Chapter 3

PEACETIME CHALLENGES

World War II confirmed that high-level strategic advice and direction of the Armed Forces were indispensable to success in modern warfare. These accomplishments, however, did not assure the Joint Chiefs of Staff a permanent place in the country's defense establishment. Indeed, as the war ended, the demobilization of the Armed Forces and the country's return to peacetime pursuits pointed to a shift in priorities that diminished the chiefs' role and importance. Yet even though the JCS may have been shorn of some of the power and prestige they enjoyed during the conflict, they remained a formidable organization, served by some of the best talent in the Armed Forces, and thus a key element in the immediate postwar development of national security policy.

The postwar fate of the Joint Chiefs of Staff initially rested in the hands of one individual: President Harry S. Truman. A sharp contrast in style and work habits to his patrician predecessor, Truman was the epitome of down-to-earth Middle America. Born and raised in northwest Missouri, he had served as the captain of a National Guard artillery unit in World War I. After the war, he returned to Missouri, tried his hand in the haberdashery business, failed, and turned to politics, becoming a fringe part of the notorious Pendergast "machine" of Kansas City. Elected to the U.S. Senate in 1934, he worked hard and developed a reputation as a fiscal conservative, ever protective of the taxpayers' money. When Roosevelt decided to drop Vice President Henry A. Wallace from the ticket in 1944, he turned to Truman to be his running mate, even though the two barely knew one another. After the election, they rarely met or conversed by phone.[1]

As Commander in Chief, Truman was almost the antithesis to Roosevelt. Preferring a structured working environment, he conducted business with the Joint Chiefs on a more formal basis and usually met with them in the presence of the Service Secretaries or, later, the Secretary of Defense. As a rule, he got along better with Army and Air Force officers than Navy officers. His bête noire was the Marine Corps, which he once accused as having "a propaganda machine that is almost

the equal of Stalin's."[2] Once the wartime emergency was over, Truman found his time and attention increasingly taken up with domestic chores, which reduced his contacts with the chiefs. Still, he had the utmost respect for members of the Armed Forces and often named retired or former military officers to what were normally considered civilian positions.[3] Highest of all in Truman's estimation was General George C. Marshall, to whom he turned repeatedly for help as his special representative to China from 1945 to 1946, as Secretary of State from 1947 to 1949, and as Secretary of Defense from 1950 to 1951. But he tempered the military's influence with close control of the defense budget and a strong emphasis on civilian authority in key areas such as atomic energy.

Truman had no intention of keeping the Joint Chiefs of Staff in existence any longer than it took Congress to enact legislation unifying the armed Services. Throwing his support behind a War Department proposal drawn up to Marshall's specifications toward the end of the war, Truman favored replacing the JCS with a uniformed chief of staff presiding over an "advisory body" of senior military officers who would be part of a single military department.[4] The idea had mixed appeal in Congress, however, where several leading members complained that it could lead to a "Prussian-style general staff" and dilute civilian control of the military. Increasingly popular on Capitol Hill was a competing proposal sponsored by Secretary of the Navy James Forrestal. Under the Navy plan, the JCS would remain intact and form part of a network of interlocking committees promoting cooperation and coordination for national security on a government-wide scale.[5] Pending resolution of the unification debate, Truman opted for the status quo.

Thus, the Joint Chiefs continued to operate much as they had during the war, though at a reduced level of activity, with fewer personnel in the organization and with new membership. Having accomplished their job, most of the wartime members elected to retire soon after the war. Their successors were officers who had held significant U.S. or Allied commands. The first to leave was General of the Army Marshall, who stepped down as Chief of Staff in November 1945 to make way for General of the Army Dwight D. Eisenhower, leader of the D-Day invasion of Normandy and Supreme Allied Commander in Europe. A month later, Fleet Admiral Chester W. Nimitz succeeded Fleet Admiral Ernest J. King as Chief of Naval Operations. And in March 1946, General Carl Spaatz, Commander of the Eighth and Twentieth Air Forces and a key architect of the strategic bombing campaigns against Germany and Japan, succeeded General of the Army Henry H. Arnold as Commanding General, Army Air Forces. The only hold-over was Fleet Admiral William D. Leahy, who continued to serve until illness forced his retirement in March 1949, at which time the position he occupied as Chief of Staff to the Commander in Chief lapsed.

DEFENSE POLICY IN TRANSITION

At the outset of the postwar era in 1945, the Joint Chiefs of Staff viewed the prospects for an enduring peace with growing apprehension. Even though Germany and Japan were no longer a threat, a new danger arose from the Soviet Union, now the leading power on the Eurasian landmass, whose "phenomenal" increase in military and economic strength gave the JCS cause for concern.[6] Never an overly close partnership, the Grand Alliance began dissolving even before the war was over. Factors that made the future uncertain in the Joint Chiefs' eyes included an uneasy modus vivendi over the postwar treatment of Germany and Soviet insistence on German reparations, the spread of Communist control in Eastern Europe, disputes over Venezia Giulia at the northern end of the Adriatic, political instability in Greece, Soviet demands for political and territorial concessions from Turkey and Iran, and the impasse over the control of atomic energy. None of these issues alone need have caused undue alarm. Taken together, however, they formed an ominous pattern that suggested to the chiefs a fundamental divergence of interests that could result in an adversarial relationship.[7]

Unsettled relations with the Soviet Union reinforced what the Joint Chiefs of Staff had been saying for some time about the need for a strong postwar defense posture. But in the immediate aftermath of the war, the trend was in the opposite direction, as the country embarked on one of the most rapid and thorough demobilizations in history. Bowing to strong public and congressional pressure to "bring the boys home," the War and Navy Departments discharged veterans pell-mell, shrinking the Armed Forces from 12 million in June 1945 to 1.5 million 2 years later. Operating on a conservative economic philosophy that gave priority to balancing the budget and reducing debt, President Truman ordered sharp reductions in Federal spending that included the wholesale cancellation of war-related contracts, curbs on military outlays, and strict ceilings on future military expenditures.[8]

While cutting deeply into the effective combat capabilities of the Armed Forces, the posthaste demobilization and limitations on military spending left the JCS uneasy over the country's defense posture. To be sure, the chiefs recognized that funding for defense would be tight after the war. Convinced, however, that the United States had been woefully unprepared prior to Pearl Harbor, the JCS believed that Congress and the American public should be willing to support a level of military readiness well above that of the interwar period. Under a broad blueprint of postwar requirements, the JCS argued that U.S. forces should have the resources to carry out their increased peacetime responsibilities and to respond effectively during the initial stages of a future war.[9] Some, like General Marshall, saw universal military training as the solution to the country's long-term defense needs. But after

Hiroshima and Nagasaki, UMT steadily lost ground to more technologically-oriented solutions, with reliance on airpower and "new weapons" like the atomic bomb foremost among them. Whether that reliance should be on land-based airpower or carrier-based aviation or both became one of the most contentious defense issues of the immediate postwar period.

At the center of the emerging postwar debate over military policy was the atomic bomb, a weapon of awesome proven destructive power but uncertain prospects. Despite the enormous wartime effort to develop the bomb, production of fissionable materials (uranium-235 and plutonium) dropped quickly once the war was over, as most of the scientists and technicians recruited for the Manhattan Project returned to their civilian pursuits. Refinements in weapon design virtually ceased and bomb production slowed to a snail's pace. Sketchy and incomplete records suggest that by the latter part of 1946 there were between six and nine nuclear cores in the atomic stockpile—an exceedingly small arsenal by later standards but still a sufficient number, President Truman believed, "to win a war."[10]

In the immediate aftermath of World War II, the Truman administration had no incentive to keep the atomic bomb program at its wartime level of production and efficiency. As the war ended, the prevailing belief in many quarters was that atomic energy would be taken out of the hands of the military and that nuclear weapons would be banned, just as poison gas was after World War I. The notion of civilian control had an appealing ring and gave rise to legislation in 1946 establishing the Atomic Energy Commission (AEC). A civilian body appointed by the President with the advice and consent of the Senate, the AEC acquired complete authority over the Nation's nuclear program, from the production of fissionable material and the manufacture of bombs to the custody and control of finished weapons. In support of the commission's activities, Congress also established a nine-member General Advisory Committee to provide scientific and technical guidance, and a Military Liaison Committee (MLC), to assure coordination between the commission and the Armed Forces.[11]

In contrast, the movement to ban the bomb, or at least to place it under some form of international supervision, produced far less definitive results. Intense policy debates, starting in the autumn of 1945, extended into the following spring. The outcome was the Baruch Plan, placed before the United Nations in June 1946, under which the United States offered to give up its nuclear monopoly in exchange for a stringent regime of international controls and inspections. A magnanimous gesture, the Baruch Plan was too intrusive to suit the Soviets, who declared it unacceptable "either as a whole or in [its] separate parts." As an alternative, Moscow proposed a flat prohibition on nuclear weapons with a vague promise of inspections

sometime in the future. A UN special committee voted overwhelmingly to accept the Baruch Plan, but the Soviet Union and Communist-controlled Poland abstained, leaving the plan's fate up in the air.[12]

Throughout the deliberations leading to announcement of the Baruch Plan, the Joint Chiefs maintained a guarded attitude that endorsed international controls in principle as a desirable long-term goal, but with strong reservations attached to giving up any atomic secrets until outstanding international issues had been fully vetted and resolved.[13] This line of reasoning remained the JCS core position on arms control and disarmament for the duration of the Cold War. But in 1945, the chances of overcoming the chiefs' objections and of enlisting their support for a stringent regime of international control were probably better than they ever were again. Regarded by the JCS as a special weapon with limited applications, the atomic bomb had yet to acquire a permanent niche in their military planning and was in many ways a disruptive presence that the chiefs could have done without. Later, as the Services launched expensive acquisition and training programs to integrate nuclear weapons into their equipment inventories, and as national policy came to rely heavily on a strategy of nuclear deterrence, the chances of making sweeping changes in the JCS position faded. But until then, the chiefs were actually more flexible and open-minded than most critics gave them credit.

While awaiting the outcome of the international control debate, the Joint Chiefs sought a clearer picture of the atomic bomb's military potential. Having seen from the results of Hiroshima and Nagasaki what nuclear weapons could do to targets on land, they obtained President Truman's approval in January 1946 to explore the atomic bomb's effect on targets at sea.[14] Planning and preparations for Operation *Crossroads* took place under the auspices of the Joint Staff Planners, who named a six-member ad hoc inter-Service subcommittee headed by Lieutenant General Curtis E. LeMay to coordinate the effort. Almost immediately, quarrels erupted between AAF and Navy representatives over the placement of the target ships and other details, turning *Crossroads* into yet another arena of inter-Service strife. A joint task force led by Vice Admiral William H.P. Blandy eventually carried out the operation, but like the LeMay committee, it had to contend with a good deal of inter-Service bickering and competition.[15]

The *Crossroads* tests were unique in several respects. First, they were the only nuclear experiments organized and conducted under the authority of the Joint Chiefs of Staff; and second, they received an extraordinarily high level of publicity, in sharp contrast to the restricted nature of subsequent nuclear experiments carried out by the AEC. Despite strong political pressure to cancel the tests lest they interfere with the debate in the UN, President Truman refused, citing the waste of

$100 million if they failed to proceed. The ensuing experiments, involving 42,000 Servicemen, took place in July 1946 at Bikini Atoll in the Pacific and rendered mixed results. The first weapon, an air-dropped, Nagasaki-type bomb, missed the aim point by 1,500 yards. Sinking only a few of the ships in the target area, it did relatively minor damage to the rest. But a second bomb, detonated under water, was more impressive and left the members of a JCS evaluation board convinced that atomic weapons had the potential for achieving decisive results in future wars. "If used in numbers," the board found, "atomic bombs not only can nullify any nation's military effort, but can demolish its social and economic structure and prevent their reestablishment for long periods of time."[16]

Still, the *Crossroads* tests had little immediate impact on JCS plans or military policy. Although the Joint Chiefs recognized that atomic bombs, like other new weapons (e.g., jet aircraft and long-range guided missiles), could have a significant bearing on the conduct of future wars, the ongoing deliberations in the UN over international controls, coupled with the limited availability of fissionable materials, effectively ruled out a defense posture resting to any great extent, if at all, on nuclear weapons. This did not stop the Army Air Forces, acting on their own, from making informal arrangements in the summer of 1946 with the British to modify bases in England for air-atomic missions (the Spaatz-Tedder Agreement).[17] Nor did it deter the Navy from commissioning design studies for a new generation of flush-deck "super carriers" dedicated to nuclear warfare.[18] But in looking ahead, the Joint Chiefs and their Joint Staff Planners clung to the view that wars of the future would be much like the one they had just finished, engaging large conventional armies, navies, and air forces. The only major difference the JCS could see was that the next time, the enemy would probably be the Soviet Union.[19]

REORGANIZATION AND REFORM

Foremost among the issues needing to be addressed in framing a postwar defense policy was the reorganization of the Armed Forces, including a settlement of the controversial unification issue, a clarification of command arrangements, and a re-articulation of Service roles and missions. Unable to arrive at an agreed position on unification, the Joint Chiefs told President Truman in October 1945 that they had no corporate wisdom to offer and would defer to Congress and the administration to make the necessary adjustments.[20] As the senior officers of their respective Services, however, all JCS members remained actively engaged in the debate. Even Admiral Leahy, who had no Service responsibilities and who viewed himself as above the fray, took a position from time to time, invariably in support of the Navy.

In consequence, it was almost impossible for tensions generated by the unification quarrel not to spill over into JCS deliberations on other matters.

Though the Joint Chiefs sidestepped involvement in the unification controversy, they could not avoid two related matters—the establishment of a unified command plan, and the redefinition of Service functions in light of the experience of World War II, new technologies, and the changing nature of modern warfare. In addressing the first, the chiefs overcame their differences to establish a flexible command structure which, while far from perfect, proved remarkably adaptable to the tests of time. But in dealing with the roles and missions issue, they made little headway and eventually ceded this pivotal responsibility to others.

The unified command plan was the outgrowth of the extensive and generally successful use of joint and combined "supreme commands" in World War II, and the realization that, with the occupation of Germany and Japan and other responsibilities, the United States would have joint military obligations abroad for the indefinite future. Even before the war ended, the Joint Chiefs envisioned retention of the unified command system in peacetime, and by June 1945 they were taking steps to transform General Eisenhower's combined headquarters in Europe into a unified U.S. command, a relatively easy task since most of the forces involved were ground and air units under the War Department.[21]

The picture was more complex in the Pacific. There, the impetus for change came early in 1946 from the Navy, which sought to consolidate what were at the time far-flung command arrangements. Adopted by the JCS the previous April as an interim measure, the existing setup adhered to MacArthur's dictum that "neither service fights willingly on a major scale under the command of the other."[22] Hence, in allocating command functions, the JCS divided responsibilities between an Army command for all land forces in the theater, and a Navy command for forces at sea. Characterizing these divided command arrangements as "ambiguous" and "unsatisfactory," Admiral Nimitz wanted the JCS to establish a single command for the Pacific encompassing all forces in the area, excluding China, Korea, and Japan.[23] What prompted Nimitz to raise the issue is unclear, though it may have been intended to complement draft legislation submitted by Secretary of the Navy Forrestal asking for an increase in the peacetime authorized strength of the Navy and the Marine Corps. A merger of the two commands would have given the Service in charge a strong claim to a larger budget share. Since the Navy had the predominant interest in the Pacific, Nimitz thought it only logical that the new command should be in Navy hands. Seeing the proposed merger as a blatant power grab, MacArthur, from his headquarters in Tokyo, warned the War Department that it would render Army or AAF units in the area "merely adjuncts" of the Navy.[24]

Hoping to avoid a fractious debate, the Joint Chiefs referred the CNO's proposal to the Joint Staff Planners, whose efforts soon ran aground. The Army and Army Air Forces members insisted on unity of command by the forces involved, while the Navy member urged unity of command by area.[25] Eventually, it took pressure from Congress, which wanted to avoid anything resembling the divided command that existed at Pearl Harbor in 1941, and the direct intervention of Admiral Nimitz and General Eisenhower to settle the matter. All the same, the compromise thus achieved did little more than paper over inter-Service differences that later reappeared. Accepting the Navy's basic premise that unity of command should be by area, Eisenhower proposed extending the system worldwide, to include not only the Pacific but other regions where the United States had significant military assets or military interests. With further fine-tuning by Nimitz, this became the Unified Command Plan (UCP), approved by President Truman in December 1946.[26]

Initially, the UCP called for seven geographic commands and one functional command (known after 1951 as a "specified" command).[27] Implicit in this arrangement was that a senior officer representing the Service with the predominant interest in a particular region or functional activity should head the command. Thus, in Europe the accepted practice (until 2003) came to be that an Army or Air Force officer should exercise command of the theater, while in the Pacific a Navy officer was invariably in charge. The sole functional command recognized in the UCP was the Strategic Air Command (SAC), created by order of General Spaatz in March 1946. SAC comprised the strategic assets of Eighth and Fifteenth Air Forces, 509th Composite Group with its air-atomic capability, and air bombardment units not otherwise assigned. Like Twentieth Air Force in World War II, SAC reported directly to the Joint Chiefs of Staff through the Commanding General, Army Air Forces (later the Chief of Staff of the Air Force), who acted as their executive agent.[28]

The Services could compromise on the UCP because each gave up very little in exchange for official confirmation of their existing geographical equities. Unfortunately, this approach was infeasible when defining overlapping Service functions and sorting out the impact of new technologies on traditional roles and missions. An integral part of the unification debate, the assignment of functions was also highly instrumental in determining the allocation of budget shares among the Services. It seemed only logical, as the successor organization to the Joint Board, which had overseen the assignment of Service functions prior to World War II, that the Joint Chiefs should carry on this task. But with the changes in warfare that had taken place during the war, the traditional formula used by the Joint Board for determining and assigning functions, more or less by the medium in which a Service

operated, no longer applied. Quite simply, neat distinctions between land, sea, and air warfare had ceased to exist. But even though the JCS agreed that the old assignments were frayed and outmoded, they were hard-pressed to come up with something better.

The event that brought the roles and missions controversy to a boil was a report by the Joint Strategic Survey Committee to the JCS in February 1946. Intended as a new statement of Service functions, the JSSC report became instead the catalyst for a prolonged and inconclusive debate among the chiefs. Like the Joint Board, the JSSC proposed an assignment of functions organized primarily around the major element in which each Service operated. Where Service functions intersected, however, the committee was often unable to provide unanimous advice. The most contentious points were the Army Air Force's insistence on full control of air transport; the Navy's claim on access to land-based aviation for antisubmarine warfare, as it had in World War II; and the Marine Corps's objections to the Army's efforts to bring amphibious operations under its aegis.[29] The quarreling became so acrimonious and divisive that the Joint Chiefs in June 1946 felt it advisable to suspend their deliberations on roles and missions until such time as "Presidential or legislative action requires that consideration be revived."[30]

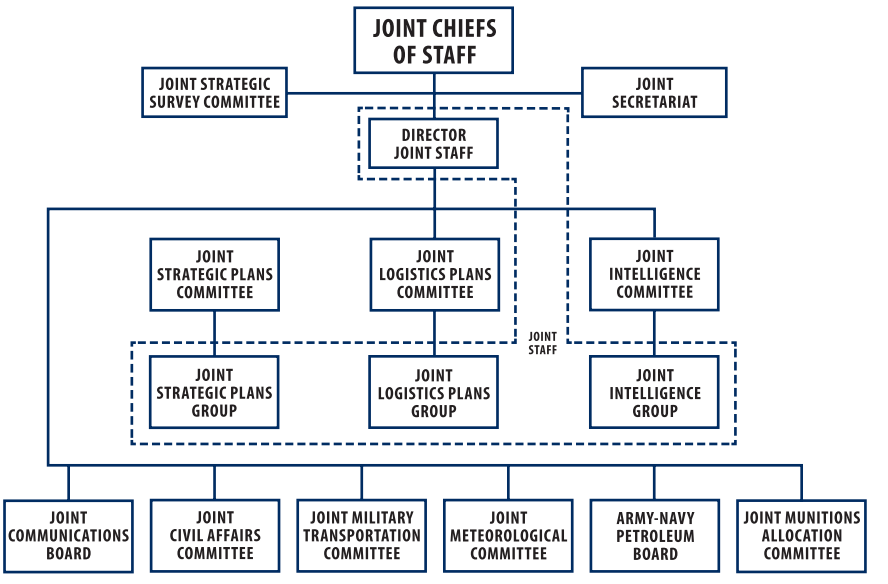
Despite the impasse, the Joint Chiefs remained under heavy pressure to compose their differences in order to expedite consideration of a unification bill. Accordingly, in July 1946 they asked the Operations Deputies—Major General Otto P. Weyland of the Army, Major General Lauris Norstad of the Army Air Forces, and Vice Admiral Forrest P. Sherman—to explore a solution.[31] Initially slow work, the pace quickened following a breakthrough meeting at Secretary of the Navy Forrestal's home on November 12, 1946, where Assistant Secretary of War for Air W. Stuart Symington and Vice Admiral Arthur W. Radford, Deputy Chief of Naval Operations (Air), reached a tentative modus vivendi. Based on the discussion that afternoon, Norstad and Sherman agreed to develop a fresh formulation of Service functions and a statement of agreed principles to help jump-start approval of a unification bill that had stalled in Congress. In January 1947, Norstad and Sherman submitted their recommendations to Forrestal and Secretary of War Robert P. Patterson, who then conveyed them to President Truman. Passage of the National Security Act of 1947 followed in July, at which time the President issued an accompanying Executive order delineating Service roles and missions.[32]

The National Security Act was a legislative compromise that combined major elements of the centralized organization the War Department favored, and the decentralized coordinating system the Navy recommended. To unify the armed Services, Congress created a hybrid organization known as the National Military

Establishment (NME) composed of three coequal Service departments (Army, Navy, and Air Force) and a presiding civilian Secretary of Defense, who had a support staff limited to three special assistants. Under the Secretary's authority fell various coordinating bodies: the Research and Development Board (RDB) to advise and assist the Services with policies on scientific research and technology; the Munitions Board (MB) to coordinate production and supply; and the Joint Chiefs of Staff. Now endowed with statutory standing, the Joint Chiefs also acquired a list of assigned functions similar to those in the unused charter of 1943. The law effectively eliminated the role the JCS played in World War II as the country's de facto high command and redefined their mission as a strategic and logistical planning and advisory organization to the President and the Secretary of Defense. Recognizing the chiefs' need for permanent support, Congress authorized a full-time Joint Staff of one hundred officers, drawn in approximately equal number from each Service. President Truman had wanted to replace the JCS with a single military head, but opposition in Congress forced him to drop the idea. The law also created a Cabinet-level National Security Council (NSC) to advise the President on foreign and defense policy, a Central Intelligence Agency (CIA) for the collection, analysis, and distribution of intelligence, and a National Security Resources Board (NSRB) to oversee national mobilization in emergencies.[33]

Figure 3–1.

JCS Organization Chart, 1947



Note: Only Major Organization Entities Shown.

The Executive order (EO 9877) that accompanied the National Security Act was virtually the same statement of Service functions recommended in January by Norstad and Sherman. Where roles and missions overlapped, EO 9877 called on the Services to coordinate their efforts with one another to the greatest extent possible.[34] Between the drafting of the Executive order in January and the passage of the National Security Act in July, however, Congress inserted language into the law that guaranteed the Navy access to "land-based naval aviation" and the Marine Corps a role in amphibious warfare. The net effect was to render key parts of EO 9877 obsolete, opening the door to renewed inter-Service bickering. Secretary of the Navy Forrestal, who became the first Secretary of Defense in September 1947, recognized the problem immediately but needed two contentious conferences with the Joint Chiefs—one at Key West, Florida, in March 1948, and a second at Newport, Rhode Island, the following August—to resolve the problem. These conferences also reaffirmed the practice dating from World War II of allowing the Joint Chiefs to designate one of their members as executive agent for a unified command, a function that effectively preserved the JCS in the chain of command. Drawing on Forrestal's frustrating experience, future Secretaries of Defense relied less on JCS guidance in sorting out roles and missions, and more on the Services to take the necessary steps to reconcile and adjust their differences.[35]

WAR PLANS, BUDGETS, AND THE MARCH CRISIS OF 1948

The National Security Act came into effect on September 18, 1947, a time of escalating tensions with the Soviet Union and dramatic change in American foreign policy. The previous March, in response to the Communist-led insurgency in Greece and Soviet pressure on Turkey, the Truman administration had launched the Greek-Turkish aid program, in the President's words, to prevent "the extension of the iron curtain across the eastern Mediterranean."[36] The following June, Secretary of State Marshall proposed the European Recovery Program (ERP), a large-scale assistance effort aimed at the broader problem of arresting the deteriorating economic and social conditions in Western and Central Europe that were playing into the hands of Communist agitators and Soviet sympathizers. Commenting publicly on these initiatives and the escalation of tensions between Washington and Moscow, journalist Walter Lippmann proclaimed the onset of a "Cold War" between East and West.[37]

As he sought to stem the spread of Communism abroad, President Truman also ordered major changes in the U.S. atomic energy program. Frustrated by the impasse in the United Nations over the Baruch Plan, the President directed the new Atomic Energy Commission in early April 1947 to restore production facilities and

to resume the manufacture of nuclear weapons. The President's decision had the strong endorsement of the Joint Chiefs of Staff, who agreed that the time had passed for international control and that the only choice was to resume the production of atomic bombs. Procedures in effect at the time called for the JCS to conduct an annual review of nuclear stockpile requirements and to convey their recommendations, through the Military Liaison Committee, to the AEC. The chiefs tailored their military requirements, stated in numbers of bomb cores, to be roughly commensurate with the AEC's estimate of its annual production capabilities, the standard practice for fixing the size of the nuclear stockpile for the next several years.[38]

With the emerging "strategy of containment" toward the Soviet Union came a sense of unease among the Joint Chiefs over the deterioration of the Nation's military capabilities. Other than resuming the production of nuclear weapons, little had been done since World War II to modernize U.S. forces or improve their effectiveness. The American Military Establishment had shrunk dramatically since the war, and the forces that remained by 1947 were generally understrength, indifferently equipped and trained, and scattered around the globe. Soviet military power, in contrast, was concentrated on the Eurasian landmass and appeared to be largely intact and organized around an estimated ground force of 175 divisions, a figure derived from the order of battle pieced together by German intelligence in World War II.[39] Long-range threat projections developed by the Joint Intelligence Committee between late-1946 and mid-1947 credited the Soviet Union with possessing an overwhelming numerical superiority in conventional forces and the capacity for acquiring nuclear weapons by the early 1950s, if not before. Some in the scientific community thought it would take longer for the Soviets to duplicate the American achievement in atomic energy, but by and large the emerging consensus was that the Soviets were determined to become a nuclear power and that sooner or later they would realize their goal.[40]

Despite the danger signs, the Truman administration initially downplayed the possibility that growing East-West antagonisms and steps taken by Washington to curb Communist expansion might escalate into a military confrontation. The reigning expert on the Soviet threat immediately following World War II was George F. Kennan, a Foreign Service Officer with long experience in the Soviet Union and Director of the State Department's elite Policy Planning Staff. It was Kennan whose 1947 article in *Foreign Affairs*, "The Sources of Soviet Conduct," had given rise to the term "containment" to describe what the administration was trying to achieve vis-à-vis the Soviet Union. Kennan believed that if the United States exerted sufficient economic, political, and diplomatic pressure, it would elicit significant improvements in Soviet behavior. Though Kennan acknowledged that military forces were a vital diplomatic tool, he doubted whether the United States and the Soviet Union

would ever go to war. Warning against excessive reliance on armed strength, he preferred small, mobile strike forces that could intervene quickly in crisis situations. For sizing purposes, he favored a defense establishment that could operate effectively in two separate theaters simultaneously, a rule of thumb that would influence U.S. force requirements for decades to come.[41]

Given the Truman administration's preference for nonmilitary solutions and the limited military assets available at the time, the Joint Chiefs saw no urgent need for approving a strategic plan of action against the Soviet Union. During the latter part of World War II, in considering the hypothetical possibility of a future East-West conflict, the Joint Chiefs had concluded that while there was little chance the United States would lose such a war, the likelihood of winning it was exceedingly remote.[42] Acting on its own initiative, the Joint War Plans Committee (JWPC) launched a series of studies code-named PINCHER late in 1945 to explore the problems of waging a war against the Soviet Union. The first fruit of this exercise appeared on March 2, 1946, when the JWPC forwarded a broad concept of operations to the Joint Staff Planners. With refinement, this became the basic concept of operations around which strategic planning revolved for the next several years. Dealing only with the opening stages of a conflict, PINCHER envisioned war breaking out in the eastern Mediterranean or Near East and spreading rapidly across Europe.[43] Arguing that it would be futile for the United States and its allies to try to match Soviet strength on the ground, the JWPC favored a strategic response "more in consonance with our military capabilities and in which we can exploit our superiority in modern scientific warfare methods." Even if such a response failed to defeat the Soviet Union, it would buy time for the United States to mobilize forces, check the Soviet advance, and mount counterattacks.[44]

The first Secretary of Defense, James Forrestal, was an ardent proponent of the new get-tough policy toward the Soviet Union and wanted to give it as much military support as possible. But he was under orders from President Truman to hold the line on defense spending.[45] Hoping to satisfy both requirements, Forrestal looked to the Joint Chiefs to provide an integrated statement of Service requirements for meeting essential national security objectives and an agreed strategic concept, tailored to fit within approved spending limits, to justify those forces.[46] In Forrestal's view, the JCS were the key to the successful implementation of the new unification law, for it was primarily through them that he intended to extend his authority as Secretary of Defense down into the Services.[47]

While it looked good on paper, Forrestal's reliance on the Joint Chiefs proved flawed in practice. Even though the JCS organization had a reputation for highly proficient planning, it had lost much of its edge and efficiency by 1947 through

the attrition of veteran personnel and a dwindling pool of suitable replacements. Though the JCS were less affected than other joint agencies (i.e., the MB and the RDB), many able officers were averse to joint duty in Washington lest it cost them command experience in their Services and derail their careers.[48] Limited by law to one hundred officers, the once-mighty Joint Staff now operated at a reduced pace through three groups—the Joint Intelligence Group, Joint Logistics Group, and Joint Strategic Plans Group (formerly the Joint War Plans Committee). With an enormous backlog of business and new requests coming in almost daily from Forrestal's office, the Joint Staff soon found itself with more taskings than it could handle. To augment the Joint Staff, the JCS continued to rely on part-time inter-Service committees of senior officers—the Joint Strategic Plans Committee (which replaced the Joint Staff Planners), the Joint Logistics Committee, the Joint Intelligence Committee, and the Joint Strategic Survey Committee. At Forrestal's urging, Congress increased the size of the Joint Staff from 100 to 210 officers when it amended the National Security Act in 1949. But despite the increase, there always seemed to be more work than the Joint Staff could handle.

The most serious flaw in Forrestal's system lay in the chiefs themselves, whose internal disagreements sapped their cohesion and effectiveness. Some of their quarrels were carryovers from the unification debate or earlier disagreements, like the ongoing battle between the Army and the Marine Corps over amphibious operations. But by far the most visible and contentious issues were those between the Air Force and the Navy over whether long-range, land-based bombers or carrier-based aviation should serve as the country's first line of defense. Now that the production of nuclear weapons had resumed, it seemed clear that the atomic bomb would play a growing role in strategic planning and that the Service with the nuclear mission would get the lion's share of the defense budget. Some, including key figures in Congress and the members of the Finletter Commission, a fact-finding body set up by the White House in 1947 to report on the future of military aviation, assumed that the Air Force had the job sewn up.[49] In fact, the issue was far from settled. While the Air Force had a nuclear-delivery system derived from the SILVERPLATE B–29s of World War II, its capabilities were limited to a handful of planes; thus, its position was not immune to challenge by the Navy.[50]

These disputes were precisely the kinds of quarrels Forrestal had hoped to stifle with an integrated budget process keyed to the development of joint strategic plans. Yet they were practically unavoidable, given the strict spending limits Truman had imposed and Forrestal's reluctance to test his powers as Secretary of Defense against the Joint Chiefs. As Secretary of the Navy, Forrestal had been in the vanguard of those who opposed a closely unified defense establishment. As Secretary of Defense,

he found himself in the awkward position of implementing a compromise law he helped to craft but only half-heartedly believed in. Initially, he described himself as a "coordinator" and, in the interests of promoting harmony among the Services, promised to make changes through "evolution, not revolution." He probably never should have taken the job of Secretary of Defense, but when Truman offered it (after Secretary of War Patterson turned it down for personal reasons), he felt duty-bound to accept.[51]

Based on his discussions with the Joint Chiefs and his personal assessments of the international situation, Forrestal became convinced that the President's budget ceilings were too low to fund essential military requirements and to provide a credible defense posture. During his 18 months as Secretary of Defense, he asked Truman twice for more money—in the spring of 1948 and, again, toward the end of the year. On the first occasion, with the help of a crisis atmosphere abroad, he was successful in persuading Truman to lift the ceiling; on the second, despite continuing tensions in Europe, he failed, thereby inadvertently undermining his own authority and credibility.

The immediate occasion that prompted Forrestal's first request for more money was the "March Crisis" of 1948 that followed the Soviet-directed coup against the government of Czechoslovakia the month before. The only country liberated by the Red army that had thus far remained democratic and independent of Soviet domination, Czechoslovakia had tried to steer a course of nonalignment but faced growing pressure from Moscow to curb its contacts with the West. Not only did Czechoslovakia share a common border with the Ukraine; it was also the principal source of high-grade uranium ore for the Soviet atomic bomb project.[52] Beset with growing political turmoil and a general strike organized by Communist-controlled unions, the Czech president, Eduard Beneš, had dismissed his cabinet and turned over all important government posts to Communists, except the foreign ministry, which remained under Jan Masaryk, a popular figure in the West. Within a fortnight, on March 10, Masaryk's body was found on the cement courtyard of the foreign ministry beneath his office window. Czech authorities promptly labeled his death a suicide, but the speculation in the West was that Soviet agents murdered him.[53]

Shortly after the Czech coup, rumors circulated that the Soviets would turn their sights on occupied Germany and try to force the Allied powers out of their enclaves in Berlin. Lending substance to these reports were ominous signs of Soviet troop movements in eastern Germany suggesting a buildup for an invasion of the West. Later, U.S. analysts concluded that these bellicose gestures were a ruse and that there was no "reliable evidence" the Soviets intended military action. All the same,

the Intelligence Community refused to rule out the possibility of "miscalculation" by one side or the other leading to an incident that could spark a war.[54]

Toward the end of February 1948, the Director of Army Intelligence, Lieutenant General Stephen J. Chamberlin, paid an unexpected call on General Lucius D. Clay, U.S. Military Governor of Germany, at his Berlin headquarters. Concerned over recent events in Czechoslovakia and Soviet behavior in general, Chamberlin urged Clay to use his considerable influence with the Joint Chiefs and others in Washington to send a "strong message" to stimulate support in Congress for reinstituting the draft and for bolstering other military programs. Clay replied that he had no concrete evidence the Soviets were planning a move. But after sleeping on the matter, he decided to act. On March 5, 1948, he cabled Chamberlin confirming that, while the signs were far from conclusive, he had detected "a subtle change in Soviet attitudes which I cannot define but which now gives me a feeling that [war] may come with dramatic suddenness." Clay's "war warning" message soon leaked to the press, setting off a war scare that had Washington on edge for several weeks.[55]

Based on the intelligence crossing his desk, Truman had known for some time that the Soviets were up to something.[56] Still, Clay's war-warning message caught the President off guard and gave Forrestal and the Joint Chiefs the opportunity to seek an increase in the military appropriations bills for Fiscal Year 1949 then pending in Congress. By then, General Omar N. Bradley had replaced Eisenhower, General Hoyt S. Vandenberg had been named to succeed Spaatz, and Admiral Louis Denfeld had replaced Nimitz. But even with a fresh set of faces the quarreling continued, with the size of the increase and the allocation of funds among the Services the main points in dispute. Some in Congress wanted any additional money to be devoted exclusively to strengthening the Air Force's strategic bombing capability. But it was Forrestal's and Truman's view that the country should have a "balanced" force posture in which all three Services participated on roughly equal terms.

The Joint Chiefs agreed that balanced forces were a laudable objective, but having yet to agree on an integrated strategic concept, they had no basis for identifying deficiencies or recommending an overall plan on how additional money should be allocated. By default, they wound up recommending what each Service unilaterally calculated it needed, a sum well in excess of anything the White House or the Bureau of the Budget (BOB) found acceptable on economic grounds. With an election looming in the fall, Truman was more afraid of inflation at home, fueled by increased military spending, than he was of the Soviets. Nevertheless, the additions he eventually approved in May 1948 increased the military budget by nearly a third and showed Forrestal and the JCS that the President's budget ceilings were not so firm after all.[57]

In addition to boosting the military budget, the March Crisis produced several other outcomes. First, it heightened awareness both in Europe and the United States that the Soviet Union was a potential military threat and needed to be addressed accordingly. Until then, except for a limited military aid program to Greece and Turkey, the Truman administration and Congress had relied on political, economic, and diplomatic initiatives to contain communism and Soviet expansionism; but with the March Crisis came the realization on both sides of the Atlantic that closer military collaboration was a necessary accompaniment to the European Recovery Program.[58] Passed by Congress in May 1948, the Vandenberg Resolution urged the administration to explore a collective security agreement with willing partners in Europe, a process that culminated in April 1949 with the creation of the North Atlantic Treaty Organization (NATO). A major departure from the nonentanglement policy of the past, NATO would be a key element in the Joint Chiefs' military assessments and strategic planning throughout the Cold War and beyond.

The March Crisis also led the JCS to expedite completion of an integrated strategic concept, a major step toward a unified defense budget. The agreed plan, called HALFMOON (later renamed FLEETWOOD), was an outgrowth of the PINCHER series and called for the Strategic Air Command to launch "a powerful air offensive designed to exploit the destructive and psychological power of atomic weapons against the vital elements of the Soviet war-making capacity." Navy carriers would conduct a secondary air offensive from the eastern Mediterranean. But with atomic bombs in short supply, there was no assurance that the Navy would participate in the nuclear phase of the air offensive. Arguing that HALFMOON was overly dependent on SAC's ability to mount nuclear operations, the Navy accepted it only on condition that the JCS treat it as an "emergency" war plan (EWP) and not for long-term force planning beyond the next budget cycle.[59]

A key feature of HALFMOON was the need for overseas bases in Newfoundland, the United Kingdom, and the Cairo-Khartoum area of Northeast Africa from which to mount strikes against the Soviet Union. Keeping alive the "special relationship" developed in World War II, the Joint Chiefs hosted a meeting in Washington for senior British and Canadian planners from April 12 to 21, 1948, to discuss U.S. access to British and Canadian staging points.[60] An inevitable byproduct of U.S. planning, these tripartite discussions were to some extent premature, since President Truman had yet to consent to the HALFMOON plan, transfer the custody of any nuclear weapons from the AEC to the military, or authorize their use. After receiving a JCS briefing on the plan on May 5, 1948, the President asked the Joint Chiefs to prepare a nonnuclear alternative, code-named ERASER. But because of budgetary limitations, Forrestal viewed ERASER as a low priority and later ordered work on it

suspended.[61] Confirming the course of action previously discussed, a U.S. Air Force mission of senior officers and planners visiting London later in May assured their RAF colleagues that "all planning was to be based on the use of atomic bombs from the outset including the use of the UK as a base for USAF carrying such bombs."[62]

As the March Crisis wound down, the Joint Chiefs were gradually making progress toward integrating their requirements and developing a strategic concept to serve as the basis for a postwar defense policy. The emerging centerpiece of this process was the atomic bomb, with the threat of strategic bombardment serving as the country's principal deterrent. While differences persisted among the Services over how this strategy should be interpreted and applied, the overall thrust of what would constitute the American response to Soviet aggression was no longer in doubt. Given the limitations on weapons and equipment under which the Services operated, the JCS were still a very long way from the "massive retaliation" doctrine of the 1950s. Slowly but surely, however, they were moving in that direction.

THE DEFENSE BUDGET FOR FY 1950

Following President Truman's approval of the supplemental defense increase in the spring of 1948, Forrestal and the Joint Chiefs turned their attention to the military budget for Fiscal Year 1950 (July 1, 1949, through June 30, 1950). As the first full set of estimates to be developed since the passage of the National Security Act, the FY50 budget would be a clear test of the chiefs' ability to perform their assigned strategic planning functions of producing an integrated defense plan within approved spending limits.[63] At a meeting with Forrestal and the JCS in May 1948, Truman stated that he wanted new obligational authority (i.e., cash and new contract authority) held under $15 billion. Acknowledging that defense requirements could fluctuate, the President told the chiefs that he would review the situation in September and again in December and make adjustments as needed.[64] At Forrestal's request, Truman also authorized the new National Security Council to develop a broad statement of national objectives to assist the JCS in developing their estimate of military requirements.[65] But he cautioned Forrestal against using NSC guidance to override spending limits. "It seems to me," Truman told him, "that the proper thing for you to do is to get the Army, Navy and Air people together and establish a program within the budget limits which have been allowed. It seems to me that is your responsibility."[66]

Whether the international situation would cooperate to hold down military spending remained to be seen. Not only were the Soviets continuing to put pressure on Berlin, but there were also problems in the Middle East that threatened to embroil the United States in a conflict over Palestine, currently a British mandate.

Zionists had long sought to create a Jewish homeland there, and survivors of the Holocaust poured into the area by the thousands in the aftermath of World War II. The partitioning of Palestine into separate Arab and Jewish states had strong popular appeal in the United States and quickly became a crucial part of President Truman's campaign strategy for the 1948 election.[67] The Arab states of the Middle East, however, vowed to resist the Jewish influx with force. Fearing an anti-American backlash across the Arab world, the Joint Chiefs warned against U.S. support of partition on the grounds that it could "gravely prejudice" future access to Middle Eastern oil and compel the United States to wage "an oil-starved war."[68]

For the Joint Chiefs, the issue of most immediate concern was the declared intention of the British to end their mandate in Palestine prematurely and withdraw their forces, which had been serving as a buffer between the Arabs and the Jews. If the British withdrew, the JCS expected the United States to come under intense pressure to intervene as part of a UN peacekeeping operation to prevent Arab armies from slaughtering Jewish refugees and settlers. As it turned out, Jewish defense forces proved more than able to hold their own in defending the new state of Israel. But in the spring of 1948, the threat of another Holocaust appeared imminent.

In what would become a recurring theme for the next several decades, the Joint Chiefs strenuously opposed practically any deepening of U.S. involvement in the Middle East, especially if the United States appeared to be siding with Israel against the Arab states. Based on the size of the British presence in Palestine, the Joint Chiefs estimated that the UN would need to deploy a minimum peacekeeping force of over 100,000 troops (about half from the United States), supported by appropriate air and naval units. To raise the U.S. contribution to such a force, the chiefs notified the President that he would need to seek supplemental appropriations, reintroduce the draft, and order partial mobilization of the Reserves.[69] Suspecting that the chiefs were overdramatizing the situation and inflating their estimates, President Truman refused to rule out the possibility of U.S. intervention. But he took a cautious approach which more or less validated the chiefs' preference for avoiding involvement in the increasingly sensitive Arab-Israeli conflict.[70]

While the situation in Palestine argued for a flexible defense posture resting on a sound conventional base, persistent tensions in Central Europe played into the hands of those who favored reliance on strategic airpower and atomic weapons. Unsuccessful in exacting concessions from the Western powers or forcing their withdrawal from Berlin during the March Crisis, the Soviets turned to more direct measures. On June 19, 1948, they blockaded all access other than by air into the city. General Clay immediately organized an airlift to keep the western sectors of the city in essential supplies, but the longer the standoff went on, the more ominous it became.

By the end of June, the consensus in Washington was that the Western occupying powers—Britain, France, and the United States—should concert their efforts around a show of force and buy time for negotiations backed by a military buildup. Clay wanted to mount an armed convoy to test Soviet resolve, but the Joint Chiefs assessed the risk as too high and Allied forces as too weak to prevail should the Soviets resist.[71] On the other hand, the JCS had no objection to British Foreign Secretary Ernest Bevin's suggestion of a visible reinforcement of American airpower in Europe with B–29s.[72] Approved by President Truman in July, the B–29 augmentation would, in Forrestal's view, give the Air Force much-needed experience and make the presence of these planes "an accepted fixture" to the British public.[73] Encouraged by the success of the operation, Lieutenant General Lauris Norstad, the Air Force Deputy Chief of Staff for Operations, visited Britain in September and arranged to make the deployment permanent, with one B–29 group and one fighter group to be stationed in England at all times. Out of these discussions emerged a tentative agreement by the Air Force to "loan" Britain's Bomber Command an unspecified number of B–29s, and Bomber Command's pledge to place its assets "immediately" under SAC's coordination in the event of war with the Soviet Union.[74]

None of the SAC aircraft deployed to Europe during the Berlin blockade crisis was equipped for atomic operations, a fact the Soviets could easily have deduced from the appearance of the planes, which lacked the enlarged underbelly to accommodate atomic bombs. Even so, it was well known that B–29s carried out the attacks on Hiroshima and Nagasaki. The implied threat these planes represented elevated nuclear weapons to a new level of importance in national policy. Here in embryonic form was the doctrine of nuclear deterrence in practice for the first time. Though the threat may have been hollow, it was sufficient to give the Soviets pause before increasing the pressure and, as one senior Soviet officer later put it, risking "suicide" over Berlin.[75]

Still, without direct access to or control over nuclear weapons, the Joint Chiefs were apprehensive about what could happen if the Soviets called the American bluff. As a result of the stepped-up production program the AEC had initiated the year before, the atomic stockpile stood at around fifty nuclear cores by the summer of 1948.[76] Preliminary results of the recent SANDSTONE experiments, a series of test explosions held at Eniwetok in the Pacific the previous April–May, suggested the feasibility of new design techniques that could increase the size of the stockpile faster than expected and vary the yield of weapons. By demonstrating the feasibility of the "levitated" core, the SANDSTONE experiments confirmed the possibility of yields up to two and a half times larger than the Nagasaki bomb, using less fissionable material. The days of atomic scarcity and handmade bombs were drawing

to a close. Thenceforth, the Joint Chiefs would have at their disposal a stockpile of assembly line–produced weapons, more plentiful in number than previously estimated and more varied in type and design.[77]

With U.S. war plans increasingly dependent on the early use of nuclear weapons, the SANDSTONE tests provided the reassurance of a larger and more versatile atomic arsenal than previously imagined. To make the most of the opportunity, Forrestal and the Joint Chiefs became convinced that the time had come to change the custody and control arrangements of nuclear weapons. But after a lengthy White House meeting to examine the matter on July 21, 1948, Truman ruled that custody of nuclear weapons would remain in the hands of the Atomic Energy Commission. A few days later, he told Forrestal that "political considerations" relating to the upcoming Presidential election barred a change of policy at that time.[78] All the same, Truman accepted Forrestal's basic premise that eventually the Services would need more direct access to weapons, and in September he raised no objection when the National Security Council confirmed (NSC 30) that the Armed Forces should expand their training for atomic warfare and integrate nuclear weapons into their regular military planning.[79]

NSC 30 removed the final obstacle to making the air-atomic strategy the centerpiece of postwar American defense policy. Now assured of increased access to weapons and training for their personnel, the Air Force and the Navy moved quickly to expand and refine their capabilities for atomic warfare. For the Navy, this meant pressing ahead with plans for laying the keel of the first in a new generation of super carriers; for the Air Force, it meant bolstering the Strategic Air Command, which continued to have a monopoly on the nuclear mission. A critical factor in preserving the Air Force's dominant position was the appointment of a new SAC commander, Lieutenant General Curtis E. LeMay, who took charge in October 1948, bringing with him a reputation for solving problems and getting results. The architect of the devastating conventional "fire bomb raids" against Japan in World War II, LeMay also had helped to coordinate the 1946 *Crossroads* tests in the Pacific and had thus acquired a working familiarity with nuclear weapons. When he assumed command, SAC had only about 20 atomic-modified B–29s fit for duty. Concentrating on expanding SAC's nuclear capability, LeMay set about eliminating equipment deficiencies and training personnel one group at a time, starting with restoring the 509th to its wartime level of efficiency.[80]

Meanwhile, the budget process for FY 1950 plodded along, with the Berlin situation and the presumed intimidating power of the atomic bomb overshadowing Palestine and other trouble spots where the need for conventional forces predominated. Forrestal continued to favor balanced capabilities, but a detailed analysis of

Service estimates by the Budget Advisory Committee, a tri-Service panel of senior officers chaired by General Joseph T. McNarney, USAF, revealed an enormous gap between the requirements for a balanced force posture and the resources available under the President's budget ceiling.[81] To narrow the difference, the Joint Chiefs reduced the scale and scope of planned operations under the FLEETWOOD (formerly HALFMOON) strategy by eliminating certain Army and Air Force units and deleting the naval air offensive in the eastern Mediterranean. No matter how they priced it, however, the savings from these cuts failed to produce a military budget within the President's spending limit. Convinced that the chiefs had done their best and realizing that they were deadlocked, Forrestal told them on October 15 that he would entertain the proposal of an "intermediate" budget somewhat larger than the President had said he would allow.[82]

To justify the increase, the Joint Chiefs hastily compiled a catalog of commitments that the military budget would have to support. This list was the first in a long line of such statements that the Joint Chiefs would routinely produce during the Cold War to support Service requirements. While the chiefs amply documented the wide range of military obligations the country faced, they fell short of providing a useful framework for assessing military spending. At no point did they put a price tag on U.S. commitments, attempt to link them directly to force requirements, or establish an order of priority for military programs. Given these shortcomings, the chiefs' catalog, while informative, was not very useful as budgetary guidance. Later iterations of these joint planning documents would be similarly defective and would come under sharp criticism from the Office of the Secretary of Defense (OSD) and the White House for failing to sort out and prioritize military requirements. But in view of the consensus-oriented rules under which the JCS operated and the difficulties these procedures posed in allocating resources, a better product was probably unattainable.[83]

A more practical tool for assessing Service requirements was the NSC's evaluation of national security policy (NSC 20/4), which appeared toward the end of November 1948. Prepared mainly by Kennan and State's Policy Planning Staff in response to Forrestal's request for guidance, NSC 20/4 predicted an indefinite period of tension between the United States and the Soviet Union. Cautioning against "excessive" U.S. armaments, the report urged "a level of military readiness which can be maintained as long as necessary as a deterrent to Soviet aggression." These recommendations were not much help to Forrestal in evaluating the relative merits of competing weapons systems or strategic concepts. But they left no doubt that a defense establishment tailored for the long haul and a posture of deterrence would be more in keeping with security needs than one with large, immediate increases for fighting a war that might not materialize.[84]

On December 1, 1948, Forrestal submitted his defense budget for FY 50. Actually, he submitted two budgets—one for $14.4 billion that fell within the President's spending ceiling; and a second for nearly $17 billion. (Forrestal dismissed as excessive and unrealistic a third set of estimates, prepared by the JCS, totaling nearly $24 billion.) The first budget, Forrestal explained, would allow for a defense establishment of 10 Regular Army divisions, 287 combatant ships in the Navy, and a 48-group Air Force. The second, which the Secretary of Defense personally endorsed as preferable for national security purposes, would support a defense establishment of 12 divisions, 319 combatant vessels, and 59 air groups. Forrestal added that he had shown these figures to Secretary of State George C. Marshall, who concurred that the larger budget would provide better support for the country's foreign policy.[85] All the same, Truman was unimpressed. Buoyed by his recent come-from-behind victory at the polls, he told the Bureau of the Budget to ignore Forrestal's larger submission. "I don't know why he sent two. The $14.4 billion budget is the one we will adopt."[86]

Refusing to accept the President's decision as final, Forrestal tendered an amended request on December 20 that proposed adding $580 million to fund six additional air bombardment groups in the Air Force. In line with the emerging reliance on air-atomic power as the country's first line of defense, Forrestal argued for the money as the most practical way of addressing the threat posed by "our most probable enemy." Whether he agreed or not with Forrestal's reasoning, Truman continued to give fiscal considerations priority and turned down the Secretary's request without giving it a second thought.[87] Early the following year, in testifying to Congress on the President's 1950 budget, the Joint Chiefs expressed skepticism that it would assure proper readiness in an emergency, but declined to criticize the President for his decision to hold down military spending for fiscal and economic reasons. According to Admiral Denfeld, the budget was "the best division of funds that we could agree on at the time."[88]

THE STRATEGIC BOMBING CONTROVERSY

The strategy and budget debates of 1948 left no doubt that the United States was moving toward a defense posture centered on strategic bombardment with nuclear weapons. While Truman, Forrestal, and other senior administration figures continued to pay lip service to the need for balanced forces, the reality was quite different. Not everyone agreed that reliance on strategic bombing was a sound course to follow, certainly not the Navy, which had its own competing view of strategy and weapons. But in practical terms, the air-atomic strategy had considerable appeal. An intimidating threat, it seemed feasible within the limits of existing technology,

had strong bipartisan support in Congress, and could be priced to fit virtually any reasonable spending limit the White House might set. Assuming he had a mandate to proceed, LeMay set about transforming the Strategic Air Command into an all-atomic strike force that grew from a handful of atomic-capable aircraft when he took over in October 1948 to more than 250 a year and a half later. Most of the bombers in SAC's inventory were medium-range B–29s or B–50s (an upgraded version of the B–29), which required overseas bases to reach Soviet targets. A growing number, however, were B–36s that could reach targets in the Soviet Union from bases in the United States.[89]

Affirmation of the air-atomic strategy put major stresses on the JCS, revealing vital shortcomings in their ability to function as a deliberative corporate body. In assessing the chiefs' performance, Forrestal believed a key weakness was the absence of a presiding officer, or chairman, to steer the deliberations. As the only member without Service responsibilities, Admiral Leahy had performed something approximating this function in World War II, but after the war his role and influence had diminished as his health declined. To fill the void, Forrestal persuaded General of the Army Dwight D. Eisenhower, the president of Columbia University in New York, to return to Washington on a part-time basis as his "military consultant." Eisenhower met off and on with the chiefs between mid-December 1948 and late June 1949 and devoted most of his time to war plans and budget matters.[90]

Eisenhower's appointment was a stop-gap measure until Congress could create a permanent position, one of a list of reforms that Forrestal deemed essential for unification to succeed. In December 1948, declaring that his views had changed, Forrestal came out strongly for giving the Secretary of Defense enhanced powers and assistance. Among the measures he proposed was legislative authority to appoint a "responsible head" of the JCS and to increase the size of the Joint Staff.[91] The resulting amendments to the National Security Act took effect in August 1949 and converted the NME into the Department of Defense. In the legislation, Congress added a Chairman, Joint Chiefs of Staff, and gave him "precedence" over all other officers in the Armed Forces. His statutory responsibilities were to preside at JCS meetings, set the agenda, and notify the Secretary of Defense of any disagreements. The Chairman could not vote in JCS deliberations nor could he command any military forces. Clarifying the JCS role in the policy process, Congress designated the Chairman and the Joint Chiefs of Staff collectively as the "principal military advisers" to the President, the Secretary of Defense, and the National Security Council.[92]

By the time the 1949 amendments became law, Forrestal was dead, the victim of an apparent suicide. Frustrated, overworked, and mentally exhausted, he had reluctantly stepped down as Secretary of Defense in March 1949 to make way for

his successor, Louis Johnson. A prominent West Virginia attorney, Johnson had been Assistant Secretary of War in the Roosevelt administration and Truman's principal fund-raiser for the 1948 campaign. Johnson's mandate from the President was to bring order and discipline to the Pentagon and make the Services and the JCS toe the line on military spending. Even without the 1949 amendments, Johnson felt he had the power and authority to accomplish his mission. Using the Joint Chiefs less and less, Johnson embraced budgetary procedures that relied more on his own staff to make the tough decisions on military spending and the allocation of resources.[93]

Johnson's first major action as Secretary of Defense came in April 1949, when he cancelled the Navy's new super carrier, the USS *United States*. Incorporating design features derived from the *Crossroads* tests, the *United States* was to be a 65,000-ton, flush-deck carrier capable of accommodating aircraft carrying a 10,000-pound payload, roughly the same as an atomic bomb. Though Johnson strongly endorsed the air-atomic strategy, he acted on economic grounds and believed the Navy's super carrier needlessly duplicated the Air Force's strategic bombing function. His first and foremost aim was to hold down military spending, a goal that became all the more imperative in the summer of 1949, when President Truman disclosed that the defense budget for FY 51 would have to come down to $13 billion to help stave off a recession. An escalation of the quarrel between the Air Force and the Navy soon followed, producing charges and countercharges about the relative merits of long-range bombers versus super carriers, and culminating in a highly publicized congressional investigation. By the autumn of 1949, the senior echelons of the Navy were in open revolt against Johnson's policies and authority.[94]

While these controversies swirled in the public arena, the Joint Chiefs were trying to develop a more rational framework for analyzing the strategic environment and the competing Service claims for rival weapons systems. The impetus behind this effort came from a request by Forrestal in October 1948 for an analysis of two issues: the chances of success of delivering the strategic air offensive contemplated in current war plans, and an evaluation of the effects of SAC's planned air offensive on the Soviet Union's war effort.[95] Forrestal hoped to use the results to help defend his FY 50 budget submission to the President. But owing to the complexity and sensitivity of the issues raised, the Joint Chiefs wanted more time to assure thorough examinations. Initially, the JCS assigned the weapons effects study to an ad hoc body that reported to the Joint Strategic Plans Committee, and the other study, on the chances of success for the air offensive, to the Air Force. When the Air Force replied in December 1948 with a highly generalized boilerplate response, the JCS asked the Weapons Systems Evaluation Group (WSEG), a new technical support organization, to step in.[96]

Lieutenant General Hubert R. Harmon, USAF, a member of the U.S. military staff to the United Nations, chaired the ad hoc weapons-effects study group. A classmate of Eisenhower's and Bradley's at West Point, Harmon had served briefly as commander of Thirteenth Air Force in the South Pacific in World War II. Exactly how or why Harmon came to chair the effort is unclear; however, he had a reputation for being tactful and fair-minded that enhanced the study's objectivity and credibility. To assist him, Harmon assembled an inter-Service team of one Air Force officer, two Navy officers, and two Army officers.[97]

The Harmon committee looked only at SAC's role and the atomic phase of the air offensive, which would take place at the outset of a war. It made no attempt to evaluate the impact of a planned follow-on offensive with conventional bombs, nor did it look at possible Navy contributions under the plan since there was no assurance that the Navy would be allocated nuclear weapons or have the requisite capabilities for delivering them.[98] The committee confirmed that SAC's attacks under the current JCS-approved emergency war plan (now code-named TROJAN) would exact a heavy toll on the Soviet Union. SAC's targets were 70 urban-industrial complexes, with the destruction of Moscow and Leningrad the top priorities. Should all planes and bombs reach their targets (an assumption the WSEG study had yet to test), casualties from the initial attack would be in the vicinity of 2.7 million killed and another 4 million injured. Life for the 28 million survivors in the target areas would be "vastly complicated." The Air Force estimated that the destruction inflicted by the bombing would reduce Soviet industrial production for war-related purposes by 50 percent, with the heaviest impact falling on the petroleum industry. Based on its own separate assessments, the Harmon committee pared this estimate to a drop in production of 30 to 40 percent.

The committee doubted whether the atomic offensive would "seriously impair" ongoing Soviet operations in Western Europe, the Middle East, or the Far East. Large stockpiles of war reserves would allow Soviet forces to operate for some time before the effects of the disruptions to industry caused by the bombing reached the battlefield. Nor was the committee convinced that the planned air attacks would undermine the will and capacity of the Soviet population to resist, a key objective of the EWP. Nevertheless, the committee concluded that the atomic bomb remained "a major element of Allied military strength" and would constitute "the only means of rapidly inflicting shock and serious damage to vital elements of the Soviet war-making capacity." Even if not initially decisive, the crippling effects of nuclear weapons would tilt the balance sooner or later in favor of the West.[99]

Though the Joint Chiefs received the Harmon report in May 1949, they waited until late July to give it to the Secretary of Defense. The reason for the delay was a

disagreement over how to handle Air Force objections to the committee's analysis of collateral damage, which failed to consider the impact of fires started by the bombing. General Vandenberg, the Air Force Chief of Staff, wanted the report amended to address this and several other issues the Air Force had raised, whereas Admiral Denfeld thought it should go up the chain of authority as written. Eventually, the Secretary of Defense received the report unchanged, but with a covering note explaining the Air Force's dissenting views.[100]

Only the Secretary of Defense, the Joint Chiefs, and their immediate aides saw the Harmon report. President Truman never received a copy, though he knew of its existence and expressed an interest in seeing it and the WSEG study as well.[101] While Truman wanted economy in defense spending, he also remained a firm believer in a balanced force posture. At this juncture, the President was uneasy over a proposed reapportionment in the Air Force budget to free funds for the procurement of additional B–36s, despite reports that the planes were experiencing significant engine problems. Prodded by the Bureau of the Budget and by his White House naval aide, Rear Admiral Robert L. Dennison, Truman inquired in April 1949 about the status of these studies, telling his staff that he wanted to avoid "putting all of our eggs into one basket." Secretary of Defense Johnson assured the President that when the time was right he would receive a full briefing, but that it could take up to a year for the Pentagon to complete its evaluations.[102]

As Johnson's response suggests, the WSEG study had fallen behind schedule owing to WSEG's start-up problems and disagreements between the Air Force and the Navy over the intelligence data the study should use. WSEG was the brainchild of Vannevar Bush, President Roosevelt's chief scientific advisor on the atomic bomb in World War II and first Chairman of the Research and Development Board (RDB) when that agency acquired statutory status in 1947. According to his biographer, Bush regarded WSEG "as the epitome of the professional partnership between soldiers and scientists that he had tried to foster since 1940."[103] Having worked closely with the JCS in World War II, Bush seriously doubted that they could detach themselves from Service interests and responsibilities, act as a unitary body of strategic advisors, or deal intelligently and effectively with scientific and technical matters. Advocating a greater role for science and scientists in defense affairs, he called for "dispassionate, cold-blooded analysis of facts and trends," and persuaded Secretary Forrestal that there should be "a centrally located, impartial and highly qualified group" to provide the JCS with "objective and competent advice" on current and future weapons systems.[104]

Initially, the Joint Chiefs were concerned that the new organization Bush proposed might infringe on their functions. The Joint Strategic Survey Committee was especially uneasy and warned lest "technical evaluations" become "operational

evaluations" that could encroach on JCS responsibilities.[105] But after lengthy discussions with Forrestal and Bush, the JCS finally accepted the WSEG proposal at the Newport Conference in August 1948. Even so, it took until December for the JCS, Forrestal's office, and the RDB to agree on a directive laying out the terms of reference for the group's work, and 6 months more for WSEG to recruit a mixed military-civilian staff. WSEG took up offices in the Pentagon, within the secure restricted area set aside for the Joint Staff and other JCS components on the second level. Many of those who worked for WSEG were alumni of the Manhattan Project in World War II, an indication of how the new organization viewed its mission and where it expected to concentrate its efforts.[106]

Even though the strategic delivery study rated top priority on WSEG's agenda, it did not receive authorization to go forward until late August 1949, when the JCS finally approved intelligence data for the study.[107] At issue was the Air Force contention that Soviet air defenses were technologically substandard and spread too thin to pose a significant obstacle to attacking U.S. bombers.[108] Citing a "dearth of reliable intelligence," Admiral Denfeld challenged this notion and insisted that the Joint Intelligence Committee (JIC) conduct a review.[109] The JIC's preliminary analysis concurred with Denfeld that the Air Force had oversimplified the situation. But in a detailed follow-up report, the committee agreed with the Air Force that by and large Soviet air defenses were second rate. Still, it also pointed to recent improvements in air defense radars that suggested a more complex and effective Soviet air defense environment than the Air Force was anticipating.[110]

In view of the uncertainties surrounding Soviet air defenses, WSEG leaned toward the side of caution and produced a less than favorable report (WSEG R-1) on the chances of success for the planned air offensive. Knowing President Truman's interest in the subject, Secretary Johnson arranged for the WSEG director, Lieutenant General John E. Hull, USA, to hold a briefing at the White House on January 23, 1950, immediately prior to submitting R-1 to the JCS. While calculating that 70 to 85 percent of the attacking aircraft would reach their targets, Hull cited gaps in intelligence and logistical deficiencies that would reduce the effectiveness of the operation. Among SAC's vulnerabilities were a limited aerial refueling capability, competing demands for transport aircraft, and heavy dependence on overseas operating and staging bases. Overall, WSEG estimated that SAC could carry out its mission, but not to the full extent envisioned in current war plans without correcting identifiable deficiencies.[111]

Even though the Hull report presented a conservative view of the chances of complete success for the air offensive, there was no immediate rush to overhaul U.S. war plans or devise a new strategy. Developments on other fronts—the creation of NATO

linking the security of Europe to the United States, the recent Communist victory in China, and the discovery that the Soviets had acquired an atomic capability—were shifting the debate on defense and military policy to broader global issues. In many respects, the war plans the Joint Chiefs had so painstakingly developed and refined were becoming irrelevant and obsolete. On the other hand, the preparation of these plans gave the Joint Chiefs a better appreciation for the problems of waging war against the Soviet Union and underscored yet again the critical importance of inter-Service cooperation.

NOTES

1 Robert H. Ferrell, *Harry S. Truman: A Life* (Columbia: University of Missouri Press, 1994), 162–176.

2 Letter, Truman to Gordon McDonough, August 29, 1950, *Public Papers of the Presidents of the United States: Harry S. Truman,* 1950 (Washington, DC: GPO, 1965), 617–618, hereafter cited as *Truman Public Papers*.

3 See Dale R. Herspring, *The Pentagon and the Presidency: Civil-Military Relations from FDR to George W. Bush* (Lawrence: University Press of Kansas, 2005), 54.

4 Message to Congress, December 19, 1945, in Alice Cole et at., eds., *The Department of Defense: Documents on Establishment and Organization, 1944–78* (Washington, DC: Historical Office, Office of the Secretary of Defense, 1978), 7–17.

5 U.S. Senate, Committee on Naval Affairs, *Unification of the War and Navy Departments and Postwar Organization for National Security*, 79:1 (Washington, DC: GPO, 1945).

6 See letter, Leahy to Hull, May, 16, 1944, U.S. Department of State, *Foreign Relations of the United States: The Conference of Berlin (The Potsdam Conference), 1945* (Washington, DC: GPO, 1960), I, 265.

7 Walter S. Poole, "From Conciliation to Containment: The Joint Chiefs of Staff and the Coming of the Cold War," *Military Affairs* 42 (February 1978), 12–16; James F. Schnabel, *The Joint Chiefs of Staff and National Policy, 1945–1947* (Washington, DC: Joint History Office, 1996), 7–32.

8 Robert A. Pollard, *Economic Security and the Origins of the Cold War, 1945–1950* (New York: Columbia University Press, 1985), 20–23.

9 JCS Military Policy Statement, "Basis for the Formulation of Military Policy," September 20, 1945, JCS 1496/3.

10 Christian Brahmstedt, ed., *Defense's Nuclear Agency, 1947–97* (Washington, DC: Defense Threat Reduction Agency, 2002), 1–13; Eban A. Ayers Diary entry, October 14, 1946, in Robert H. Ferrell, ed., *Truman in the White House: The Diary of Eban A. Ayers* (Columbia: University of Missouri Press, 1991), 161; David Alan Rosenberg, "U.S. Nuclear Stockpile, 1945 to 1950," *Bulletin of the Atomic Scientists* 38 (May 19, 1982), 25–30.

11 Richard G. Hewlett and Oscar E. Anderson, Jr., *A History of the United States Atomic Energy Commission*, vol. I, *The New World* (Washington, DC: U.S. Atomic Energy Commission, 1962), 408–427, 482–530.

12 McGeorge Bundy, *Danger and Survival* (New York: Random House, 1988), 166; Hewlett and Anderson, *The New World*, 582–597.

13 Letter, JCS to President, October 23, 1945, "Military Policy as to Secrecy Regarding the Atomic Bomb," JCS 1471/4.

14 Hewlett and Anderson, 581–582.

15 Lloyd J. Graybar, "The 1946 Atomic Bomb Tests: Atomic Diplomacy or Bureaucratic Infighting?" *Journal of American History* 72 (March 1986), 888–907.

16 Brahmstedt, 13–14; JCS Evaluation Board for Operation *Crossroads*, "The Evaluation of the Atomic Bomb as a Military Weapon: Final Report," June 30, 1947, President's Secretary's File (PSF), Truman Library.

17 Walton S. Moody, *Building A Strategic Air Force* (Washington, DC: Air Force History and Museums Program, 1996), 141–142; Ian Clark and Nicholas J. Wheeler, *The British Origins of Nuclear Strategy, 1945–1955* (Oxford: Clarendon Press, 1989), 116.

18 Jeffrey G. Barlow, *Revolt of the Admirals: The Fight for Naval Aviation, 1945–1950* (Washington, DC: Naval Historical Center, 1994), 106–107; David Alan Rosenberg, "American Postwar Air Doctrine and Organization: The Navy Experience," in Alfred F. Hurley and Robert C. Ehrhart, eds., *Airpower and Warfare* (Washington, DC: Office of Air Force History, 1979), 245–278.

19 Schnabel, 70–72.

20 Memo, Leahy to Truman, October 16, 1945, "Reorganization of National Defense," JCS 749/29.

21 Ronald H. Cole et at., *The History of the Unified Command Plan, 1946–1999* (Washington, DC: Joint History Office, 2003), 11.

22 Quoted in Walter S. Poole, "Joint Operations," in Jacob Neufeld, William T. Y'Blood, and Mary Lee Jefferson, eds., *Pearl to V-J Day: World War II in the Pacific* (Washington, DC: Air Force History and Museums Program, 2000), 19.

23 Memo, CNO to JCS, February 1, 1946, "Command Structure in the Pacific Theater," JCS 1259/6.

24 Quoted in Poole, "Joint Operations," 18.

25 Schnabel, 81–82.

26 Memo, CSA to JCS, September 17, 1946, "Unified Command Structure," JCS 1259/12; Memo, CNO to JCS, December 5, 1946, "Unified Command Plan," JCS 1259/26; Memo, JCS to President, December 12, 1946, enclosing Unified Command Plan, JCS 1259/27. Truman approved the plan on December 14, 1946.

27 *History of the UCP*, 11–13. The seven original geographic commands were Far East Command, Pacific Command, Alaska Command, Northeast Command, Atlantic Fleet, Caribbean Command, and European Command.

28 J.C. Hopkins and Sheldon A. Goldberg, *The Development of Strategic Air Command, 1946–1986* (Offutt Air Force Base, NE: Office of the Historian, Strategic Air Command, 1986), 2–3.

29 JSSC Report to the JCS, February 20, 1946, "Missions of the Land, Sea and Air Forces," JCS 1478/8.

30 Schnabel, 113.

31 Herman S. Wolk, *Planning and Organizing the Postwar Air Force, 1943–1947* (Washington, DC: Office of Air Force History, 1984), 157.

32 Walter Millis, ed., *The Forrestal Diaries* (New York: Viking Press, 1951), 221–223; letter, Patterson and Forrestal to Truman, January 16, 1947, in Cole et al., *Documents on Defense*

Organization, 31–33. See also Townsend Hoopes and Douglas Brinkley, *Driven Patriot: The Life and Times of James Forrestal* (New York: Knopf, 1992), 341–343.

33 National Security Act of 1947, July 26, 1947, PL 253, in Cole et al., *Documents on Defense Organization*, 35–50.

34 EO 9877, "Functions of the Armed Forces," in Cole et at., *Documents on Defense Organization*, 267–270.

35 Steven L. Rearden, *History of the Office of the Secretary of Defense: The Formative Years, 1947–1950* (Washington, DC: Historical Office, Office of the Secretary of Defense, 1984), 385–402.

36 Harry S. Truman, *Memoirs*, vol. II, *Years of Trial and Hope* (Garden City, NY: Doubleday, 1956), 100.

37 Walter Lippmann, *The Cold War: A Study in U.S. Foreign Policy* (New York: Harper and Row, 1947).

38 Richard G. Hewlett and Francis Duncan, *A History of the United States Atomic Energy Commission,* vol. 2, *Atomic Shield, 1947–1952* (Washington, DC: Atomic Energy Commission, 1972), 53–55, 196–148; Schnabel, 133–135.

39 Matthew A. Evangelista, "Stalin's Postwar Army Reappraised," *International Security* 7 (Winter 1982/1983), 110–138. Evangelista argues that the JCS consistently overestimated Soviet strength. He attributes this error to a lack of reliable information rather than to an intentional effort to deceive.

40 Samuel R. Williamson, Jr., and Steven L. Rearden, *The Origins of U.S. Nuclear Strategy, 1945–1953* (New York: St. Martin's Press, 1993), 193; Steven T. Ross, *American War Plans, 1945–1950* (London: Frank Cass, 1996), 54; Donald P. Steury, "How the CIA Missed Stalin's Bomb," *Studies in Intelligence*, 199:1 (2005), 19–26.

41 John Lewis Gaddis, *Strategies of Containment* (New York: Oxford University Press, 1982), 39–40; see also David Mayers, *George Kennan and the Dilemmas of U.S. Foreign Policy* (New York: Oxford University Press, 1988), 122–123; and John Lewis Gaddis, *George F. Kennan: An American Life* (New York: Penguin, 2011).

42 Letter, Leahy to Hull, May 16, 1944, derived from JCS 838/1.

43 For the details, see Ross, *American War Plans*, 25–52.

44 Schnabel, 70–75.

45 Millis, 351–352; Melvyn P. Leffler, *A Preponderance of Power: National Security, the Truman Administration, and the Cold War* (Stanford, CA: Stanford University Press, 1992), 221–226. Leffler sees Truman as an essentially ambivalent figure who provided less than dynamic or credible leadership. While committed to preserving the preponderant U.S. position in world affairs, he ignored the gap between commitments and capabilities.

46 During the unification debate, both Forrestal and Secretary of War Patterson had recommended that Congress give the JCS the responsibility under the law to "make recommendations for integration of the military budget." For unexplained reasons, Congress failed to include this provision in the statement of JCS functions when it passed the National Security Act in July 1947.

47 Rearden, *Formative Years*, 311.

48 Ibid., 89–115.

49 U.S. President's Air Policy Commission, *Survival in the Air Age* (Washington, DC: U.S. President's Air Policy Commission, January 1, 1948).

50 Moody, 125–127; Barlow, 105–121.

51 Rearden, *Formative Years*, 35–36; Hoopes and Brinkley, 351–153.

52 Jonathan Haslam, *Russia's Cold War: From the October Revolution to the Fall of the Wall* (New Haven: Yale University Press, 2011), 99.

53 See William R. Harris, "March Crisis 1948, Act I," *Studies in Intelligence* 10, no. 4 (Fall 1966), 1–22; and William R. Harris, "March Crisis 1948, Act II," *Studies in Intelligence* 11, no. 2 (Spring 1967), 9–36 (RG 263, Records of the Central Intelligence Agency, National Archives). Written largely from interviews, these articles, now declassified, provide fascinating insights into the origins of the Czech coup, the March Crisis, and the inner workings of Soviet and U.S. intelligence leading up to the 1948 Berlin blockade.

54 Memo, Hillenkoetter to Truman, March 16, 1948, PSF, Truman Library. See also Donald P. Steury, "Origins of CIA's Analysis of the Soviet Union," in Gerald K. Haines and Robert E. Leggett, eds., *Watching the Bear: Essays on CIA's Analysis of the Soviet Union* (Langley, VA: Center for the Study of Intelligence, 2001), 1–14.

55 Jean Edward Smith, *Lucius D. Clay: An American Life* (New York: Henry Holt and Co., 1990), 166–167; Cable, Clay to Chamberlin, March 5, 1948, in Jean Edward Smith, ed., *The Papers of General Lucius D. Clay: Germany, 1945–1949*, 2 vols. (Bloomington: Indiana University Press, 1974), II, 568.

56 Memo, Hillenkoetter to Truman, December 22, 1947, PSF, Truman Library.

57 Rearden, *Formative Years*, 316–330.

58 Lawrence S. Kaplan, *NATO 1948: The Birth of the Transatlantic Alliance* (Lanham, MD: Rowman and Littlefield, 2007), 192–144, 199–159.

59 "Brief of Short-Range Emergency War Plan 'HALFMOON,'" May 6, 1948, JCS 1844/4; Memo, CNO to JCS, April 5, 1948, "Planning Guidance for Medium-Range Emergency Plan," JCS 1844/2.

60 Kenneth W. Condit, *The Joint Chiefs of Staff and National Policy, 1947–1949* (Washington, DC: Office of Joint History, 1996), 156.

61 Diary Entry, May 6, 1948, Leahy Papers, Library of Congress; Memo, Leahy to JCS, May 13, 1948, "Brief of Short-Range Emergency Plan "HALFMOON," JCS 1844/6; Millis, 158, 161–162; David Alan Rosenberg, "Toward Armageddon: The Foundations of United States Nuclear Strategy, 1945–1961" (Ph.D. diss., University of Chicago, 1983), 110.

62 Notes of an informal meeting between Vice chief of the Air Staff and Maj. Gen. Richard C. Lindsay, May 10, 1948, quoted in Stephen Twigge and Len Scott, *Planning Armageddon: Britain, the United States and the Command of Western Nuclear Forces, 1945–1964* (Amsterdam: Harwood, 2000), 30–31.

63 Warner R. Schilling, "The Politics of National Defense: Fiscal 1950," in Warner R. Schilling, Paul Y. Hammond, and Glenn H. Snyder, *Strategy, Politics, and Defense Budgets* (New York: Columbia University Press, 1962), 155–164.

64 Millis, 135–138.

65 Memo, Forrestal to NSC, July 10, 1948, "Appraisal of the Degree and Character of Military Preparedness Required by the World Situation," *FRUS, 1948*, I, 589–592; letter, Forrestal to Truman, July 10, 1948, ibid., 592–593.

66 Memo, Truman to Forrestal, July 13, 1948, PSF, Truman Library.

67 Alonzo L. Hamby, *Beyond the New Deal: Harry S. Truman and American Liberalism* (New York: Columbia University Press, 1973), 209–211.

68 Memo, JCS to SECDEF, October 10, 1947, "Problem of Palestine," JCS 1684/3.

69 Memo, JCS to Truman, April 19, 1948, "Provision of U.S. Armed Forces in Palestine," JCS 1685/13.

70 Rearden, *Formative Years*, 187–194; Condit, 51–57.

71 Memo, JCS to SECDEF, July 22, 1948, "U.S. Military Course of Action with Respect to the Situation in Berlin," JCS 1907/3.

72 Douglas to SecState, June 26, 1948, *FRUS, 1948*, II, 923–924.

73 Millis, 457.

74 Clark and Wheeler, *British Origins of Nuclear Strategy*, 128–129.

75 John Lewis Gaddis, *We Now Know: Rethinking Cold War History* (Oxford: Clarendon Press, 1997), 198.

76 Rearden, *Formative Years*, 139.

77 Hewlett and Duncan, *Atomic Shield*, 161–165, 174–176; Robert S. Norris, Thomas B. Cochran, and William M. Arkin, "History of the Nuclear Stockpile," *Bulletin of the Atomic Scientists* (August 1985), 106–109. Barlow, 127, discusses the impact of the levitation method.

78 Millis, 460–461; Rearden, *Formative Years*, 425–432.

79 Minutes, 21st Meeting of the National Security Council, September 16, 1948, PSF, NSC Series, Truman Library; NSC 30, "U.S. Policy on Atomic Warfare," September 10, 1948, *FRUS, 1948*, I, 624–628.

80 Moody, 229–233.

81 Condit, 124; Rearden, *Formative Years*, 342.

82 Ibid., 124–131.

83 Memo, JCS to SECDEF, November 2, 1948, "Existing International Commitments Involving the Possible Use of Armed Forces," circulated at NSC 35, November 17, 1948, *FRUS, 1948*, I, 656–662.

84 NSC 20/4, November 23, 1948, "U.S. Objectives with Respect to the USSR to Counter Soviet Threats to U.S. Security," *FRUS 1948*, I, 662–669.

85 Letter, Forrestal to Truman, December 1, 1948, *FRUS 1948*, I, 669–672.

86 Memo, Truman to Webb, December 2, 1948, PSF, Truman Library.

87 USAF CoS Memo, ca. December 16 or 20, 1948, quoted in Williamson and Rearden, *Origins of U.S. Nuclear Strategy*, 95.

88 Denfeld testimony, February 16, 1949, U.S. Congress, Senate, *Hearings: National Military Establishment Appropriations Bill for 1950*, 81:1, Pt. 1, 17.

89 Moody, 265. Other sources give larger numbers. Using JCS historical materials, Ross, *American War Plans, 1945–50*, 139, says that SAC had 521 atomic-capable aircraft by the end of 1949. Actually, as the JCS source makes clear, this was the total number of bomb-

ers in SAC's inventory at the time. Ross erroneously assumes that all SAC bombers had been converted.

90 Diary entry, December 13, 1948, in Robert H. Ferrell, ed., *The Eisenhower Diaries* (New York: W.W. Norton, 1981), 150–151; Condit, 139–152.

91 U.S. National Military Establishment, *First Report of the Secretary of Defense* (Washington, DC: GPO, 1948), 3–4.

92 National Security Act of 1947 as Amended and Approved, August 10, 1949, PL 216, in Cole et al., eds., *Documents on Defense Organization*, 84–106.

93 Rearden, *Formative Years*, 369–376.

94 Paul Y. Hammond, "Super Carriers and B–36 Bombers: Appropriations, Strategy and Politics," in Harold Stein, ed., *American Civil-Military Decisions: A Book of Case Studies* (Birmingham, AL: University of Alabama Press, 1963), 465–564, though dated, is still the best overview of the controversy; Moody, 286–313, is a measured account from the Air Force perspective; Barlow, 182f, and Paolo E. Coletta, *The United States Navy and Defense Unification, 1947–1953* (Newark: University of Delaware Press, 1981), give the Navy perspective.

95 Memo, SECDEF to JCS, October 23, 1948, "Evaluation of Current Strategic Air Offensive Plans," JCS 1952; Memo, SECDEF to JCS, October 25, 1948, "Evaluation of Effect on Soviet War Effort Resulting from Strategic Air Offensive," JCS 1953.

96 John Ponturo, *Analytical Support for the Joint Chiefs of Staff: The WSEG Experience, 1948–1976* (Arlington, VA: Institute for Defense Analyses, 1979), 52–53. For the Air Force response, see the Appendix to Memo, CoS USAF to JCS, December 21, 1948, "Evaluation of Current Strategic Air Offensive Plans," JCS 1952/1.

97 Note by the Secretaries to the JCS, October 25, 1948, JCS 1953; Moody, 295.

98 Details of the planned offensive are in Report, JSPC to JCS, December 13, 1948, "Atomic Weapons Supplement to TROJAN," JCS, 1974.

99 Report by the Ad Hoc Committee (Harmon Committee), May 12, 1949, "Evaluation of Effect on Soviet War Effort Resulting from the Strategic Air Offensive," JCS 1953/1.

100 Memo, CoS USAF to JCS, July 8, 1949, JCS 1953/4; Memo, CNO to JCS, July 19, 1949, JCS 1953/5; Moody, 295.

101 Truman, *Years of Trial and Hope*, 305.

102 Rearden, *Formative Years*, 406–407.

103 G. Pascal Zachary, *Endless Frontier: Vannevar Bush, Engineer of the American Century* (New York: Free Press, 1997), 340.

104 Ponturo, 23–25.

105 Report, JSSC to JCS, February 27, 1948, "Proposed Directive to the RDB," JCS 1812/5.

106 Ponturo, 27–48.

107 Note by the Secretaries to JCS, August 25, 1949, "Joint Intelligence Estimate," JCS 1952/8.

108 See the appendix to Memo, CoS/USAF to JCS, December 21, 1949, "Evaluation of Current Strategic Air Offensive Plans," enclosure to JCS 1952/1.

109 Memo, CNO to JCS, January 11, 1949, "Evaluation of Current Strategic Air Offensive Plans," JCS 1952/2.

110 Rpt, JIC to JCS, March 3, 1949, "Intelligence Aspects of Evaluation of Current Strategic Air Offensive Plans," JCS 1952/4; Report, JIC to JCS, August 25, 1949, "Joint Intelligence Estimate for Basing Operational Evaluation Success of the Strategic Air Offensive," JCS 1952/8.

111 WSEG R-1, "Report on Evaluation of Effectiveness of Strategic Air Operations," February 8, 1950, JCS 1952/11; Ponturo, 74–75, summarizes the White House briefing.

President Harry S. Truman meeting General Douglas MacArthur, USA, Wake Island, October 1950