviets would be compelled to take military action because of

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567 Ibid.
internal conflicts, or the opportunity of gaining more “military booty” to assist their recovering economy. The report also suggested that despite these possibilities, the “evidence points to the conclusion that the Soviet Government is not now planning any deliberate armed action of this nature and is still seeking to achieve its aims predominantly by political means” and military intimidation.\textsuperscript{568}

The report also addressed the role of atomic weapons in relation to the Soviet Union, and immediately pointed out a critically important theory about the Soviet threat. The Policy Planning Staff suggested that political factors were likely to decide in opposition to the use of atomic weapons by the USSR against “major urban and industrial areas in other countries, except by way of retaliation” for strikes on Soviet targets. There was also evidence from World War II that the Soviets had a level of reluctance “to resort without provocation to methods of mass destruction aimed against civilian elements” in other nations. It was also articulated that if the Soviets believed that there was the strong likelihood of retaliation, it could dissuade them “from taking the initiatives in the use of atomic weapons against western cities.” The USSR had few cities to lose, and a small number of atomic bombs could “if properly and effectively directed” destroy their entire industrialization program. It would also have a devastating consequence on any Soviet military action and on the Soviet people. These ideas compelled the United States to build a military with a clearly understood deterrent factor. It was believed that the Soviets would not risk a conflict with the United States that offered little possibility of a complete victory for the Soviet Union.\textsuperscript{569} What became clear through the Policy Planning Staff’s briefing report to the NSC was that they did not consider the Soviet

\textsuperscript{568} Ibid.
\textsuperscript{569} Ibid.
Union to represent a clear and present danger to the continental United States, nor was there an immediate threat of nuclear strikes against American cities. There was, however, much uncertainty as to true Soviet intentions, and policy makers attempted to divine the minds of the leadership inside the Kremlin.

If the previous two reports indicated a level of moderation of the American view of the USSR, another report entitled “U.S. Objective with Respect to the USSR to Counter Soviet Threats to U.S. Security” was endorsed by the JCS, and forwarded to the President. Truman approved the document a day later, and the policy of the United States with regards to the Soviet Union became more defined, but not necessarily understood. The document reverted back to the principle that it was the “will and ability” of the Soviet leadership that presented the United States with the greatest threat to its security and the Soviets were still determined to dominate the world. This threat would not end until the “non-communist nations have been so reduced in strength and numbers” that the communists dominated the rest of the world. Soviet goals were pursued through subversion, waging “political, economic, and psychological warfare against all elements resistant to communist purposes” and a continuing build-up Soviet forces in expectation of war. The Soviet threat was also considered to be immediate and dangerous to the United States because of their bombers on one-way missions, and submarines that could disrupt American control of the sea. Soviet military capabilities would increase progressively, and by 1955, they would have the capacity to attack the United States with nuclear or other weapons of mass destruction, including the launching of submarine based guided missiles.\footnote{A Report to the President by the National Security Council on U.S. Objectives with Respect to the USSR to Counter Soviet Threats to U.S. Security,” NSC 20/4, November 23, 1948, Papers of Harry S.}
It was not felt that the Soviet Union or its leadership was actively “planning any deliberate armed action calculated to involve the United States” and instead was attempting to achieve its goals through “political means, accompanied by military intimidation.” If the United States showed weakness through “appeasement or isolationist concepts” in diplomacy, it could lead to the loss of American allies and authority. It would also provide the Soviets with greater strength or leverage in the international arena that could lead to the defeat of the United States or “force us into a war under dangerously unfavorable conditions.” Among the recommendations to accomplish this objective was the development of a state of “military readiness which can be maintained as long as necessary as a deterrent to Soviet aggression” and to maximize “our economic potential, including the strengthening of our peace-time economy and the establishment of essential reserves readily available in the event of war.” It was also important to keep the American people aware of the Soviet threat to its national security so that they would be willing “to support the measures which we must accordingly adopt.” In the event of war, the United States had to destroy the military power of the Soviet Union and the political infrastructure of the communist party apparatus. Nations that had been dominated by the Soviets had to be reassured that in the aftermath of the war, there would be insufficient military power in the former Soviet Union to wage an aggressive war or impose “nothing resembling the present iron curtain over contacts with the outside world.” At the end of the war, the U.S. would create conditions that prevent

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Truman, President’s Secretary Files, National Security Council Files – Meetings, Meeting 14, July 1, 1948 to Meeting 27, November 23, 1948, Box 204, HST.
“the development of power relationships dangerous to the security of the United States and international peace.”

It is difficult to determine what the role of strategic bombing would be in achieving the goals listed in these documents but certainly, bombers would have a role in destroying the military production of the Soviet Union. However, they would not be able to prevent well-equipped Soviet armies from moving across European nations, unless the United States was willing to use atomic bombs on friendly or neutral territories in an effort to curb or destroy the Soviet military. It would be difficult to attain a mood of liberation within the territory of the Soviet Union, if most of the major cities or production centers were uninhabitable because of nuclear contamination. In the event of total war with nuclear exchanges on both sides, however, the role of the bomber would be to destroy much of the enemy so as to allow the United States to survive in some capacity by punitively destroying the heart and soul of the Soviet regime. This type of war was possible, but extremely remote, as both sides understood there was too much to lose in this type of war. Nevertheless, the American military continued to prepare and obsess over this latter type of warfare, and were supported by the Congress and many members of the press during the budget battles of 1948 and 1949. The United States was beginning to embrace an “all or nothing” strategy designed to destroy the Soviet Union. It would cost the U.S. taxpayer billions of dollars and virtually destroy any flexibility for achieving victory in smaller wars, or conflicts that did not involve the USSR. Victory through airpower came to be identified by stately bombers flying at will against a hapless enemy to deliver a nuclear strike that would force an enemy to surrender as rapidly as Japan did in August 1945. The reality, however, would be much different, and it would

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571 Ibid.
cost so much more in lives expended, because of a national policy that was difficult to achieve solely through the air.

**BURYING THE NME AND CREATING THE DEPARTMENT OF DEFENSE**

Relatively unhappy with the infighting inside the Pentagon, and realizing that the Secretary of Defense had no substantive authority over the military departments, James Forrestal recommended changes to the National Security Act of 1947 in late 1948.\(^{572}\) Forrestal was concerned that the position of Secretary of Defense was too weak, and it needed more power to bring the Pentagon in line. He therefore suggested five revisions that would make the NME more efficient. They included turning the NME into a single executive department, increase the authority of the Secretary of Defense over all aspects of the military departments, create an Under Secretary of Defense, provide a larger and stronger staff for the Office of the Secretary of Defense, and create the position of Chairman of the Joint Chiefs of Staff to provide direction and leadership to the JCS.\(^ {573}\)

Congress had already begun to scrutinize changes to the Executive Branch in a committee chaired by former President Herbert Hoover. A subcommittee of the Hoover Commission, led by Ferdinand Eberstadt, examined the apparatus of American national security.\(^ {574}\) The recommendations made by Hoover and Eberstadt, once adopted under the National Security Act Amendments of 1949, would have a dramatic impact on the Pentagon for decades to come. Critically important for unity in the Pentagon, the Service


\(^{573}\) Marx Leva to James Forrestal, 2 December 1949, Papers of Clark M. Clifford, Subject File, 1945-1954, National Military Establishment, Navy to Overseas Radio and Cable Consolidation, Box 12, HST.

Secretaries were removed from Cabinet level positions and from the National Security Council. This meant that the Secretary of Defense now solely represented the Pentagon in the Cabinet, rather than the civilian leadership of the military branches. A Deputy Secretary of Defense position was created along with three Assistant Secretaries that would assist the Secretary to administer the Pentagon. A permanent position of Chairman of the Joint Chiefs of Staff was also created. Effective with the passage of the appropriate legislation in August 1949, the name of the National Military Establishment was officially changed to the Department of Defense (DOD). The Secretary of Defense now had more power over the Services in all matters, including budgeting.\textsuperscript{575}  Truman would later write in his memoirs that it had been apparent to him, during the first year of the NME, that more responsibility and power needed to be placed into the hands of the Secretary of Defense. He had to be the singular representative of the Pentagon in the NSC.\textsuperscript{576}  One could argue that in many ways, these changes would indeed make the Secretary the face of the military from 1949 to the present. The Secretary of Defense had the ability to promote or destroy weapon systems and strategies. As the United States continued to embrace an evolving nuclear strategy, the Secretary became far more critical to the future of American aircraft and weapons purchases, and their application in all wars, including limited or nuclear exchanges.

\begin{footnotesize}
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\item \textsuperscript{575}  Arnold A. Rogow, \emph{James Forrestal: A Study of Personality, Politics, and Policy} (New York: MacMillan, 1963), 304-305.
\item \textsuperscript{576}  Harry S. Truman, \emph{Memoirs: Years of Trials and Hope} (Garden City, NJ: Doubleday & Company, 1956), 52-53.
\end{itemize}
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THE TRAGEDY OF JAMES FORRESTAL AND THE RISE OF LOUIS JOHNSON

Unfortunately for James Forrestal, he would not be in office long enough to see the reforms that he had pushed for during the latter months of 1948. The working relationship between the Secretary of Defense and the President had eroded sufficiently enough for Truman to replace the workaholic Forrestal. Rumors about Forrestal’s loyalty to Truman, in light of an alleged attempt to offer his services to the presumed victorious Thomas Dewey, had many inside the administration calling for his resignation. His tireless effort to keep a balanced defense strategy, under the budget ceiling that Truman demanded, and the Service Secretaries fought over, appeared to have overwhelmed Forrestal. The Secretary of Defense also came under increased criticism from naval aviators because they believed that Forrestal, in an effort to complete unification, was prepared to strip the Navy of its air arm.\(^\text{577}\) Having lost his base support from the Navy, and disparaged by the Air Force for not eliminating the redundant naval nuclear mission and the supercarrier, Forrestal succumbed to the pressures of the job.

It is not clear why Truman kept Forrestal on in the very beginning of his second term once it became apparent that Louis A. Johnson would take over as Secretary of Defense in late 1948. Truman could have publicly announced the change at the same time he appointed Dean Acheson to take over the State Department for the departing George Marshall in January 1949. Instead, Truman apparently informed Forrestal behind closed doors that he was being replaced perhaps in an effort to help transition the NME into Johnson’s hands.\(^\text{578}\) Forrestal was asked to resign by Truman in March 1949, and


\(^{578}\) Hoopes and Brinkley, *Driven Patriot*, 438.
encouraged to take a vacation.\textsuperscript{579} His behavior became so erratic once he left the Pentagon, that an apparently delusional Forrestal was quietly brought back to Washington and committed to the Bethesda Naval Hospital. An investigation reported to Truman that it appeared that Forrestal was “suffering from a slight nervous breakdown and that his suspicions are the result of this condition.”\textsuperscript{580} After several weeks of care and observation, Forrestal fell to his death from the sixteenth floor of the hospital on May 22, 1949.\textsuperscript{581} Truman acknowledged that Forrestal had suffered from bouts of depression, but that “after they were passed he was right back to normal” and “had we been able to prevent this from happening he would have entirely recovered.”\textsuperscript{582} Either way the best ally the Navy had in the administration during the postwar years was now gone.

Louis A. Johnson, a member of the board of directors of Consolidated-Vultee (Convair), the corporation that produced the B-36, as well as the head of Convair’s key law firm, was now the Secretary of Defense.\textsuperscript{583} He was the former commander of the American Legion and had served as the Assistant Secretary of War during World War II but his main qualification, however, appeared to be his loyalty to Truman. When most prominent Democrats were ready to abandon the unpopular Truman for another candidate in the contentious 1948 Presidential race, Johnson became a major fundraiser for the President’s reelection campaign and Johnson was rewarded with the position for his

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\textsuperscript{580} March 31, 1949 report, Papers of Harry S. Truman, President’s Secretary Files, Subject File, Cabinet (Defense – 2) – (War), Box 157, HST.
\textsuperscript{581} Serious debate has taken place in the 60 years since Forrestal’s death over whether it was a suicide or murder and the Navy did not declassify the details of his death until April 2004. Copies of this report are available at \url{http://www.princeton.edu/~mudd/finding_aids/willcutts/}
\textsuperscript{582} Harry S. Truman to W. Averell Harriman, May 23, 1949, Papers of Harry S. Truman, President’s Secretary Files, Subject File, Cabinet (Defense – 2) – (War), Box 157, HST.
\end{flushleft}
service. Johnson was considered to be “an outspoken advocate of land-based strategic bombing” and was willing to follow Truman’s mandates on the budget, unification, and “elimination of duplication wherever possible.”

One of the first items on the new Secretary’s agenda was a review of the supercarrier *United States* and its necessity in the age of Truman’s defense austerity.

**TO BUILD THE SUPERCARRIER**

At Key West one year earlier, in March 1948, the Joint Chiefs of Staff apparently gave the approval for, or perhaps did not officially disapprove a supercarrier for the Navy. The Secretary of the Navy, John L. Sullivan, testified in front of the House Subcommittee on Appropriations on May 19, 1948, in an effort to clear the way for the funding of the new ship, USS *United States*. Throughout his testimony, Sullivan made the case that with the cuts in the construction of other ships, the cost of *United States* could be absorbed. Congressman Noble Johnson of Indiana asked the Secretary to go on record about whether or not “the Joint Chiefs of Staff … and the Secretary of War and the Secretary of National Defense, Mr. Forrestal, have approved this new type carrier?” Sullivan replied that at Key West, the JCS approved the supercarrier and a letter from the late Secretary of Defense Forrestal supported his testimony. Forrestal had supported removing other ships from various stages of construction and redirecting those funds towards the flush deck supercarrier that had been approved by Truman, Forrestal, and

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James Webb, the Director of the Bureau of the Budget.\textsuperscript{585} The canceled ships opened up approximately $57 million to “insure the continuance of the carrier.”\textsuperscript{586}

Sullivan next testified in front of the Subcommittee of the Senate Committee on Appropriations on June 11, 1948. He reiterated that the JCS had, “within the last 10 days…voted 3 to 1 in favor” of the supercarrier. The only dissenting vote was from the Air Force Chief of Staff, General Hoyt S. Vandenberg. Sullivan believed that this was part of an ongoing attempt by the Air Force “to stop the money that was appropriated by the House for starting the flush-deck carrier at once.”\textsuperscript{587} Sullivan articulated the need for naval aviation throughout his testimony but he might have hurt the case for the carriers by trying to soften the importance of the supercarrier by referring to it as a prototype. Chairman of the subcommittee, Leverett Saltonstall of Massachusetts, asked Sullivan if the prototypes were to be carried out into a bigger program. Sullivan replied, “We do not anticipate that. There has been talk about a larger number of these flush-deck carriers. That is not our objective. We want to build one of these and operate it to find out its defects…and its potentialities.”\textsuperscript{588}

After months of political wrangling, Sullivan sent a brief letter to the President on February 1, 1949 to inform him that work had been progressing towards the construction of the new supercarrier that Sullivan recommended be formally named \textit{United States}. A day later, a press release announced that Truman had approved the name for the new
flush-deck carrier. It further stated that the new carrier was to be the largest and most advanced carrier of its time and it would “fly from her deck the latest type of carrier planes available.” It was also reported that the design of the new carrier was “predicated on meeting current and future requirements” which included the ability to operate “heavier aircraft required to attain higher performance, longer range, and carry loads of armament and radar equipment necessary to modern air warfare” in addition to more traditional roles. While it was designed to meet “the foregoing requirements for purely naval missions,” it was possible that it would “provide a mobile base for high-speed planes capable of carrying atomic bombs.” The *United States* was in reality the Navy’s platform to get into the nuclear mission and their piece of strategic bombing and increasingly scarce funding. The Navy also argued that the cost of the carrier was favorable in comparison to other military projects, and the ship was not vulnerable, but rather it was “tough, durable, and effective.” The supercarrier also had a vital role in the national security of the United States, and the Navy considered it to be “indispensable to the successful prosecution of any war with Russia” and it would “support our Air Force particularly in attacks on Soviet oil refineries.” It was considered so critical to the role of the Navy that abandonment of the *United States* “is symbolic of acceptance of a willingness to admit progressive deterioration of American naval superiority.”

On April 15, 1949, three days before the keel for the *United States* was to be laid, Secretary of Defense Louis Johnson queried the JCS and the Service Secretaries, including Sullivan, for further opinions into the necessity of a supercarrier. The Air

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589 Press Release, February 2, 1949, Papers of Harry S. Truman, 249 Official (1949-1953), Box 859, HST.  
Force and Army factions discounted the potential capabilities of the United States and a carrier-based nuclear strategy. They contended that the supercarrier allowed the Navy to simply duplicate the strategic mission of the Air Force. Sullivan, on the other hand, was not even given an opportunity to respond because Johnson made himself unavailable for Sullivan's rebuttal. In the end, Johnson, not surprisingly, agreed with the Air Force hypothesis. Without consultation of the Congress, the Chief of Naval Operations, Louis E. Denfeld, or even the Secretary of the Navy, Johnson ordered construction of United States terminated on April 23, 1949. In the press release issued from Johnson’s office, the Secretary of Defense claimed that he had reviewed the findings of the JCS and after discussion of the carrier with President Truman, the decision was made to discontinue with the construction of United States “at once and at the least possible cost to the Government.”

The blow to the Navy was devastating and Sullivan, who was not in Washington when the cancellation was ordered, resigned in protest of Johnson's decision and Truman's acceptance of the cancellation. In a blistering resignation letter he accused Johnson of making the decision to cancel the ship after Truman had twice previously approved its construction. He added that the funds for the carrier had already been approved by Congress, and other naval projects canceled to “insure the continuance” of the supercarrier. Additional funding had also been included in the budget that Truman had forwarded to Congress, and “were included in the National Military Establishment Appropriation Bill passed by the House on 13 April 1949.” Sullivan further stated that the leadership within the Navy believed “that the construction of USS UNITED STATES

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is so indispensable to the continuing development of American sea power that they have
twice sacrificed other substantial construction because of the carrier’s highest naval
priority.” He also claimed that Johnson’s action represented “the first attempt ever made
in this country to prevent the development of a powerful weapon” and Sullivan believed
that this action would result in a renewed effort to transfer naval aviation to the Air Force
and abolish the Marine Corps.\footnote{John L. Sullivan to Louis A. Johnson, 26 April 1949, Post 1 January 1946 Command File, OA, NHC.} Joining Sullivan in submitting a resignation was his
Under Secretary of the Navy, John Kenney. Dan Kimball, the former Assistant Secretary
for Air, replaced Kenney.\footnote{Jeffery G. Barlow, \textit{The Revolt of the Admirals: The Fight for Naval Aviation, 1945-1950} (Washington D.C.: Naval Historical Center, 1994), 200-207.} Sullivan had also asked Denfeld to resign, but the CNO
remained silent about the fatality of the supercarrier, and the immediate future of the
Navy. To many within naval aviation community, Denfeld’s silence was a sign of selling
out the Navy’s position on aviation to get re-appointed as CNO in December 1949.\footnote{Richard P. Hallion, \textit{The Naval Air War in Korea} (Mount Pleasant, SC: The Nautical & Aviation Publishing, 1986), 17-19.}

Replacing Sullivan in the Pentagon was Francis P. Matthews, a Nebraska lawyer
and a prominent Midwestern Catholic. The new Secretary was reported to be a “devout
Christian . . . a lawyer of more than thirty-five years’ experience, who has established a
remarkable record of honesty and integrity and ability.”\footnote{Cedric Foster Broadcast, WNAC, October 28, 1949, Papers of Francis P. Matthews, Secretary of the Navy, Correspondence File, (Den-Ea), Box 27, HST.} A major liability of Matthews
was his gross unfamiliarity with the Navy, its traditions, and a real grasp of the political
infighting that had plagued the military over the last four years. Matthews himself stated
“his naval experience was confined mainly to handling a rowboat at his summer
home.”\footnote{“The Rowboat Secretary”, \textit{Omaha Evening World-Herald}, February 1, 1950, newspaper clipping in, Papers of Francis P. Matthews, Secretary of the Navy, Correspondence File, (Den-Ea), Box 27, HST.} He was also hampered because of his commitment to the Secretary of

\begin{footnotes}
\item[592] John L. Sullivan to Louis A. Johnson, 26 April 1949, Post 1 January 1946 Command File, OA, NHC.
\item[595] Cedric Foster Broadcast, WNAC, October 28, 1949, Papers of Francis P. Matthews, Secretary of the Navy, Correspondence File, (Den-Ea), Box 27, HST.
\item[596] “The Rowboat Secretary”, \textit{Omaha Evening World-Herald}, February 1, 1950, newspaper clipping in, Papers of Francis P. Matthews, Secretary of the Navy, Correspondence File, (Den-Ea), Box 27, HST.
\end{footnotes}
Defense. This forced the command structure within the Navy to find ways to preserve their mission and prerogatives at the expense of their own Service Secretary and the CNO.

In response to the continuing Air Force assaults on naval aviation in general, and the supercarrier in particular, Denfeld agreed to appoint Captain Arleigh A. Burke as the Assistant Chief of Staff of Naval Operations for Organizational Research and Policy Section, simply referred to as OP-23. When Burke assumed command in late December 1948, just months before the cancellation of *United States*, he was tasked with providing information to the CNO on matters concerning unification and its impact on the Navy.

Burke was very familiar in Navy circles because he previously had been Admiral Marc Mitscher’s chief of staff during World War II. In his new position, Burke had come to realize that the future of the Navy was through its airpower, not just its surface fleets. Burke’s Op-23 was to represent the views of the majority of naval officers, have the “confidence of the Navy’s senior officers,” and conduct themselves in an ethical manner.\(^{597}\)

Op-23 was to continue the war against further unification, in addition to defining the role of naval aviation to the future of the Navy. They had to continue to argue that the separate strategic missions of the Air Force and Navy were not redundant, but essential to a well-balanced military strategy. They funneled information to Denfeld, and monitored speeches made across the nation by pro-Navy speakers. Op-23 also assisted Cedric Worth, a civilian assistant to the Undersecretary of the Navy, to draft a document that alleged major irregularities in the decision to build the B-36s.\(^{598}\)

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\(^{597}\) Barlow, *Revolt of the Admirals*, 169.

ahead, this document would be leaked to members of Congress and the press. It would tarnish by association many in the Navy who overtly or unwittingly supported Worth’s accusations.

THE OXYMORON: THE B-36 PEACEMAKER

Of all the names that could have been chosen for the monstrosity that was the B-36, “Peacemaker” was probably the most ill suited. The B-36 was designed for the most horrific type of war, and it brought nothing but very public dissension, inside and out of the Pentagon. Even within the Air Force, there was some reluctance to embrace the B-36 as the weapon of the future. The first commanding officer of Strategic Air Command, General George C. Kenney, suggested that the B-36’s real mission range was below the 10,000 miles that had been advertised. It was also vulnerable to enemy fighters because of its slow speed, insufficient armament, and lack of self-sealing fuel tanks to prevent explosions. The SAC commander argued that the B-50 could accomplish the mission of the B-36, and the Peacemaker should not be ordered until further studies on the plane were completed.\(^{599}\) Kenney also opposed the B-36 because of the better performance possibilities offered by jet bombers and he would not be silenced on the inadequacies of the B-36. These opinions may have led to his eventual replacement at SAC.\(^{600}\) Concerns over the performance envelope of the B-36 continued even after several of them flew over the nation’s capital in honor of Truman’s inauguration in January 1949. Perhaps

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more alarming to some, the Air Force began to scale back procurement of newer jet aircraft to free up more funds for further B-36 purchases.\footnote{John G. Norris, “Defense Office Questions Cut in Jet Planes for Giant B-36s,” Washington Post, January 13, 1949, clip found in Papers of Stuart Symington, 1946-1950. Spaatz to Travel, Box 12, HST.}

In an effort to determine the veracity of the arguments against the B-36, James Van Zandt, a Republican Representative from Pennsylvania and a Navy veteran, sent identical letters to Stuart Symington and John Sullivan on April 27, 1949.\footnote{Barlow, \textit{Revolt of the Admirals}, 210.} In it, he asked if the Navy had any aircraft that were “capable of intercepting and shooting down a B-36” and did the Navy have “any knowledge of a fighter aircraft of any other nation” that could accomplish this mission.\footnote{James E. Van Zandt to John L. Sullivan, April 27, 1949, Papers of Stuart Symington, 1946-1950. Memoranda –General (Folder 3) O General, Box 9, HST.} In the response from the Navy, under the temporary leadership of Dan Kimball, Van Zandt was informed that the Navy indeed had a plane capable of stopping a B-36. The McDonnell Aircraft company was delivering a new Navy fighter, the F2H Banshee, whose performance allowed it to “accomplish interception and successful attack against the B-36B throughout the latter’s range of possible performance” and even more, the Grumman F9F Panther jet had enough performance to be effective as well. However, the Navy also claimed that its prop-driven F8F Bearcat and F4U-5 Corsair also had the ability to accomplish the mission depending upon the “altitude and cruising speed” of the B-36.\footnote{Dan A. Kimball to James E. Van Zandt, 2 May 1949, Papers of Stuart Symington, 1946-1950. Spaatz to Travel, Box 12, HST.}

Kimball was so confident that the Navy could track and intercept a B-36 that they asked the Air Force to test the Peacemaker against the Banshee. As for foreign aircraft, Kimball stated only that it was his belief that “the fighter airplanes of major foreign powers can well have performance characteristics in general comparable to those of this
nation and that, likewise, there is no deterrent known to me which prevents the existence of the essential radar equipment” that would allow for the interception of the B-36.²⁶⁰⁵ Possibly realizing the folly of their pursuit, the Air Force refused to test a B-36 against interception.²⁶⁰⁶ That did not mean that unofficial interceptions of the B-36 did not happen. The Navy’s slowest jet fighter, the F3D, had the ability to catch the Peacemaker at altitude and could easily outperform the unwieldy bomber. The F3D was slow for a jet fighter, and was no match for the MiGs that the B-36 would encounter in a war with the Soviet Union.²⁶⁰⁷

In an effort to increase the performance of the B-36, the Air Force freed up some funds, within their own budget, to add four jet engines, two on the end of each wing, to the B-36. This would increase its speed, and gave the updated Peacemakers a total of ten engines. Rear Admiral Daniel V. Gallery sarcastically responded to this by stating that apparently if the Air Force says it can add engines to an aircraft and “increase not only its speed but also its range, the simplest thing to do is just forget what you learned in engineering school and readjust your ideas to conform to this new concept. After all, this is the atomic age, so relax and enjoy it.”²⁶⁰⁸ Further skepticism from the Navy was evident when it was pointed out that if the B-36 was stated to be the primary weapon in the American arsenal, the Soviets were only required to produce a defense system based upon the interception and destruction of the B-36. The new generation of Soviet fighters, and the radar network that they had developed since the end of the Second World War,

²⁶⁰⁵ Dan A. Kimball to James E. Van Zandt, 2 May 1949, Papers of Stuart Symington, 1946-1950. Spaatz to Travel, Box 12, HST.
²⁶⁰⁶ Confidential Memorandum, F.M. Trappell to RADM Ofstie, 2 July 1949, Subj: "Banshee vs B-36", Box 4, Ralph A. Ofstie Papers, OA, NHC.
²⁶⁰⁸ Daniel V. Gallery, "An Admiral Talks Back to the Airmen," Saturday Evening Post 221, no. 52 (June 1949), 138.
could be formidable in the event of war with the USSR. Instead of broadening the ability of airpower to confound an enemy with variations in targets and applications of weapons, the B-36 offered the same premise that had existed since before World War II. That is, the strategic bomber attacking an urban center in an effort to destroy the morale of the enemy and win the war with minimal cost to the United States.

The Air Force still continued to argue that the B-36 could effectively operate beyond the range of escorting fighters and into areas where the Soviets controlled the air. This completely disregarded the experience of unescorted American bombers that were decimated over Germany early in the air war.609 This does not mean that the USAF privately ignored the very same evidence of Soviet defenses that they publically minimized. A top-secret memo was sent to Symington in January1950 that indicated that the Air Force acknowledged modern Soviet fighters were the equivalent of their American counter-parts. There were currently more aircraft in operational and reserve units in the USSR and it was presumed that they were producing aircraft at a more rapid rate than the United States. Moreover, it was felt that the Soviet Union was “preparing a strong defense against strategic bombardment” in addition to an overall strategy that was premised upon controlling all of Europe. Therefore, the memo suggested that in effort to “assure that our retaliation will be devastating” work must continue on the development of “controlled air-to-air weapons in order that our bombers may protect themselves, accomplish their missions and keep losses to a minimum.610

609 Letter, R.A. Ofstie to Fleet Admiral Wm. F. Halsey, 23 September 1949, box 4, Ralph A. Ofstie Papers, OA, NHC.
Beyond the known inadequacies of the B-36, the strategic application of atomic weapons would not have the immediate impact in the war that was envisioned. If the Soviets suddenly moved into western Germany, France, and the Low Countries, B-36s would be sent to bomb Moscow, Kiev, and other Soviet cities hundreds of miles behind the front lines. The initial impact of those strikes would not be felt for days, weeks, or even months to come and if bombs were used against the Red Army in the field, the United States would potentially be using weapons of mass destruction against targets inside its own allied nations.

In June 1949, VADM Daniel Gallery suggested that the Air Force's concept of war with the Soviet Union would result in atomic strikes on seventy of the largest Soviet cities. If this were the course of action, 30 to 40 percent of Soviet industry would be temporarily halted, but the Red Army would still occupy all of Europe, and their will to fight would be intensified. He argued that strategic bombing should be directed against Soviet fuel production facilities because the Soviet war machine was powered by fuel and if their access to fuel was eliminated the Soviet offensive capabilities were limited. Therefore the prime target should be “Baku not Moscow.” All the supplies that the Soviet troops needed to survive would be available from the occupied countries, and unless the Air Force was prepared to use atomic weapons on allied cities, U.S. ground forces would be necessary to push the Red Army out of Western Europe. To assist the ground forces, the United States had to control the air, and if the United Kingdom and Western Europe fell to the Soviets, the only tactical aircraft that could continue the war would have to be carrier-based. By the summer of 1949, the Navy continued to press for

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611 Secret Memo, OP-57 to DCNO (AIR) via OP-05B From Adm Gallery, “Concept of War,” 13 June 1949, Box 4, Ralph A. Ofstie Papers, OA, NHC.
a role in strategic power projection, while the Air Force wanted the entire mission. It became a battle between supercarriers and the “billion-dollar blunder” of the B-36.\textsuperscript{612} In this approach to an all or nothing strategy, unfortunately, neither really fit the overall U.S. policy towards war or peace with the Soviet Union. If the goal was the complete annihilation of the Soviet will to fight, the B-36 would have a difficult time accomplishing the mission because of its performance, and the supercarrier did not yet exist and carrier-based nuclear bombers were in their infancy.

ATTACKING THE INTEGRITY OF THE B-36 PROGRAM

As part of the effort to change the growing public skepticism of the B-36, the Chief of Staff of the Air Force, General Hoyt S. Vandenberg gave a speech on May 1, 1949, to the American Legion’s 13\textsuperscript{th} National Aerial Roundup Banquet. With an audience that was interested in the topic of aircraft, Vandenberg began to speak about the B-36. He suggested that the aircraft was indeed expensive, but it was a “capable performer” and it would “do a good job.” Vandenberg further contended that the B-36 was not the solution to all of the security problems of the United States, nor could it perform all of the jobs that the Air Force needed to accomplish, but “the Air Force has never held that this airplane is a suitable basket for all our eggs.” Later he added that in the future, all airplanes, including the B-36, “may be outmoded by long-range uninhabited missiles” however, long before that, the “B-36 will be replaced by a better airplane, perhaps by a series of better airplanes.” Vandenberg acknowledged that there were critics of airpower who had referred to the strategic bomber as the “new” Maginot

Line. He claimed that he did not understand this concept because the fortifications that the French hoped to hide behind before the breakout of World War II were stationary. They could not possibly provide the security the French desired. Strategic airpower, on the other hand, was mobile, and in the United States, it was “primarily a deterrent” to war. Vandenberg added that airpower alone could not win a complete victory, the other Services were needed, and the “strategic attack against the enemy’s vulnerable interior” was not the only Air Force job. Others included aerial defense and air support of land and sea operations and overall American airpower was “an instrument of democracy. It is created and maintained because our citizens want it.”⁶¹³ Despite Vandenberg’s discussion about a variety of missions, it remained clear that the leadership of the Air Force was prepared to use the immense bomb bay of the B-36 to bring democracy to the Soviet Union one megaton at a time.

Challenging the supposition that the B-36 was capable as the instrument of democracy that Vandenberg had suggested, attacks on the performance of the B-36 and alleged improprieties in its procurement began to leak from the Navy. Truman later wrote that the dispute arose “over anonymous charges alleging irregularities in the Air Force’s procurement of the B-36 and the questioning of its combat effectiveness.”⁶¹⁴ This accusation included “rumors, half-truths, and a sprinkling of accurate information” and had been prepared by the aforementioned special assistant to the Undersecretary of the Navy, Cedric Worth. Eventually the documents prepared by Worth, with the help of Op-23, came into the possession of Republican Congressman James E. Van Zandt, a

⁶¹³ Hoyt S. Vandenberg, Address before the American Legion 13th National Aerial Roundup Banquet, Indianapolis, Indiana, May 1, 1949, Papers of Stuart Symington, 1946-1950. Spaatz to Travel, Box 12, HST.
⁶¹⁴ Harry S. Truman, Memoirs: Years of Trials and Hope (Garden City, NJ: Doubleday & Company, 1956), 53.
member of the House Armed Forces Committee from Pennsylvania. Van Zandt, also a Naval Reserve officer, had previously questioned the B-36 and he would now bring the issue to the floor of the House of Representatives. His integrity was attacked for questioning the B-36’s performance because, after all, any “well informed person also knows that a B-36 at an altitude over forty thousand feet does not even need fighter protection. Our fastest jet planes are helpless even if they could find the B-36 in this twilight height.”

Van Zandt opened his address by suggesting that it was the solemn obligation of Congress to “maintain at all times an adequate National Defense” and that the Armed Forces of the United States be “equipped with the finest weapons of modern warfare that dollars and cents can buy.” He asked that a House committee be established to investigate “all phases of military aircraft; all circumstances and facts involved in the cancellation of some contracts, the enlargement of others, the connections of Louis Johnson, Secretary of Defense, and Honorable Stuart Symington, Secretary of the Air Force, past or present, direct or indirect, with these companies” and the role of contributions to Truman’s Presidential re-election campaign in 1948. Van Zandt further suggested that improprieties in the purchases of the B-36 were coupled to political considerations that were linked to Johnson, Symington, and Floyd Odlum, the chairman of Convair. Van Zandt further argued that only a full investigation could resolve the alleged problems with the purchases of the B-36. Because the nation was spending $15

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616 D.H. Byrd to James E. Van Zandt, May 27, 1949, Papers of Stuart Symington, 1946-50, B General (Folder 2) C General (Folder 3), Box 2, HST. (Byrd was a Col. in the Civil Air Patrol, the USAF Auxillary)
billion on national defense, the inquiry would answer whether or not the United States was spending too much of this on an outmoded weapon system.\textsuperscript{617}

In response to the charges leveled by Van Zandt, the House Armed Services Committee voted to investigate the B-36 project, and “assess the capabilities of the B-36, examine the roles and missions of the services, and determine whether the decision to cancel the supercarrier had been sound.”\textsuperscript{618} Many officers laid their careers on the line to protest Johnson, the B-36, the cancellation of the supercarrier, and the idea of a single weapon defense system. They did not argue against strategic air warfare, but rather the chosen weapon, the B-36. If the Air Force had a more advanced and capable bomber, the protest from the Navy might have been more tempered, but there still would have been pressure for a carrier-based nuclear option.

The congressional hearings on the B-36 program took place, under the leadership of the Chairman of the House Armed Services Committee Carl Vinson (D, Georgia), in August 1949. They involved the testimony of military and civilian personnel both for and against the Peacemaker as well as strategic air warfare. Key individuals to appear before Vinson’s committee came from Consolidated-Vultee Aircraft Corporation and other aircraft manufacturers. In the published report of the investigation, Vinson’s committee stated unequivocally that the allegations of improprieties in the decisions to purchase the B-36 were not true. The judgment to acquire the Peacemaker was “based on the conviction that it is the best available aircraft” for strategic bombing and its role in the defense of the United States. The Armed Services Committee also cleared Symington

\textsuperscript{617} Statement of James E. Van Zandt in the House of Representatives, May 26, 1949, Papers of Clark M. Clifford, Subject File, 1945-54, National Intelligence Authority to National Military Establishment – Miscellaneous, Box 11, HST.
\textsuperscript{618} McFarland and Roll, \textit{Louis Johnson and the Arming of America}, 176-177.
and Johnson of any wrongdoing and stated that “these men continue to merit the complete confidence of the American people in their past actions and in the future.” The report placed the blame for the charges directly on Cedric Worth. It also noted that once this was made clear, Worth was fired from his position in the Navy. The committee report maintained that all of the Services were important and essential to the defense of the United States, and it was disturbed by the ongoing infighting within the Pentagon. This might have the unfortunate consequence of impairing the basic functions of the military that would “endanger the national defense.” It was the recommendation of this committee to follow up the investigation with hearings, scheduled for October, to further investigate the problems with unification that had stressed the Navy so dramatically.  

CHAPTER SEVEN
THE BATTLE WITHIN THE PENTAGON

*I am transmitting herewith the nomination submitted by the Secretary of the Navy, of Admiral Louis E. Denfeld, U.S. Navy, to be Chief of Naval Operations for a period of two years.*

Secretary of Defense Louis A. Johnson, August 2, 1949.620

*Upon receipt of these orders you will stand relieved of your duties as Chief of Naval Operations.*

Secretary of the Navy Francis P. Matthews to Admiral Louis E. Denfeld, November 1, 1949.621

THE BATTLE OVER STRATEGIC AIR WARFARE: THE REVOLT OF THE ADmirals

One of the most historically polarizing political battles took place in October 1949, over strategic air warfare and the ability of the United States to actually accomplish the strategic air warfare mission. Often referred to as “the Revolt of the Admirals,” the political and military upheaval went beyond simply the Navy. It was a battle for strategy, funding, and control of the nuclear weapons delivery systems that had come to symbolize American defenses in these early postwar years. In too many biographies of President Harry S. Truman, the Congressional hearings are briefly mentioned, and quickly lost between discussions of containment, re-election, NSC-68, and the Korean War. In military histories or biographies, however, the Revolt has a much stronger reaction to the authors and the veracity of its interpretations vary depending upon the author’s bias for or against the Navy or Air Force. Arguments concerning the B-36, or the supercarrier, miss

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620 Louis A. Johnson to President Harry S. Truman, August 2, 1949, Papers of Francis P. Matthews, Secretary of the Navy, Correspondence File, (Den-Ea), Box 27, HST.
621 Francis P. Matthews to Admiral Louis E. Denfeld, 1 November 1949, Papers of Francis P. Matthews, Secretary of the Navy, Correspondence File, (Den-Ea), Box 27, HST.
one of the most vital issues that came out of the 1949 hearings, the fact that both the Navy and the Air Force appeared to fully embrace the ideals of atomic bombing to support the policies of the United States. In other words, the Revolt had less to do with cancellation of the United States or the B-36, than it had to do with the underlying belief in atomic strategic bombing to accomplish the policies of the United States as identified by the Truman administration, the National Security Council, or even the State Department.

Historians and contemporaries were quick to blame the Navy for the upheaval, and for undercutting the Truman administration’s military policy. But this ignores the role that Symington and the Air Force had in creating the crisis in the first place, through their attempts to monopolize the budget and all air missions. The testimony that was presented focused more on which Service could deliver nuclear weapons better than the other and missed the critical question if the strategy itself was actually sound. Even more dangerous, the Congress and the military engaged in a very divisive, public debate about what American strategy and tactics would be in the event of war with the Soviet Union. This provided the USSR with a valuable insight into American military policy regarding airpower and the application of nuclear weapons. This unrestricted and unabashed look at bombing the Soviets also created a level of embarrassment for Secretary of State Dean Acheson and the State Department as they tried to maintain peace through diplomacy.

By the summer of 1949, it was apparent that naval assets were going to be reduced to levels that strained its ability to accomplish it missions of protecting the seas and the nation. The Chief of Naval Operations, Admiral Louis Denfeld, previously testified to the Senate Armed Services Subcommittee of the Committee on
Appropriations, that the Navy was attempting to fit under President Truman’s objective of building “a foundation of military strength which can be sustained for a period of years without excessive strain on our productive resources, and which will permit rapid expansion should the need arise.” The military needed to maintain a proper balance, according to Denfeld, to support a unified strategic concept that was flexible to “meet and counter not only the most probable enemy action, but unexpected and unforeseen turns of events.” He stressed that the military should avoid a single war plan that shaped “our forces solely to meet that plan, because we recognize that in reality the best war plan you can have is in effect obsolescent the moment it is completed” and that because the initiative in war belongs to the aggressor state, the “unpredictable fortunes of war make it very unwise to be committed in advance to any single plan of action.” Denfeld articulated that in the current budget the Navy was already functioning at a lower level that the Congress had previously stated was necessary and that the number of fleet carriers would be reduced in the next budget from eleven to eight and the air groups that flew off the carriers from twenty-four to fourteen. This force reduction would have serious “effect upon our overall balance” and the CNO added that he hoped the funding would be restored to the levels that were necessary to fulfill the mission of the Navy. The CNO added that the Navy would attempt to function under the new budget, but reminded the subcommittee that “failure to obtain these restorations will have a serious, continuing, and increasing effect upon our overall efficiency and overall readiness.”

However, the funding would not be restored and further cuts to the carrier forces were expected.

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622 Statement By Admiral Louis E. Denfeld, Chief of Naval Operations, to the Armed Services Subcommittee of the Committee on Appropriations, United States Senate, On the Navy Budget for Fiscal Year 1950, 18 June 1949, Papers of Francis Matthews, Secretary of the Navy, House Armed Services
Strong concerns about increased defense cuts that appeared to be aimed not only at the Navy, but at naval aviation in particular, created a crisis within the Navy. Captain John W. Crommelin, held a press conference, without Navy authorization, on September 10, 1949. He publicly accused the Air Force of trying to take over all aspects of aviation as well as budgetary control over the armed forces. Crommelin further argued that unification was detrimental to the Navy, and the “Navy cannot support an organization whose methods and principles violate the Navy concept of a Navy man’s oath.” He also accused Secretary of Defense Johnson of trying to run a totalitarian department.

He further stated that the Navy in general, and naval aviation in particular, was being slowly eliminated by the JCS and the Department of Defense. The Secretary of the Navy Francis Matthews responded by ordering his senior leadership to direct any criticisms through his office rather than through the press. What appalled many within the senior command of the Navy, was the appearance of acquiescence of Secretary of the Navy Matthews to Johnson and the Air Force position. True Service unification appeared to be in position to eliminate naval aviation and destroy the morale within the Navy as a whole.

Many naval officers were willing to continue the fight against further unification, as well as the dictum of Matthews to run every criticism through “the proper channels.” VADM Gerald F. Bogan wrote a memorandum that the “basic reason

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626 Andrew L. Lewis, "A Revolting Development," *Naval Institute Proceedings* (United States Naval Institute Press) 125, no. 9 (September 1999), 79.
627 Ibid, 81.
behind all of it is a genuine fear in the navy for the security of our country if the policies followed in the Department of Defense since the National Security Act became law are not drastically changed, and soon.” Bogan also argued that the “morale in the navy is lower today than at any time since I entered the commission ranks in 1916” and if “the adequate Military Defense Establishment could be achieved without a navy or naval aviation, I would gladly advocate using funds now expended to maintain that service, on the procurement of the best other necessary weapons and equipment.” Bogan then added perhaps the crux of the Navy’s argument, “there is no cheap victory possible between any two nations or groups of nations each having strong, if relatively unequal power.” The memorandum, endorsed by the CNO and the Commander in Chief of the Pacific Fleet, Admiral Arthur Radford, was to be kept within the Navy Department but Crommelin, who continued to fight what he perceived to be almost a war against unification, leaked the memo to the press. Johnson and Matthews were livid over this revelation and forced Bogan into an early retirement while Denfeld suspended Crommelin. It was at this point that Matthews decided to replace Denfeld when his term was up.

In October 1949, Carl Vinson’s committee was again the battlefield for the Air Force and Navy, as the fight over unification and missions continued. Prior to these hearings, Matthews ordered “naval officer witnesses to make no mention of the B-36 bomber in testifying before the House Armed Forces Committee.” In defiance of Matthews, many of the Navy’s witnesses maintained that the B-36 “would be useful only if the strategy was one of saturation bombing with atomic weapons” and they considered

this type of warfare to be “both morally bankrupt and an ineffective deterrent to Soviet
aggression.”

Senior naval commanders, past and present, had participated in the rise of
the carrier during the war. They had held major fleet commands and were instrumental in
key naval engagements, including the Battles of Midway and the Philippine Sea, and
were the architects of the American fast carrier task forces and had witnessed the rise of
the aircraft carrier as the primary weapon of the postwar Navy. They were considered to
be naval aviation’s leading authorities, and perhaps the most respected men in their
profession. These men were to defend the Navy from what appeared to be an attack on it
not only from the Air Force, but also the Secretary of the Navy. Naval witnesses were
given the first chance to address the Committee and would be followed by a few Air
Force representatives, the Secretary of the Air Force, the Secretary of Defense, the
Chairman of the Joint Chiefs of Staff Omar Bradley, and even former President Herbert
Hoover.

THE NAVY’S OPENING SALVO

The first witness to speak in front of the House Armed Forces Committee was the
Secretary of the Navy, Francis P. Matthews. Unlike his counterpart in the Air Force,
Matthews would spend the majority of this testimony railing against many of the officers
within his own department. He opened his October 6, 1949 remarks by suggesting that
the entirety of the Navy, military personnel and civilians, wanted to cooperate with the
committee, and there had been no censorship to date and there “will be none.” Matthews
did not feel that there was a morale problem in the Navy other than a few officers who

631 Michael J. Hogan, A Cross of Iron: Harry S. Truman and the Origins of the National Security State
“for reasons sufficient to themselves, in spite of their oath taken as a member of the Military Establishment of the United States which imposed upon them a solemn obligation to support the Constitution and the laws of the United States” had chosen to disseminate classified materials. This was done in a manner that “leave no doubt of their own consciousness of the impropriety of their action and the disloyal character of their conduct.” The Navy Secretary considered these actions to be outside the norm for the majority of the people in the Navy, and it appeared to him that the trouble currently afflicting his department was coming from those in the naval aviation branch. This should not have been unexpected, according to Matthews, because the number of carriers had increased so dramatically during the war, and therefore, would have to be reduced almost as significantly in the post-war period. Matthews was also clearly vexed at those naval aviators who had spoken out against unification in defiance of not only Congress, but also the American people, who supported the legislation and reform. Matthews did not consider the alleged malcontents to be symbolic of the preponderance of naval officers.

The Secretary of the Navy also praised Louis Johnson for his eloquence in outlining the divisions between the roles and missions of the Services, and for authorizing the “Navy proposal for the modernization of two aircraft carriers” of the smaller Essex-class. This provided the Navy with eight carriers that could handle “the new and modern planes which are just coming into use by the fleet.” Matthews next transitioned into a brief discussion of the B-36, but he did not want to comment on the performance of the B-36.

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632 Statement of Secretary of the Navy Francis P. Matthews before the Armed Services Committee of the House of Representatives, 6 October 1949, Papers of Francis P. Matthews, Secretary of the Navy, Speech File (May 20-July 30, 1951), House Armed Services Committee Investigation, the B-36 & Related Matter (October 6-10, 1949), Box 55, HST.
Peacemaker, because he was “not acquainted with the technical details” or its operational characteristics. As for the supercarrier, Matthews was non-committal about the decision to cancel its construction because that determination had been made before Matthews came into the administration. He did, however, feel that it was “not a denial of the necessity for aircraft carriers in general.”

Matthews’ statement did not attempt to explain the concerns among some in the Navy concerning the B-36, or the emphasis of the strategic bombing as American policy. He placed his confidence in the unification process and the cooperation of the JCS to recommend the best weapons and strategies to fit within the budgets requested by the President. At a critical time when the Navy needed strong leadership from its civilian leadership, Matthews did not make a strong impression of independence from the Secretary of Defense, nor did he appear to be a real advocate for his department in the same manner that John Sullivan had been, or even Stuart Symington was for the Air Force.

Admiral Arthur W. Radford, the Commander-in-Chief of the Pacific Fleet was considered by many to be the principal naval aviator and spokesman within the Navy. He had gone out to Hawaii to assume command of the Pacific Fleet just prior to the cancellation of the supercarrier in April 1949. He had returned to Washington to continue the fight for the survival of naval aviation, and against the single weapons system approach to war. Radford had previously observed the Air Force’s testimony during the August B-36 hearings and prepared the Navy’s rebuttal. When he took the stand the day after Matthews, Radford was ready to testify not “speaking for any segment of the Armed Services” and instead claimed that he was going to “testify as a citizen and

633 Ibid.
a professional student of warfare – not merely as a naval officer whose career has been largely devoted to aviation.” Radford was an advocate of airpower and believed that the entirety of American airpower, the primary feature in American national security, was both land and sea based. As for the application of airpower in warfare, Radford suggested that Vinson’s committee would have a “controlling influence upon the kind of war” the United States would fight, and the type of peace “which would follow such a conflict.” In Radford’s view, an enemy could choose the time and place of a war, but only the United States could establish the type of war it wanted to fight, and final victory meant more than just the annihilation of an enemy state.634

For Radford, these hearings were more than just about the B-36, for he saw the Peacemaker as “a symbol of a theory of warfare” which he called the atomic blitz. It was a type of warfare that promised a “cheap and easy victory if war should come” and therefore the B-36 had “attained an importance out of proportion to the real issues involved” which could not be ignored. Radford articulated the belief that not only could enemy aircraft intercept the B-36, it would be destroyed in deplorable numbers if not escorted by fighters. He added that currently, according the Air Force’s own estimates, there were American aircraft that could locate, intercept, and engage the B-36, “day or night and at all speeds and altitudes” so it was “folly to assume that a potential enemy cannot do as well.” In a shot at the performance of the B-36, Radford hoped that an enemy state would not attain a bomber that was any better than the Peacemaker.635

634 Statement of Arthur W. Radford, Admiral United States Navy, Commander-in-Chief Pacific Fleet and Joint Pacific Command before the Armed Services Committee of the House of Representatives Investigating the B-36 and Related Matters, October 7, 1949, Papers of Francis P. Matthews, Secretary of the Navy, Speech File (May 20-July 30, 1951), House Armed Services Committee Investigation, the B-36 & Related Matter (October 6-10, 1949), Box 55, HST.
635 Ibid.
Radford and other material witnesses who were to be called upon to support him claimed that the B-36 represented an already antiquated style of warfare that emphasized slow bombers attacking the cities of American enemies. The prioritization of strategic air warfare had retarded the numbers of aircraft devoted to ground support missions. He further contended that the pursuit of the lumbering B-36 had also hampered the development of smaller jet bombers and “extremely high performance fighters” that would support the overall strategic air warfare plans by hitting “bridges, canal locks, tunnels, and transport equipment.”

Radford also denied that the Navy was only attempting to build the supercarrier in an effort to “usurp a primary role of the Air Force in atomic bombing” and that each service should “be permitted to bring an experimental weapon through the development, test and evaluation stages.” He did not believe solely in the deterrent affect of nuclear weapons, and “we must realize that we cannot gamble that the atomic blitz of annihilation will even win a war.”

Several witnesses followed Radford and attempted to raise serious questions about the B-36 and its strategy. The most damning critique of unification and strategic air warfare, however, did not come from Op-23, or from the officers that testified on Radford’s behalf. It came from Admiral Louis E. Denfeld, a non-aviator and the Chief of Naval Operations. Captain Charles Griffin was tasked with preparing Denfeld’s statement and, according to Griffin, the last page of the CNO’s statement was completed at 3:00 a.m., just seven hours before Denfeld testified on October 13, 1949. Secretary Matthews had attempted to see Denfeld’s prepared statement for several days; however,

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Ironically, these were the very type of missions that were later flown by the exact aircraft that Radford suggested over Vietnam with heavy losses. F-105s were among the fastest jet fighters of the era and were shot down with horrific losses during the years of Operation Rolling Thunder, 1965-1968.

Statement of Arthur W. Radford, before the Armed Services Committee of the House of Representatives.
he did not get a copy of it until 30 minutes before Denfeld was scheduled to testify. Matthews expected Denfeld, as well as his other officers, to not oppose or be critical of policies that Truman or Johnson appeared to be in favor of. Therefore it was assumed that Denfeld would come out and support Johnson, Matthews and unification. Denfeld denied that the Navy was not “motivated by a selfish desire for survival in this presentation” and it was supportive of true unification, and they understood that it represented “a coordination of America’s armed might for greater efficiency and corresponding economy.”

In a dramatic breach of support for Matthews, Denfeld claimed that “the Navy is not accepted in full partnership in the national defense structure” and this was the “fundamental reason for the apprehensions you have heard expressed here.” The trepidation felt by the Navy arose from the “trend to arrest and diminish the Navy’s ability to meet its responsibilities.” The CNO claimed that he was a supporter of strategic air warfare that was predicated on accurate bombing of key targets by SAC, however, the preliminary air offensive was not “solely the function of the U.S. Air Force” and that the totality of American airpower included the Navy and the Marines. Denfeld did not criticize atomic bombing or the B-36 as a weapons platform, and instead suggested that the former was being studied, and the latter should be examined more in depth because it was “illogical, damaging, and dangerous to proceed directly to mass procurement without

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639 Statement of Louis E. Denfeld, Admiral, United States Navy, Chief of Naval Operations, Navy Department, Washington D.C. before the Armed Services Committee of the House of Representatives Investigating the B-36 and Related Matters, October 13, 1949, Papers of Francis P. Matthews, Secretary of the Navy, House Armed Services Committee Investigation, The B-36 and Related Matters, (Oct 10-17, 1949), Box 56, HST.
evaluation to the extent that the Army and Navy may be starved for funds and our strategic concept of war frozen about an uncertain weapon.” What he felt was the issue with the B-36 was the exclusion of the Navy from any input on this weapon or the strategy that it represented.\(^{640}\)

Denfeld also reminded his audience that there were agreements regarding roles and missions that had been adopted by the JCS and approved by President Truman, however, over the previous eighteen months there had been persistent attempts to change or alter the agreements that were an “example of improper unification.” An example of this was the cancellation of the United States that had been consistently approved and budgeted by the appropriate agencies since 1946, and the reexamination of the supercarrier program and its ultimate cancelation by the Secretary of Defense was “neither in accord with the spirit of unification nor the concept of unification.” To remedy the problems that had afflicted the military since 1947, Denfeld made several suggestions including a recommendation to expedite the evaluation of the B-36, support the National Security Act and its amendments and agreements as they were written, allow each service to develop its own weapons, and to provide the Navy with “adequate and appropriate representation in key positions within the Department of Defense.”\(^{641}\) About three-quarters of the way through Denfeld’s statement, Secretary of the Navy Matthews got up and stormed out of the room.\(^{642}\) Denfeld had indirectly placed the blame for the revolt on the Secretary of Defense as well as the civilian leadership within the Navy, but he did not denounce atomic air warfare. He maintained the idea that the Navy had a role

\(^{640}\) Ibid.
\(^{641}\) Ibid.
to play in the destruction of Soviet targets during the atomic blitz that Radford had apparently condemned.

THE AIR FORCE RESPONDS

The Air Force responded on October 18, 1949, with Secretary Stuart Symington who denied the veracity of the Navy’s attacks. He skillfully promoted the B-36 and the Air Force’s version of strategic air warfare. Symington immediately addressed the criticism, efficacy and morality of the single weapons system and strategy with regards to the B-36 program and the purchase of more Peacemakers. He defended the original purchases of the B-36 as well as the acquisition of 36 additional airframes because President Truman and former Secretary of Defense Forrestal and agreed to this supplemental program. He denied that the Air Force was “putting all its eggs in one basket” by reminding the committee that only four of the current 48 groups or the projected 70 groups in the USAF were equipped with the B-36. This represented only eight percent of the entire Air Force.\(^{643}\) He argued that the criticism of the USAF seemed to be aimed at the idea of the B-36 and its capabilities, and not against other Air Force aircraft that with in-flight refueling had the same range as the B-36. The USAF did not consider the B-36 to be invulnerable to enemy defenses, and in reality, the Air Force had only two choices in front of it if it did not purchase B-36s. They were to either “buy an inferior bomber which would require overseas bases; or air refueling; or missions planned as one-way strikes” that would result in the loss of the crew and aircraft. The second

\(^{643}\) It should be noted that Symington did not address the number of B-29/B-50 or B-47 groups that were tasked with the same type of mission as the oft-criticized B-36.
option was to not buy a bomber and if that were the case, “why build bombs, especially
the tremendously expensive atomic bombs?”

Symington believed that the B-36 was the best weapon available to accomplish
the mission, and that was based on recommendations by “men of recognized military
competence, with battle experience, and that they know far more about the grim business
of strategic bombardment than any other group in the world today.” He challenged the
idea that the USAF believed in the atomic blitz as a “quick and painless war” and instead
viewed the B-36 and the atomic bombs as the best deterrent to war in the world. If war
came, however, “we believe that the atomic bomb, plus the air power to deliver it,
represent the one means of unloosing prompt, crippling destruction upon the enemy, with
absolute minimum combat exposure of American lives.” Apparently Symington and
the others still held onto the idea that this type of mission would work against an enemy
in 1949, as easily as it had against the Japanese in 1945, without regard to all the other
reasons that the Japanese agreed to end their war.

Symington also testified that the Air Force did not believe in the mass atomic
bombing of civilians as critics had charged, however, he noted that it was “inevitable that
attacks on civilian targets will kill civilians” but “that was not an exclusive characteristic
of the atomic bomb, but is an unavoidable result of modern total warfare.” Symington
additionally suggested that previous testimony was based on false premises, and by
taking the United States Strategic Bombing Surveys out of context, it made strategic
bombing appear to be far more indecisive than the record indicated. The ongoing naval

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644 Statement of W. Stuart Symington, Secretary of the Department of the Air Force before the Armed
Services Committee of the House of Representatives Concerning the B-36 and Related Matters, October
18, 1949, Papers of Francis Matthews, Secretary of the Navy, House Armed Services Committee
Investigation of the B-36 & Related Matter, (October 18-21, 1949), Misc Speeches, Box 57, HST.
645 Ibid.
opposition to the B-36, and strategic bombing, had compromised national security by
publicly stating the performance envelope of the Peacemaker. It was considered “bad
enough to have given a possible aggressor technical and operating details of our newest
and latest equipment” but it was far worse to “have opened up to him in such detail the
military doctrine of how this country would be defended.” He believed that it was
obvious that the real issue in these B-36 hearings was “control of the military by
civilians, and therefore the preservation of Constitutional Government.”

What Symington did not allow for, was the time gap between the present and
when the NSC presumed the Soviets were prepared to strike. The time gap would have
allowed a third option for the Air Force to pursue, wait until a better bomber became
available, or drop the slow B-36s in favor of purchasing more of the much higher
performance B-47s that were being introduced into SAC. No matter what bomber was
acquired, the “all or nothing” military option still did not necessarily fit the containment
policy of the Truman administration, or frankly, offer many alternatives short of total
war.

The Air Force Chief of Staff, General Hoyt S. Vandenberg, confirmed what
Symington had stated concerning the ability of the B-36 to accomplish its mission, when
he appeared before the committee on October 19, 1949. Vandenberg attempted to
reassure the public that strategic plans were decided by all members of the JCS, designed
for the defense of the United States and countered the suggestion that “strategic
bombardment is an Air Force concept” or an Air Force plan. He stated that the idea
evolved from a national plan to an international plan once the United States entered
World War II, and was supported by President Franklin Roosevelt and British Prime

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646 Ibid.
Minister Winston Churchill, the Joint Chiefs of Staff and the Anglo-American Combined Chiefs of Staff. Strategic bombing further progressed, through the bombing of Germany and Japan, and was now “a significant factor in planning for the troubled period in which we find ourselves as an aftermath of World War II.” Now that it was considered to be the national plan, only one Air Force agency was tasked with the delivery of the bomb, Strategic Air Command. Vandenberg unmistakably disagreed with those who argued that the United States should abandon the concept of strategic air warfare because to do so would eliminate “the greatest equalizing factor in the balance of military power between a potential enemy and the western democracies and could only be received with contempt or despair by those who have joined together for common defense.”

Like Symington had previously stated, Vandenberg denied that the Air Force was prioritizing a single weapon based defense plan because there were less than 1,000 aircraft assigned to SAC. They represented only one-third the total of airplanes currently in the Air Force, and B-36s were only five percent of the entirety of the USAF. Vandenberg also rebutted criticism of strategic airpower and those that advocated for more resources to be used for “tactical aviation – fighters, fighter bombers, and light bombers” that were limited in range and payload. To embrace the latter, Vandenberg stated that the United States would have to give up the “deterrent value” of atomic weapons. This action would inform the Soviets “that they now take no defensive measure against a possible atomic attack on their heartland.” The mere possibility of such nuclear strikes forced the Soviet Union to invest in defensive measures and reduced

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647 Statement of General Hoyt S. Vandenberg, Chief of Staff, United States Air Force before the Armed Services Committee of the House of Representatives Concerning the B-36 and Related Matters, October 19, 1949, Papers of Francis Matthews, Secretary of the Navy, House Armed Services Committee Investigation of the B-36 & Related Matter, (October 18-21, 1949), Misc Speeches, Box 57, HST.
their capacity to produce offensive weapons. If the United States did not have a strategic bombing capability, Vandenberg argued, the Americans would have the power to destroy the enemy’s weapons and military production at the source. He dismissed other military programs as being reactive and extremely costly to prosecute in a modern war. Only strategic bombing could eliminate the source of power of an enemy state. He did not offer an airpower alternative to a war that was less than total, or options other than nuclear.

Vandenberg saw the criticism of the B-36 program as a challenge to the professionalism of those that advocated strategic bombing, and without releasing data related to the operation of the B-36, he stated unequivocally that American strategic bombers “can do their job.” He reminded Vinson’s committee that during World War II, American bombers had never been stopped short of their targets by enemy action. Vandenberg argued that the public should not be surprised that enemy planes are faster than bombers, and that radar use against bombers was not a novelty nor was it easy to bomb targets precisely from high altitudes. The Air Force was looking at improving its “visual and radar bombing methods” and tests indicated that the necessary accuracy could be attained and he dogmatically maintained the Air Force belief that the bombers would get through. Vandenberg vented at those who were responsible for the breach in national security and creating the need to have public hearings on top-secret strategy, weapons, and policy. He implied that some members of the military had violated the trust placed upon them. There were “criminal statutes imposing penalties upon the disclosure of military secrets” and there had to be a balance between freedom of speech and national security. He closed by suggesting that these hearings would not “diminish the

648 Ibid.
determination of the Air Force to cooperate effectively with its two sister services in providing for this country the greatest possible military security.”649

General of the Army Omar N. Bradley, Chairman of the Joint Chiefs of Staff, had his turn before Vinson’s committee on the same day as Vandenberg, October 19, 1949. Bradley’s prepared testimony reflected the anger that he felt about the entirety of this fiasco, and the disunity that potentially compromised national security. He insisted that the people of the United States “have as their national objective, a desire for peace and security, without the sacrifice of either the basic rights of the individual, or the present sovereignty that we cherish” but this did not mean that Americans embraced the idea of “peace at any price.” Americans intended to maintain the political and cultural life that they had, and the present form of government, with a final objective to sustain and even raise “our American standard of living.” The Soviet Union and its allies, through political and military means, currently threatened these core values because the Communists believed in dominating the world. In an effort to combat this significant threat, the United States needed to maintain balanced military forces, in numbers and budgets. In the next war, the United States would hope to defend its territory, and be able to launch retaliatory strikes from “bases which we hope to have ready at all times.”

He was convinced that the U.S. would have to strike back at the heart of an enemy through strategic bombing and large-scale land operations. Then, as many historians have pointed out, Bradley predicted, “large-scale amphibious operations, such as those in Sicily and Normandy, will never occur again.”650 The United States was not alone in confronting the Soviet threat as the North Atlantic Treaty and the Mutual Defense Act of

649 Ibid.
650 It should be noted that Symington did not address the number of B-29/B-50 or B-47 groups that were tasked with the same type of mission as the oft-criticized B-36.
1949 have pledged the Western democracies to collective defense of Europe, and the
U.S.\textsuperscript{651}

Bradley attempted to clarify the position of the JCS and the new Department of
Defense in regards to strategic bombing, and its application in a modern war. He argued
that the evidence from the Second World War had displayed the deterrent effect of
strategic bombing and the efficacy of airpower to assist in attaining the ultimate victory
in the war. Because the United States did not maintain a large conventional force after
the war, it was up to the strategic bombers to represent the power of American retaliation.
Some had opposed strategic bombing because of the “destruction of civilian lives and
communities.” Bradley stated that the Americans will always try to achieve the
“maximum effectiveness against the enemy’s armed forces, with minimum harm to the
non-participating civilian populace.” He believed that if the Soviets were able to strike
first, “the American people may feel that strategic bombing is both militarily and morally
justifiable.”\textsuperscript{652}

In a direct verbal assault on the testimony of Admiral Radford and the position of
the Navy, Bradley suggested that American war plans were not “based solely on the so-
called Atomic Blitz” and that the individuals and agencies tasked with creating the war
plans of the United States did not base it only on atomic bombs and big bombers.
Bradley then addressed the B-36 and stated that in his opinion, “it is the best bomber
available for production that is capable of carrying out the certain required missions in
the case of emergency.” This opinion, he contended, was based on “comparative

\textsuperscript{651} Statement of General Omar N. Bradley, Chairman, Joint Chiefs of Staff Before the Armed Services
Committee of the House of Representatives, October 19, 1949, Papers of Francis Matthews, Secretary of
the Navy, House Armed Services Committee Investigation of the B-36 & Related Matter, (October 18-21,
1949), Misc Speeches, Box 57, HST.

\textsuperscript{652} Ibid.
statistics as previously presented to the JCS by the Air Force on the various types of
bombers available when they made their selection of the B-36 to fulfill the strategic
bombing role they have been assigned.” This did not mean that better bombers would not
be used when they became available, only that the B-36 was approved based upon the
recommendations of the Air Force, and endorsed by the entire JCS. The B-36’s
intercontinental range was critical to the offensive capacity of the Air Force. It was the
only possible means of reprisal if bases closer to the Soviet Union were not available. He
also suggested that the critics of the B-36 had not flown the plane, were not familiar with
its capacity to bomb at high altitude with acceptable precision, and were complaining
about a weapon that the Air Force, the agency responsible for strategic bombing,
wanted.\textsuperscript{653}

The Chairman of the JCS also vigorously attacked the idea that that the Soviets,
“our only possible opponents for many years to come” had the capacity to inflict
unendurable losses “on any bomber engaged in a mission where the Russians have
adequate defenses.” Detractors of the Peacemaker based its alleged interception liability
on the performance of the F2H Banshee. Bradley added that currently the United States
did not know whether or not the Soviets had a plane that matched the Banshee despite the
fact that American knowledge of the MiG-15, a jet fighter with much greater
performance than the F2H, was already well known inside the Pentagon as early as 1948.
Bradley raised the issue that if the Soviets had the capability to intercept the B-36, would
they not have the same ability to catch and shoot down naval nuclear bombers? Aircraft

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\textsuperscript{653} Ibid.
losses were part of the overall cost of the missions, and such setbacks did not “mean that you cannot still accomplish your mission.”

Bradley transitioned his testimony to the atomic bomb as a weapon and suggested that the arguments were not effective or only effectual in a small area, had been “refuted by every test that has been made.” He added that as “a believer in humanity I deplore its use, and as a soldier, I respect it.” As for the offensive capabilities of the Navy, Bradley contended that all of the Services were reduced from what they wanted, and that the “Air Force might have better grounds for dissatisfaction” based on recommendations from the President’s Air Policy Commission that were not yet attained. The Navy had been in constant opposition to unification at the expense of the nation’s best interest, and its responsibilities did not match with the weapons it requested or wanted.

By the end of his statement, Bradley had demonstrated his support for the JCS concept of war, a belief in the ability of the B-36 and the atomic bomb, to win wars or prevent them.

The Secretary of Defense, Louis Johnson, testified before the House Armed Services Committee on October 21, 1949, the last day of the hearings, and opened with a defense of unification and what had been done up to the present including the agreements reached at Key West and Newport over role and missions. He argued that national security was “not a competitive enterprise where one Service can profit at the expense of another.” It was not the intent of unification to have one service monopolize the Department of Defense, and one Service should neither control nor be subservient to another. Johnson also made it clear that because of the cap placed on defense expenditures, the Navy would not have as many carriers on active duty as it hoped for,

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654 Ibid.
655 Ibid.
nor would the Air Force attain the 70 groups that it wished to attain. Johnson’s statement implied that the Navy was not really arguing over the “vulnerability or invulnerability of the B-36” but instead “the continuous overtone has been an attack on the theory and the administration of the unification law.”

Johnson made it clear that an invulnerable bomber has not yet been made, so therefore, the B-36 was vulnerable and under “given conditions, a bomber can always be destroyed. This was true of the B-17s at the onset of the war, just as it was also true with the B-29s in the latter stages of the war.” So many arguments that were made about the B-36 were based upon the “oversimplification of the problems of bombing and bomber interception” that there was no single statement by either side that could not be questioned. Johnson maintained that the decisions that were reached by his office, were based upon recommendations made by veteran officers and civilians who were far better equipped to evaluate all weapons systems. As for the supercarrier, Johnson claimed that he had followed the proper channels in determining if it should be built, and all of the members of the Joint Chiefs of Staff took part in the discussions and the final decision. This was not about strategy, or the B-36, according to Johnson, but instead it was about the Navy being unhappy with unification and the Secretary of Defense was committed to maintaining a military that “should and will be run solely in the interests of the American people and for the furtherance of world peace.” It appeared that Johnson saw the Navy’s role in these hearings a being obstructionist to the Secretary of Defense and the Joint Chiefs of Staff rather than answering the substantive question of not only whether

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656 Statement of Honorable Louis Johnson, Secretary of Defense Before the Armed Services Committee of the House of Representatives, October 21, 1949, Papers of Francis Matthews, Secretary of the Navy, House Armed Services Committee Investigation of the B-36 & Related Matter, (October 18-21, 1949), Misc Speeches, Box 57, HST.
657 Ibid.
the B-36 successfully bomb Moscow, but whether or not that should the primary response in a war with the Soviets.

Former President Herbert Hoover also spoke to Vinson’s committee, at their request, on October 21, 1949, as a key expert on the reforms of the federal government. Almost immediately, Hoover stated that he did not wish to “add to the bitterness which has already flooded out of this hearing” nor could he “resolve the technical questions as to whether the B-36 can, or cannot, do everything that is claimed for it.” Hoover regretted that the inter-service rivalries had become public and that it impacted our national defense and morale. The development of new weapons, tactics and dangers, had always created problems as “some weapons become less effective and others more effective, the life training of some officers in them is often a reason for their reluctance to alter them.” It was also possible for officers to “move too quickly into every new field, no matter how experimental.” Hoover then transitioned into unification and some of the background to the legislation in addition to the apparatus that was created to determine “strategic plans, problems of command, and technical questions” that were addressed by the NSC and other agencies, including the Weapons Systems Evaluation Group and the JCS. All three Services were adequately represented on this board and Hoover had “no doubt that among these agencies there is the skill to settle technical and strategic and command questions.” Any differences that could not be resolved would be placed before the President through the Secretary of Defense, and Congress had the ability to correct the President if he made a mistake. Hoover recognized that the attempt to eliminate waste and redundancy were among the primary reasons for unification, and criticism

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658 Statement of Herbert Hoover Before the Armed Services Committee of the House of Representatives, October 21, 1949, Papers of Francis Matthews, Secretary of the Navy, House Armed Services Committee Investigation of the B-36 & Related Matter, (October 18-21, 1949), Misc Speeches, Box 57, HST.
came from those groups that were adversely affected. The time for austerity was now, because the pressures on the American economy had already created a substantial budget deficit and the prospect of inflation.\footnote{659}

Many historians and pundits have gravitated towards the latter idea as the reason why the bomb seemed so attractive. They appeared to be inexpensive compared to other weapon systems. It should now be apparent, however, that the cost of the weapons had to include the delivery system and crews and this inflated the overall cost of the system. If the expensive bombers did not have the ability to accomplish their assigned mission, as was alleged by critics of the B-36, then what would be the cost of losing a war with the Soviet Union because of the inability to back American policy with American weapons?

THE CONGRESSIONAL REPORT

When the hearings closed, it was clear that there still was no consensus on unification or strategy, and for both the Navy and the Air Force, the years ahead were hidden by the shadows of a mushroom cloud. Neither the B-36, nor the proposed carrier-based nuclear bomber, could rapidly project American power against the Soviet Union in 1949. It was also doubtful that they would be able to do so in the immediate future. The bombers had been designed to destroy Soviet cities and manufacturing centers, which could only be successful if American policy linked total destruction of the Soviet Union to victory. Discussions of tactical missions to support ground troops was discussed in the hearings, but for many officers in the Air Force and the Navy, nuclear weapons could also be used in these types of missions. Both Services maintained the superiority of their

\footnote{659}{Ibid.}
airmen to deliver the coup-de-grace against the USSR at the expense of their counterparts in the Pentagon.

On March 1, 1950 the House Armed Services Committee released their report on “Unification and Strategy” that reexamined what had happened during the Revolt of the Admirals and attempted to provide direction for the future. The report affirmed the dramatic chasm between the Navy and the Air Force on strategy and policy with the USN in opposition to the strategy of atomic warfare against cities in an effort to win a war against the Soviet Union and the efficacy of high altitude strategic bombing. The testimony presented to Carl Vinson’s committee had also made it apparent that the entire military believed that airpower was indispensable to modern warfare and all branches of the Armed Forces had a role in the air campaign. The Committee concluded that the B-36 was currently the best bomber available but they did not answer the question of vulnerability to interception or if it provided “the cheapest, surest, and most effective way of delivering significant bombing attacks and that such attack cane be accurately delivered.” The committee was not certain if the current defense plans insured “adequate consideration of all professional views in these basic matters of defense, especially during this early stage in unification” as weapons and systems were still being worked out. The committee felt that the “existing national security organization” needed to be altered to guarantee that decisions “will be reached with due regard for all service views.”

The Committee also addressed the issue of the B-36 and the United States in a fairly unequivocal manner. They recommended that any expensive weapon system

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needed to be fully evaluated before it was acquired in quantity and it did not “pass judgment in any respect on the many able arguments, pro and con, which the committee has received” on the B-36 or the supercarrier. The report indicated that the Committee did not approve of the way Louis Johnson unilaterally canceled the construction of *United States* and believed that was an “unsound manner in which to conduct public business involving the national defense.” This was a concern for the Committee because the administration disregarded the role of Congress and the American people and their respective role in national security. It was also noted that they did not consider intercontinental strategic bombing to be tantamount to airpower and the “Air Force is not synonymous with the Nation’s military air power” but the USAF retained the “primary responsibility for conducting strategic bombing.” As for the battle between the B-36 and the supercarrier, the Committee affirmed their belief in the professionals who recommended it but they deplored the “the manner of cancellation of the construction” of *United States* and would sponsor legislation that would require “within reasonable limits, consultation by the Secretary of Defense with the Appropriations Committees of the Senate and House of Representatives before appropriated funds are withheld by administrative act.”\(^{661}\)

**WAS IT WORTH IT?**

The investigation into weapons and strategies did not end the controversies surrounding the Peacemaker or the naval nuclear bomber and it was questionable whether or not either one was capable of completing the assigned mission with the level of success that was predicted. Both were hopelessly obsolete by 1949 standards and

\(^{661}\) Ibid, 54-57.
frankly, so was the *United States* because it was designed with the technology of World War II and its operations in the jet age would have been severely limited without immediate funding to rectify its deficiencies. The Navy would never admit that it was in its own best interest to actually have the *United States* canceled. When the time came for the supercarrier to finally be built, it would be completed with the design and technologies that are still in use on modern carriers in the 21st century. Instead of arguing for the supercarrier and the naval nuclear bomber on strategic grounds, the Navy should have promoted their use in tactical strikes because the advantage that the Navy had over the Air Force was the ability to launch aircraft much closer to the target. This allowed troop masses to be struck before they dissipated into a wide-ranging front and naval aircraft could fly multiple missions while the B-36 was still engaged in its first strike. The Navy could project American airpower into regions well beyond the range of Air Force aircraft and maintain a higher offensive presence in critical regions such as the Mediterranean Sea and the Persian Gulf.

The Navy's defiance of Secretary of Defense Johnson did not persuade Congress to reverse his cancellation of the supercarrier *United States*. Even a demonstration of carrier airpower in September 1949 aboard the *Franklin D. Roosevelt* could not turn the tide. The B-36 prevailed and the Navy was forced to reevaluate its long-term strategic goals. Although Vinson suggested that at some point in the future Congress would support a supercarrier, the Navy would have to focus on interim carrier-based bombers, the P2V Neptune and the AJ *Savage*, and existing carriers. The large ADR-42 and the supercarrier would have to be scaled down in size and mission capability. Johnson was
so bold as to declare, “the Navy is on its way out...the Air Force can do anything the Navy can.”  

It is critical to understand that the entire B-36 investigation and the cancellation of the supercarrier had far more to do with long-term strategy than these two weapon systems. The Air Force was already making plans to replace the B-36 with an upgraded version powered by jet engines or the new Boeing concept that would eventually become the B-52, a plane that was as arguably the most successful combat aircraft ever designed. Focus needs to remain on the idea of strategic bombing and nuclear weapons delivery and the primary manner to win a war. It was these ideas, highlighted in the testimony that directed appropriations at aircraft that were designed primarily to deliver atomic weapons from air bases and carriers for the next twenty years. Nuclear-armed bombers were to be supported by fighter aircraft that could carry atomic bombs. At the same time the American skies were protected by interceptor aircraft armed with nuclear tipped anti-aircraft missiles that would attempt to destroy any incoming Soviet attack. The Air Force had won the day and their version of strategic air warfare was secure and the Navy appeared to be formally restrained in their efforts to secure a carrier-based strategic bomber.

Secretary of the Navy Francis Matthews did not abide by his word that naval officers would not be censored or punished for their testimony. Only a week after the highly publicized B-36 hearings concluded, the CNO, Admiral Louis Denfeld, was fired. To many naval aviators and supporters of the Navy, Denfeld, the non-aviator, became a martyr in the battle for carrier airpower. In an article that appeared in *Collier’s* magazine and read into the Congressional Record by the future Speaker of the House,  

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Representative John W. McCormack (D-MA), Denfeld reiterated the Navy’s position that, “We cannot win a war on foreign soil by remaining at home. A powerful Navy will be an effective partner of the Army and Air Force, carrying the war to the enemy and keeping it there.” He added that the “Air Force is tied to a single weapon, the airplane. The Navy is tied to a function, command of the sea, and its weapons change.” Denfeld also wrote that the Navy was “in danger of losing one of its greatest assets—its spirit.”

Replacing Denfeld as the Chief of Naval Operations was Admiral Chester Nimitz's former Chief of Staff, ADM Forrest P. Sherman. An extremely intelligent man and well-versed in carrier air tactics, Sherman truly believed in a balanced military that included a Navy capable of conventional and nuclear strikes. When he was recalled from command of the SIXTH Task Fleet in the Mediterranean, Sherman came into Washington as an Admiral untarnished by the Revolt and worked to reestablish confidence in the Navy and its ability to contribute to the national defense. Although much of the focus on naval operations was now in the Mediterranean, Sherman insisted that at least one carrier task group remain in the Pacific. When the Korean War broke out on June 25, 1950, the heart of the SEVENTH Fleet in the Western Pacific was a single fleet carrier, the Valley Forge.

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CHAPTER EIGHT
AIRPOWER IN RETROSPECT

As a result of these shortcomings in the USAF resources and capabilities, and the service’s reluctance to reveal them to politicians or the press, American leaders and the public, as well as some generals, entered the Korean War with inflated expectations of what airpower could accomplish. Conrad C. Crane, 2000. 665

My feeling was then, and still remains, that it would be impossible for the United States to maintain the military commitments which it now sustains around the world (without turning to a garrison state) did we not possess atomic weapons and the will to use them when necessary. Dwight D. Eisenhower, 1963. 666

The conclusion of the Congressional investigation into the B-36 and air strategy in late 1949 had done little to ease the mind of President Harry Truman as he looked ahead to a peaceful 1950. In addition to the acrimonious interservice battles that plagued the administration since the end of World War II and the escalating problems with the Soviet Union since 1946, the President also had to deal with the Berlin Blockade and collapse of Nationalist China in 1949. More ominous for the administration was the evidence that the Soviet Union had attained nuclear weapons far sooner than the 1952 timeframe that had been predicted by many scientists and military experts. The Soviet atomic bomb and their version of the Superfortress, the TU-4 Bull, gave them the ability to hit most of the continental United States on a one-way mission and neutralized the American nuclear advantage in an all-or-nothing total war. The President later wrote that the Soviet bomb and the ongoing American scientific developments spurred his decision

to pursue the hydrogen bomb and, thus, an arms race was in the making. Soon new thermonuclear weapons of much greater capacity would be made. As well, far more advanced delivery systems developed that could fly deep into the Soviet Union with minimum risk to the crews that manned the new generation of bombers or fired the nuclear-tipped intercontinental ballistic missiles. In the short-term, Secretary of Defense Louis Johnson continued to scale back the military budget under the direction of the President and it was hoped that after the tumult of the previous year, 1950 would be relatively quiet.

New weapons and the strategy confirmed during the B-36 hearings in late 1949 meant that the American military equipment, tactics, and training now emphasized nuclear weapons delivery in preparation for a total war with the Soviet Union. Secretary of the Navy Francis Matthews continued to lead the Navy but his Chief of Naval Operations Admiral Forrest P. Sherman was tasked with rebuilding the morale of the Navy after their “loss” during the hearings. Sherman was highly respected inside and outside of the Navy and even those who had questioned the ethics of many in the USN were quick to praise the new CNO for his intelligence and ability to keep a low profile at the same time he attempted to reassert a strategic direction for the Navy.

After the hearings, the Air Force would also see a change of leadership because Secretary Stuart Symington made the decision to leave the Pentagon. Perhaps frustrated at his inability to attain the 70 Group Program under Truman or even the removal of the Service Secretaries from the National Security Council and other erosions of power to the

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Secretary of Defense, Symington resigned in April 1950. He became the chairman of the National Security Resources Board before he successfully ran for the Senate in 1952. The former chairman of the President’s Air Policy Commission, Thomas K. Finletter, replaced the polarizing Symington as Secretary of the Air Force. Finletter remained convinced of the ability of airpower to win a war and remained a supporter of the 70 Group Program that his commission recommended to Truman in 1948. Like his predecessor, Finletter would not achieve this goal and it appeared that the prospects for it coming to fruition in the near future were slight as the President made it clear that he hoped to continue to scale back defense spending for the next two fiscal years.

More importantly for the immediate future of American airpower, however, was the outbreak of war in Korea only three months after the Congressional report on Unification and Strategy was released in March 1950. Unlike the total war that was predicted multiple times since the end of the World War II, the Korean War was the epitome of a limited war and the ability of airpower to win a decisive victory was restrained. Despite this flaw in airpower, the Truman and Dwight D. Eisenhower administrations were successful in linking American goals and policy to military action and airpower. An independent South Korea was always Truman’s goal, even after the ill-fated decision to move United Nations forces north of the 38th Parallel to reunify Korea. Eisenhower remained committed to ending the war in a manner that preserved the sovereignty of South Korea and repatriated captured U.N. prisoners. Both administrations were pressured by some in the military to introduce nuclear weapons into

the war, but ultimately refrained from turning the conflict into a total war. Eisenhower was willing to increase the rhetoric and looked at options to end the war on American terms including expanding the war into Manchuria, to eradicate sanctuaries, expanding conventional forces, or ultimately the use of nuclear weapons.\textsuperscript{671}

The war in Korea proved to be the antithesis of the view of strategic air warfare concepts that had been fought over since the end of World War II as the efficacy of strategic bombing was limited because of the availability of valuable targets and international concerns over civilian casualties.\textsuperscript{672} Interdiction and tactical bombing arguably became more important to protect the United Nation’s ground forces and disrupt the flow of supplies to the North Korean and Chinese forces that were engaged by the end of 1950. Strategic air warfare did not provide victory for the American led U.N. forces in Korea nor did it allow for a rapid conclusion. Instead, American tactical aircraft allowed the outnumbered allies to hold their ground against numerically superior communist forces. Well-trained American aviators were also able to establish air superiority over Korea in 1950, despite being dramatically outnumbered.\textsuperscript{673} Without this control of the air, South Korea would have been lost.

\textbf{THE KOREAN WAR, 1950-1953}

Unlike a major war with the Soviet Union, the United States was in a state of war in Korea with a third world Soviet ally. North Korea received its weapons from other countries, primarily the USSR and the People’s Republic of China (PRC), rather than

\textsuperscript{671} Eisenhower, \textit{The White House Years: Mandate for Change}, 179-180.
\textsuperscript{672} Crane, \textit{American Airpower Strategy In Korea}, 42-43.
through indigenous arms production. This created a difficult scenario for the advocates of airpower because bombing the means of production in North Korea would not destroy the weapons that its military used. Instead, focus had to be on the transportation network that funneled weapons from the Soviet Union or the PRC to the frontlines in Korea. This was extremely difficult because of the sudden outbreak of the war on June 25, 1950. The rapid advances made by the North Korean Army threatened to overrun South Korea in a matter of weeks, and it appeared that the North Koreans did not need large logistical support bases that could be easily bombed by U.N. aircraft.\footnote{Earl H. Tilford, \textit{Setup: What the Air Force Did in Vietnam and Why} (Maxwell Air Force Base: Air University Press, 1991), 18-19.} Another critical challenge to the United States Air Force was to complete a strategic bombing campaign against a nation with limited infrastructure that did not manufacture its own weapons. There had to also be extensive consideration to avoid errant B-29s from hitting Chinese or Soviet territory.\footnote{Futrell, \textit{The United States Air Force in Korea}, 41.}

Unfortunately for the advocates of airpower, when the B-29s began to bomb North Korea, troop concentrations of the communist nation had already advanced further south and seemed to be little affected by the bombing north of the 38\textsuperscript{th} Parallel. Repeated precision attacks by B-29s did little to stop the war and eventually the Superfortresses were chased from the daytime skies by Soviet flown MiG-15s that had been brought in to defend North Korea.\footnote{For decades the Soviets had denied involvement in the Korean War but the collapse of the Soviet Union and the opening of its archives accurately destroys that myth. Soviet-crewed MiG-15s operated exclusively at the beginning of the war and eventually were joined by Chinese and North Korean pilots who were trained to fly the MiGs. John R. Brunning, \textit{Crimson Sky: The Air Battle for Korea} (Dulles, VA: Brassey's, 1999), 203-207.} Even the introduction of the most advanced American jet fighter, the F-86 Sabre, could not stem the losses of B-29s because they were too few in number. The highly skilled F-86 crews did reestablish air superiority over the Korean Peninsula.
and shot down an impressive number of enemy jets. Men who had flown during World War II populated many of the American air groups that went to Korea and were familiar with the skills of dogfighting. They were able to pass these skills on to others in their squadrons and this allowed the U.N. forces to maintain control of the skies over Korea. However, the allied aircraft would never match the total number of MiGs in the theater and therefore the MiG-15 remained a threat until after the war officially ended.677

The Korean War validated the arguments that not all future wars would be nuclear or could be won solely or primarily with strategic bombing. The conflict also proved that a more balanced force structure was needed for the future including fighter aircraft that could establish and maintain air superiority. The value of carrier-based aircraft was also demonstrated to those in the Truman administration who had believed that the Air Force alone could maintain an American presence in a theater of operations. When American airbases in Korea were overrun during the summer of 1950 which forced the USAF to relocate to Japan, it was carrier-based aircraft that maintained a presence over the peninsula. The interdiction campaign in Korea also displayed the limitations of airpower to deny enemy supplies when that enemy did not need massive quantities to maintain their army in the field. Heavy losses were also inflicted upon the U.N. attack aircraft because the communist forces placed strong anti-aircraft defenses near transportation networks that were targeted.678

677 The total number of aircraft shot down or lost by either side is clouded because of the uncertainty of war and the inability to accurately document aircraft listed as destroyed by one side and verified by the other. The initial accounts from Korea credited the F-86 with destroying more than 700 confirmed with a loss of only 56 Sabres and Soviet accounts claimed 647 F-86s and more than 400 other U.N. aircraft against a loss of 319 aircraft in combat. Warren Thompson, F-86 Sabre Aces of the 4th Fighter Wing (Oxford: Osprey Publishing Limited, 2006), 76 and Lenoid Krylov and Yuriy Tepsurkaev, Soviet MiG-15 Aces of the Korean War (Oxford: Osprey Publishing Limited, 2008), 86.
indicative of forthcoming wars as both sides restricted the types of weapons that were used and excluded the use of nuclear weapons in an effort to win the war. Sanctuaries in Manchuria for communist forces were technically off limits for the U.N. forces to attack, however, Allied air bases in South Korea and Japan reciprocally remained free from communist assaults. The conflict also demonstrated that if a war involved one of the superpowers directly against a proxy state supported by the other, there would be no decisive victory and the war would end through negotiation.

Regrettably, lessons about the limitations of airpower that were learned in Korea were later ignored, particularly by the Air Force, because the conflict was seen an anomaly and “not a sign of things to come” in the future of warfare. As evidence, more resources were devoted within the Air Force, an agency founded on strategic bombing, for nuclear delivery than conventional weapons despite the lessons of Korea. USAF fighter pilots were trained to drop bombs on targets too small for SAC’s bombers to engage. Air Force tactical aircraft remained “cocked and locked—sitting on runways, pilots strapped in the cockpits, with small nuclear bombs” mounted to the fighters. It was argued that the goal of leadership within the USAF was to turn fighter aviation into a “mini-SAC.” Even into the Eisenhower years, the Air Force continued to prioritize SAC and its mission because the doctrine of strategic bombing “was seen as immutable, inflexible, and so basically sound as to demand no further justification, evolution, or revision.” Discussions about Air Force budgets did not focus on doctrine or strategy but

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680 The collapse of South Vietnam in 1975 is an anomaly because the United States had withdrawn all combat forces and therefore, it was a battle between proxies.
rather on the “types and capabilities of airplanes” to meet the Soviet threat.\textsuperscript{682} Like their peers in the Air Force, the Navy added nuclear weapons as part of their strike packages by 1951. The Joint Chiefs of Staff recognized this change and described the carriers as “the major striking power of the Navy and are primarily responsible for neutralizing at the source the enemy’s offensive capabilities to threaten control of the seas.” Focus remained primarily on the USSR and not on the chance of another limited war with a Soviet proxy state.\textsuperscript{683}

The election of Dwight D. Eisenhower in 1952 and his emphasis on the economy of nuclear weapons along with the “most effective means of using them against an aggressor” allowed the development of weapon systems designed around nuclear bombs.\textsuperscript{684} Ike’s Secretary of Defense Charles Wilson, previously the president of General Motors, was committed to economizing the Pentagon and saw an increased role in a nuclear arsenal for offense and defense. This included an increase in the development and deployment of intercontinental ballistic missiles (ICBM) by the Air Force and intermediate range missiles (IRBM) by the Navy and the Army.\textsuperscript{685} But it was more than economic issues that drove these decisions. There was still the underlying belief in the efficacy of strategic bombing and more importantly, nuclear weapons. These were the same issues that had originally caused the fighting over unification and the B-36. It was this core doctrine of strategic air warfare and their perceived deterrence that truly drove the strategy and funding. Arguably, they were indeed cheaper than

\begin{footnotes}
\item[682] Tilford, \textit{Setup}, 38.
\end{footnotes}
conventional forces, however, there is no cost savings if the weapons and strategy are ineffective or counter-productive. Still, the Eisenhower administration also oversaw a dramatic increase in the size of the Air Force, particularly in its combat groups. The Korean War had already caused a remarkable increase in the USAF, from 48 groups in 1950 to 106 groups by 1953, and plans were approved to further expand the USAF to 143 groups. Ike later trimmed this down to 137 groups, which was achieved in June 1957, a decade after the battle for the 70 Group Program.⁶⁸⁶

THE NEW LOOK PROGRAM

The B-36 survived into the Eisenhower era, but the numbers of active duty Peacemakers were in decline. By early 1959, the last of the B-36s was retired, lasting only ten years after Admiral Arthur Radford called them “the Billion Dollar Blunder.”⁶⁸⁷ They were replaced in service by aircraft that were only a few years newer, but dramatically improved through remarkable technical advances. These included fighters and bombers that could fly at supersonic speeds, as well as refuel in-flight to extend their range. Strategic Air Command finally attained a truly global bomber when they purchased the combination of B-52 Stratofortresses and KC-135 Stratotankers. Both airframes would be indispensable to sustaining the deterrence factor of the American nuclear arsenal during the Cold War.

The company that built the B-36, Convair, attempted to bring the Peacemaker into the jet age. They completely redesigned the wing to a swept-back design and powered the new plane with eight of the same engines that were used by the B-52. The redesigned

⁶⁸⁶ Futrell, The United States Air Force in Korea, 709.
aircraft was designated the B-60. However, it did not enter production because it was still too slow compared to the B-52 and the B-60 program was ultimately cancelled in 1952. Convair did, nevertheless, succeed in building a new generation of nuclear bomber, the B-58 Hustler. This was a delta-winged supersonic bomber that was the complete antithesis of the B-36 because it was sleek and fast. Still, its purpose was inflexible for any war short of a total war. Air Defense Command also purchased aircraft from Convair, particularly the F-102 Delta Dagger and the F-106 Delta Dart interceptors. These were designed primarily to defend NATO nations from Soviet bombers that would be shot down with American arsenal of nuclear tipped air-to-air missiles. In an all or nothing war, the United States was willing to use any type of atomic weapons to attain victory or stave off defeat.

The USAF Tactical Air Command, like the much larger Strategic Air Command, continued to purchase aircraft based upon their ability to function as nuclear bombers. Many in SAC believed that the day of air-to-air fighting was over and TAC needed to continue in its primary mission of atomic weapons delivery in defense of American policy. The Republic F-105 Thunderchief typified this mindset. It was the largest fighter of the era and it was not particularly maneuverable, but it could carry tactical nuclear weapons in an internal bomb bay. The F-105 became the workhorse of the Air Force over Vietnam during the years of Operation Rolling Thunder (1965-1968) and because it was designed as a low-level tactical nuclear bomber, it was not well suited to

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689 Coram, Boyd, 114.
the war over North Vietnam.\textsuperscript{690} The F-105 suffered heavy losses during the Vietnam War because it was not originally designed with adequate armor plating, electronic counter measures or sufficient back-up flight controls.\textsuperscript{691} An investigation later reported that was because it had been designed on the assumption that the Soviet defenses it would face consisted of surface-to-air missiles. Because one “hit by a large missile warhead was presumed to mean an automatic kill, the F-105 was built with little emphasis on system redundancy and resistance to battle damage.”\textsuperscript{692} In fact, during the Rolling Thunder campaign, the F-105 flew roughly seventy-five percent of the sorties over North Vietnam, which led to the loss of approximately half of all F-105s produced.\textsuperscript{693} It would also have to be refitted to carry the conventional weapons needed in Southeast Asia.\textsuperscript{694}

Air Force fighter pilots were trained for the primary mission of dropping bombs on a target rather than defending themselves from enemy fighters. The lack of training in basic air-to-air skills meant that the USAF struggled to wrest control the air from the North Vietnamese People’s Air Force (VPAF) during the 1960s. It was an enemy that was inexperienced in comparison to the USAF and flew only a small number of MiGs that were a generation behind the designs of aircraft flown by the Americans. The VPAF came into being in the mid-1950s and within ten years it fought the USAF to a standstill. The Vietnamese asserted they shot down 262 American aircraft for a loss of 261 of their

\textsuperscript{690}The statistics for F-105s very greatly from source to source. The numbers average from 41% of production listed as combat losses to slightly over 50% with non-combat losses included.
\textsuperscript{692}Craig C. Hannah, Striving for Air Superiority: The Tactical Air Command in Vietnam (College Station: Texas A&M University Press, 2002), 53.
\textsuperscript{693}John T. Correll, ”Rolling Thunder,” Air Force Magazine (United States Air Force) 88, no. 3 (March 2005), 61.
own from all causes. During Operation *Rolling Thunder* (1965-1968) United States forces destroyed 118 North Vietnamese fighters; in return, 56 American aircraft were lost to VPAF fighters. Perhaps the most striking statistic from the air war was during the 1972 Operation *Linebacker* raids. The USAF maintained a kill-to-loss proportion of 2:1 while at the same time the USN had a 6:1 ratio for the months of the operation. The Navy had done slightly better in 1972 because of an emphasis on tactics and training in air superiority for naval aviators, but this was still half of what was achieved in Korea and it was against an air force that was barely a decade old. If the United States could not win the war in the air, they could not enforce American policy. It appeared that airpower had failed.

The Navy also benefited because of the increased appropriations in the aftermath of the outbreak of war in Korea. The USN was able to bring many aircraft carriers into service as defense spending rapidly escalated throughout the war. Finally, after years of reductions, the Navy was increasing in size and mission capability. The Korean War further proved the Navy was “not on the way out” and the Air Force did not replace the Navy or its mission. Less than a year after the defeat of *United States*, the Chief of Naval Operations Forrest P. Sherman was able to secure congressional and presidential approval for a new supercarrier. When the carrier was commissioned, it was christened *Forrestal* (CVB-59) in honor of James Forrestal, the man who had held the Navy together through the early years of unification. This first class of supercarriers was fully capable of

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695 Roger Boniface, *MiGs over North Vietnam: The Vietnamese People's Air Force in Combat, 1965-1975* (Manchester: Hikoki Publications, 2008), 165-175. The number of combat losses also includes Navy and Marine Corps aircraft that were shot down in combat.


handling nuclear weapons and new types of attack aircraft that were designed to carry atomic weapons. *Forrestal* would always be known by its motto, First in Defense, and it proved the validity of the Navy claims about the offensive capacity of large-deck carriers and their ability to survive in war. Unfortunately Admiral Sherman would not see the completion of the supercarrier that he had fought so hard to achieve as he died unexpectedly in July 1951.

The man most responsible for the attempt to destroy carrier-based aviation, Secretary of Defense Louis Johnson, was fired in September 1950 because of his inability to get along with other members of the Cabinet, particularly Secretary of State Dean Acheson. He had also been outspoken in his belief in expanding the Korean War in pursuit of victory.\(^{698}\) Secretary of the Navy Francis Matthews quietly resigned in June 1951 to become the ambassador to Ireland and was replaced by the Undersecretary of the Navy Dan Kimball, the former assistant under John Sullivan during the contentious days of 1949.\(^{699}\) The war and change of leadership in the Pentagon and the Navy also rehabilitated the careers of several officers who had appeared to be on the losing side of the 1949 B-36 hearings, including the outspoken Admiral Arthur Radford who went on to serve as the Chairman of the Joint Chiefs of Staff and Admiral Arleigh A. Burke, the former director of OP-23 who served three terms as Chief of Naval Operations under President Eisenhower. These naval officers and their Air Force counterparts would continue to promote the efficacy of airpower and pressed to have increased options for nuclear delivery from bombers and fighter aircraft, as well as missiles that were launched from land or submarines.

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The Navy also pursued strategic and tactical nuclear bombers as their primary weapon systems during the Truman and Eisenhower years. The Douglas A3D Skywarrior was designed as the Navy’s first carrier-based strategic nuclear bomber. While the original proposal for the aircraft was released in 1946, the first A3D did not fly until 1952, nor did it enter operational fleet squadrons until 1956. By the time of the Vietnam War, it was relegated to carrier-based refueling, reconnaissance, or an airborne electronic counter measures aircraft. The Navy’s second-generation strategic jet bomber, the North American A3J Vigilante had also been converted to reconnaissance aircraft by the 1960s. The Vigilante served throughout the Vietnam War with 26 of the airframes lost over Southeast Asia.\textsuperscript{700} The most produced attack aircraft developed by the Navy was the Douglas built A4D Skyhawk. Built as a small, tactical nuclear bomber, the A4D was to “conduct offensive air-to-surface attack operations with emphasis on nuclear weapons delivery.”\textsuperscript{701} They had first been introduced to combat when a number of Skyhawks squadrons flew missions over Lebanon in 1958.\textsuperscript{702} Flown by Navy and Marine Corps squadrons on carriers and from air bases in South Vietnam, Skyhawks were used from the first missions over Vietnam in 1964 until the last carrier left the South China Sea in 1975. However, the Skyhawk became the most numerous naval aircraft lost in Southeast Asia with 266 combat losses because it was not designed to be exposed to enemy groundfire.\textsuperscript{703}

\textsuperscript{701} VA-83 Report 1 Oct 1961-31 May 1962, Naval Aviation History Branch, Naval Historical Center, Washington D.C.
\textsuperscript{702} VA-83 Report 1 July 1958 to 30 September 1958. Naval Aviation History Branch, Naval Historical Center, Washington D.C.
\textsuperscript{703} Brad Elward, \textit{McDonnell Douglas A-4 Skyhawk} (Ramsbury: The Crowood Press, 2000), 152.
Perhaps the greatest deficiency in the Air Force and Navy by the time of the Vietnam War was the lack of a true air-superiority fighter. The most numerous fighter used by all three Services during the war the Americans was the McDonnell F-4 Phantom II. Designed as a carrier-based interceptor for the Navy in the 1950s, the Phantom was first acquired by the Air Force in 1962.\(^{704}\) This was a result of Secretary of Defense Robert S. McNamara’s concern about military strategies linking economic efficiency and aircraft commonality.\(^{705}\) The Phantom was also sold to the Air Force because it was capable of conducting nuclear strike missions with tactical nuclear weapons.\(^{706}\) Although the Phantom was a proven airframe and remained in production until the late 1970s, it was not exactly what the Air Force or the Navy needed for an air-superiority fighter. Even worse for the Air Force, the Phantom was a Navy design and they were loathe to accept it. It had limited view to the rear of the aircraft, and engines that left a long black smoke trail that pointed directly to airborne Phantoms, and was originally armed solely with air-to-air missiles. These were still in their infancy and tremendously unreliable which severely restricted American attempts to establish air superiority over North Vietnam during the war. Despite the inefficiencies of the original Phantom design, the Air Force eventually bought over 2,600 F-4s. Many of these Phantoms were still in service at the time of the first Gulf War and several squadrons saw combat over Iraq.

THE TRIUMPH OF RESTRAINT AND THE FAILURE OF FORCE

\(^{704}\) The USMC also purchased F-4 Phantom IIs. Eventually over 5000 Phantoms were produced and many remain in service today. 
Throughout history, the most difficult predicament for any air campaign is to link the capabilities of airpower to national policy. In the decades after World War II, airpower was viewed as virtually unstoppable in any form. It was presumed consequently, that if American policy authorized an air campaign against any nation, it *had* to be successful. When President Lyndon Johnson ordered American airmen into the bombing campaign, he did not believe that it could fail. Unfortunately, the Americans were in a position that they could not realistically win the war for several reasons. Primarily, there were limitations on the types of aircraft the Americans had on inventory, their previous training for nuclear rather than conventional delivery, inflexible tactics for limited warfare, and political goals that restricted effectiveness of airpower during the war. Another limiting factor during the war in Vietnam was the dispersal of the logistical support base for the North Vietnamese and the limited amount of supplies needed by the Viet Cong. As early as 1966, the *New York Times* editorialized that the effectiveness of the bombing of North Vietnam was not easy to evaluate. While the bombing may have made the war more costly for the North Vietnamese, the “Vietcong also continued to get enough supplies to keep on fighting South Vietnamese and American troops.”

Consequently, *Rolling Thunder* extended the war for several years while 20,000 Americans and hundreds of thousands of Vietnamese died and no other substantive goals were achieved. Therefore, when *Rolling Thunder* ended in November 1968, airpower failed in Vietnam because of limited effective resources, strategies, and aircraft, as well as extremely restrictive political objectives. For that, by 1969 the United States had lost more than 900 aircraft, 382 airmen killed in action, and over 700 listed as missing in

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action. Yet, there were a few bright spots in *Rolling Thunder*. The North Vietnamese were forced to place large numbers of anti-aircraft guns in and around Hanoi and Haiphong to protect those assets from attack. If not for the persistent American presence over North Vietnam between 1965 and 1968, many of those weapons could have been redeployed south of the Demilitarized Zone and wreaked havoc upon American, RAAF, and South Vietnamese tactical strikes in South Vietnam. In addition, because the pressure on North Vietnam was limited, the Soviet Union did not release upgraded anti-aircraft missiles to the North Vietnamese prior to 1972.710

Richard M. Nixon was elected President in 1968 partially on the promise to successfully conclude the Vietnam War with honor. To accomplish this goal, airpower in Vietnam would have to transition from the gradualism of the Johnson administration to accomplish a far more decisive conclusion. This would include the main battery of American defenses, Strategic Air Command B-52s, and a massive application of force. The Joint Chiefs of Staff had researched this numerous times, but no action had been taken prior to 1972 because of concerns about how the press would respond, in addition to apprehension about Soviet or Communist Chinese intentions in Southeast Asia.711 The Nixon administration, frustrated by their inability to extricate themselves from the war, ordered massive strikes by B-52s in 1972 under the code names Operation *Linebacker I* and *II*. The strategic missions of the Stratofortresses were coupled with tactical strikes by fighter aircraft utilizing Precision Guided Munitions (PGM), or smart bombs, as well as

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710 SA-3 missiles developed in the USSR and transferred to several Arab states were proficient in upsetting Israeli air superiority during the 1973 Yom Kippur War. One can only wonder what would have happened had these improved missiles been used against B-52s or F-105s over Hanoi.
traditional bombs. However, poor mission planning, out-dated tactics, poor weather, and reluctance on behalf of Strategic Air Command to engage in non-nuclear missions over North Vietnam cost SAC fifteen B-52s in only eleven days.\textsuperscript{712} Losses were so high in the beginning of the campaign that the Commander in Chief of Strategic Air Command ordered the cancellation of some B-52 missions for fear of further combat losses. This was the first time in American history that a bomber attack had been recalled for fear of casualties.\textsuperscript{713}

THE LIMITS OF STRATEGIC AIR WARFARE AND THE FUTURE

The legacy of the air war over Vietnam was the fundamental bureaucratic shift in the way airpower was viewed from the top down. The traditional strategic and tactical nuclear strike missions of the Air Force and Navy remained, but were deemphasized as more flexible concepts of airpower were implanted. New aircraft were designed to establish air superiority and allow new generations of tactical strike craft to hit their targets unmolested by enemy fighters. The introduction of precision-guided munitions during the Vietnam War created greater results with fewer bombs and lower risks to strike aircraft. Limited numbers of laser-guided bombs were utilized during the Vietnam War and the First Gulf War, although far more traditional iron “dumb bombs” were dropped upon the enemy. It was only during the recent operations in Afghanistan and Iraq that the Air Force, Navy, and Marine Corps efficiently used precision guided munitions in great numbers. These included laser-guided bombs and weapons that

\textsuperscript{712} George A. Larson, “Linebacker II: Strategic Air Command’s B-52s over North Vietnam,” Combat Aircraft: The International Journal of Military Aviation 3, no. 6 (September 2001)

received their targeting information from Global Positioning Satellites. This increased accuracy and decreased collateral damage. It also reduced the number of aircraft used on each strike mission, exposed fewer personnel to enemy fire, and hit the target with greater accuracy. Moreover, increased accuracy reduced the number of times aircraft had to be exposed destroying important targets. This had been one of the greatest deficiencies of the Vietnam War. This also allows airpower to finally accomplish the great promise that had eluded it since the first flight of a military aircraft.

It should be noted that an interesting memory from Vietnam remains. During the first Persian Gulf War in 1991, Operation *Enduring Freedom* in 2002, and Operation *Iraqi Freedom* in 2003, American B-52 Stratofortresses were once again at war. Capable of carrying up to fifty-one 750lb high explosive bombs or cluster bomb units, the B-52s destroyed many well defended Iraqi and Taliban positions. As they had been over the skies of Vietnam a generation earlier, the B-52s were one of the most enduring images in these recent conflicts. So commanding was their presence over the battlefield that propaganda leaflets featuring a B-52 unloading its bombs were used to warn of potential air strikes in the immediate area. Under the Arabic writing was a photo, not of a recent B-52, but rather of an aircraft dropping its payload on a different enemy, in a different war, in an environment that is the antithesis of the deserts of Iraq and Afghanistan. Its crews knew the particular B-52 on the leaflet as “the Mekong Express.” The photograph, taken during an *Arc Light* mission over South Vietnam in 1965-1966, is an icon of war that many had hoped to forget and a legacy that will not be forgotten.

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Finally, the air campaign over North Vietnam is reminiscent of what General Omar Bradley argued in 1949. In an address before the Third National Industry Army Day Conference in Boston, Bradley argued that while he was a supporter of airpower in the modern age, he also understood the great limitations that affected its use. Bradley stated that while an air campaign could cripple an enemy, the United States would be forced to gain victory “over our dead bodies—those of our soldiers on the ground.” Unfortunately, the war in Vietnam did not end in victory despite the sacrifice of more than 58,000 Americans. To whom then do we affix the blame?

CONCLUSION

The Truman administration had ended more than a decade before the first American combat missions were flown over Vietnam in 1964, but many of the military policy decisions that were made between 1945 and 1950 were a principal part of the dilemma. The President was extremely indecisive when it came to how nuclear weapons and strategic bombing were going to be used by his administration and those that followed. He accepted recommendations made primarily by the Air Force concerning funding and weapons types, despite deep reservations that he had about their effectiveness. He also prioritized reduced military funding at the same time that he was increasing the role of the United States across the globe. Truman attempted to use service unification as a means to achieving cost reductions, but instead, it opened a great chasm between the services. These very public and acrimonious debates revolved around what types of bombers would be built and how to build a defense strategy around them

rather than on whether or not the strategy would work. Truman’s inability to completely control his defense department was a critical problem. The Air Force, and the command structure of the Strategic Air Command clearly understood how to secure funding in the Truman administration, be able to deliver the biggest weapons of all. The policies became so entrenched that even a change of administrations did not alter the core doctrine of strategic bombing. Under the Eisenhower administration, SAC continued to dominate the Air Force and defense spending.

Secretary of the Air Force Stuart Symington also shares much of the responsibility for the inflexibility of American defenses in the post World War II era. Like others within the USAAF, he saw a successful strategic bombing campaign as a critical component to achieving an independent Air Force and preeminence in post war strategic planning and budgeting. Furthermore, Symington used his position to lobby, cajole, and convince the President and Congress to embrace a strategy that was premised more upon theory than results. Using his office to promote the Air Force at the expense of the other Services clearly derailed serious consideration to alternative strategy. The supremacy of the USAF was certainly embraced by Louis A. Johnson when he became the Secretary of Defense and within one month in office he had turned the Department of Defense into a virtual fiefdom of the Air Force’s bomber barons. Ineffective civilian leadership plagued the Navy for much of this time. James Forrestal appeared to be more concerned about unification, Johnson and Symington marginalized Jim Sullivan, and Francis Matthews did not appear to represent the interests of the Navy. There were strong concerns inside the Navy about their diminished role in the nation’s defense and a general feeling of hostility from the administration. This forced the Navy to respond to
the Air Force’s role in strategic bombing by attempting to outdo the upstart Service with weapons that reflected the promise of strategic bombing as the quickest avenue to victory in any war. Behind the atomic diplomacy arguments or a simple “more bang for the buck” approach to viewing nuclear weapons was a true belief in the efficacy of strategic bombing that was at core of this dilemma.

The military itself also bears much of the blame as well. Instead of attempting to truly offer a more flexible military program that gave the United States more options short of war, both the Navy and the Air Force attempted to outdo the other with claims of supremacy of nuclear delivery systems. In particular, the leadership within the Air Force continued to focus almost solely upon nuclear weapons delivery as their raison d’etre until the 1970s, especially after Curtis LeMay was appointed as the Air Force Chief of Staff in 1961. Even after President Kennedy’s move towards flexible response, which contradicted many of the beliefs of LeMay, the Air Force continued to invest heavily in nuclear bombers and missiles to expand its role in the defense triad. They also sustained an alert status for all bombers and, since the 1950s, maintained a percentage of its armed B-52s in the air at all times. This was to guarantee that a surprise attack against the United States would not cripple all of the strategic forces because at least a few of SAC’s bombers would be able to strike back. It was only after two major crashes involving hydrogen bomb laden B-52s crashing on international soil that the airborne alert program was finally suspended. The Air Force continued to believe in the efficacy of strategic bombing via manned bombers or missiles, even after Korea and the Rolling Thunder raids had disproven the idea that bombing was the ultimate arbiter in any war.
The Navy was able to address their strategic imbalance much earlier than the Air Force, in part out of financial necessity. It was also because of the introduction of the Polaris ballistic missile submarines in the early 1960s, which secured a role for the Navy in the American nuclear triad of strategic bombers, land-based and submarine launched ballistic missiles. The nuclear heavy and light attack bombers developed for the Navy transitioned to conventional attack roles. New classes of supercarriers became symbols of the American ability to project power ashore across the globe. The Korean War had also influenced the Navy to develop a mission that it could successfully accomplish, a credible sea-based offensive strike that only the Navy could deliver. It emphasized controlling the air over enemy targets and successfully dropping bombs where necessary. By the late 1950s, the Navy had moved on to developing planes that would help them accomplish this tactical mission rather than basing their decisions solely on an aircraft’s ability to deliver nuclear weapons. In the 1990s, the Navy retired the last of their former heavy attack bombers, the A-3 Skywarrior, a plane that traced its origins to the troubling days of the Revolt of the Admirals, and its attack versions of the venerable Skyhawk. During that same decade, after more than forty years, a new supercarrier named United States was to patrol the seas and extend American power along with other carriers including Carl Vinson (CVN-70). Instead, in a compromise between Republicans and Democrats, United States was renamed in honor of the President who almost killed naval aviation, Harry S. Truman (CVN-75).
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Top image was a B-17 and the bottom is a B-24. These were the primary American heavy bombers during World War II. (Images from the USAF Museum)
Top: B-29s during production. Note the relative large size of the B-29 compared to the workers under the wing; two Superfortresses in action over Japan. (Images from the USAF Museum)
Top: A B-29 is dwarfed by the extraordinary size of the XB-36 Peacemaker. (USAF Museum) Bottom: An early model B-52 Stratofortress flies off the wing of a late model B-36 (National Archives)
Top: Late model B-36 Peacemaker with six propeller driven engines and four jet engines mounted on the outboard of the last conventional engine. These were used on take-offs and over the target area to make the Peacemaker less vulnerable to attack. Bottom: An update of the B-29 design, the B-50 had improved internal components, new engines, and extra fuel tanks mounted on the wing. (Images from the USAF Museum)
Top: The XB-47 Stratojet, the prototype of the most produced bomber for Strategic Air Command. It was fast, maneuverable, and ultimately, the antithesis of the B-36. Its primary limitation was its combat radius. Bottom: To solve the problem of the shorter range of the B-47, SAC adopted aerial refueling to extend the range of all its bombers, except the B-36. The aircraft refueling the Stratojet is a KC-97 Stratotanker. If one looks carefully at it, you can see the B-29 lineage in the design. (Images from the USAF Museum)
Top: The P2V Neptune being launched from USS Midway. However, unlike the Savage, the P2V could recover aboard carriers. Bottom: Like all carrier aircraft built since the end of World War II, the basic design breaks down for storage on the smaller confines of a carrier at sea. (National Archives)
Top: An early model A3D from the Naval Air Test Center lands aboard *Forrestal* (CVA-59). Bottom: A3Ds are being hoisted aboard the World War II era *Essex*-class carrier *Shangri-La* (CVA-38). This ability of the A3D to operate off of all fleet carriers and its superior performance gave the Navy a truly effective nuclear bomber. However, the Skywarrior reached the fleet only a few years before the primary naval nuclear strike program transitioned to the Polaris ballistic missile submarine program in the early 1960s. (National Archives)