

U.S. Nuclear Policy Toward the Soviet Union, 1949–1952

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Abstract:

This study examines the formulation and implementation of United States policy in response to the emerging Soviet nuclear threat between 1949 and 1952. It seeks to uncover the mechanisms of American decision-making and the role of official institutions and their contributions by tracing the historical development of the Soviet nuclear program and the security threat it posed to the United States. Drawing on a range of primary sources, including declassified government documents and official policy statements, the study analyzes the political, military, and diplomatic considerations that shaped early Cold War nuclear strategy. It further highlights the interaction between threat perception, technological developments, and policy innovation, demonstrating how the United States sought to maintain strategic superiority and deter Soviet aggression. By situating early nuclear policy within the broader framework of international relations theory, the study contributes to a deeper understanding of the foundations of American Cold War strategy and its enduring implications for contemporary nuclear deterrence policy. This study finds that U.S. nonproliferation policy reflected a broader shift in American strategic thinking from bilateral nuclear rivalry toward managing a multilateral nuclear order. Accordingly, U.S. threat perceptions expanded beyond the Soviet Union to include the destabilizing risks of nuclear proliferation and its implications for deterrence and systemic stability.

Keywords: U.S. nuclear decision-making; Soviet nuclear threat; Cold War nuclear arms race; nuclear deterrence strategy; United States Atomic Energy Commission (AEC).

Introduction:

This article situates early U.S. nuclear policy within the analytical frameworks of Cold War deterrence theory and bureaucratic decision-making. The deployment of nuclear weapons by the United States in 1945 marked not only the end of the Second World War but also a profound transformation in the nature of power and security in international politics. Nuclear weapons rapidly evolved from instruments of battlefield destruction into strategic assets central to national security, political influence, and the maintenance of global power hierarchies. This transformation accelerated efforts by major powers to acquire nuclear capabilities, embedding nuclear weapons at the core of postwar foreign and security policy.

The Soviet Union emerged as the most consequential challenger to the U.S. nuclear monopoly. Following the atomic bombings of Japan, Joseph Stalin viewed nuclear weapons as both an existential threat and a decisive instrument of strategic parity with Washington. In response, U.S. policymakers increasingly framed Soviet nuclear development as a direct challenge to American security and international leadership. The resulting policy response combined diplomatic initiatives, military planning, and technological expansion, shaped by complex interactions among executive decision-makers, security agencies, and scientific institutions. By examining these dynamics, this article highlights how perceptions of nuclear threat, institutional interests, and strategic doctrine collectively shaped early American responses to the Soviet nuclear challenge.

Against this backdrop, the present study traces U.S. policy toward the Soviet nuclear program in general, and the first Soviet nuclear test in particular, selecting 1949 as the starting point of the analysis, as it marks the successful detonation of the Soviet atomic bomb and the end of the U.S. nuclear monopoly, and 1952 as the concluding point, corresponding to the successful test of the first U.S. thermonuclear weapon. Washington viewed the Soviet nuclear program as a direct threat to its national security and to the balance of power it had previously enjoyed.

The study further examines how U.S. policymakers responded to the emerging Soviet nuclear threat and the means by which American nuclear policy sought to confront it through diplomatic initiatives, technological advancement, and strategic decision-making. The structure of the study reflects this focus and is divided into two main sections. The first, entitled “U.S. Strategies to Limit Soviet Nuclear Capabilities,” examines how Washington responded to Soviet aspirations to acquire nuclear weapons and the criteria upon which it based its assessments of Soviet nuclear capabilities. The second section, “U.S. Strategic and Political Responses to the First Soviet Nuclear Test,” analyzes Washington’s reaction to the initial Soviet nuclear detonation, the policy responses adopted to confront the emerging Soviet threat, and whether the United States was drawn into an unprecedented nuclear arms race. It also explores the responses of U.S. governmental agencies to the Soviet challenge and assesses whether Washington succeeded in halting or deterring Soviet nuclear progress.

This study relies on a wide range of published U.S. primary sources that illuminate American policy toward the Soviet nuclear threat, including:

- the archives of the Central Intelligence Agency (CIA), particularly intelligence estimates used to evaluate Soviet nuclear capabilities;
- documents from the National Security Archive (NSA), which provide insight into how the United States addressed Soviet nuclear armament as its most significant strategic threat;
- the Foreign Relations of the United States (FRUS) series, one of the most authoritative official sources for the study of U.S. foreign policy and national security history;
- the Public Papers of the Presidents of the United States (PPUS); and
- documents issued by the United Nations Office for Disarmament Affairs (UNODA).

U.S. Strategies to Curb Soviet Nuclear Capabilities

The administration of U.S. President Harry Truman intensified its efforts to uncover Soviet nuclear activities in order to safeguard American national security and preserve the United States' nuclear monopoly and strategic superiority, primarily through the expansion of intelligence collection related to atomic energy. However, U.S. intelligence analysts did not anticipate a Soviet nuclear test in the near term. Consequently, the intelligence estimates issued by the Office of Reports and Estimates regarding the timing of Soviet atomic bomb production proved inaccurate. In January 1949, these assessments identified mid-1953 as the most probable date for Soviet nuclear capability, while some indicators suggested mid-1950 as a possible alternative. Despite differing estimates concerning when Moscow would acquire nuclear weapons, U.S. intelligence failed to grasp the rapid pace of Soviet progress. This miscalculation stemmed in part from the effectiveness of Soviet espionage networks operating within the United States, which accelerated Moscow's bomb program by an estimated one to two years. Moreover, the strict security measures imposed within the Soviet Union significantly complicated accurate intelligence assessments. Although the Central Intelligence Agency collected information with important implications for the Soviet nuclear program, its analysts failed to fully integrate these findings into their evaluations. Among these reports was evidence of metallic calcium production at a plant in East Germany—an essential component in the preparation of uranium used as fuel for Soviet reactors. Notably, little serious attention was paid within the Agency to the unusually large scale of metallic calcium production, despite levels that strongly suggested the Soviets were producing substantial quantities of reactor fuel.¹

The earlier intelligence estimates were based on several assumptions, including the belief that the Soviet leadership had not initiated its own nuclear program until late 1945, that it was attempting to construct a plutonium-based bomb, and that its uranium stockpile was sufficient to operate only a single nuclear reactor and inadequate for weapons production.² Nevertheless, the Soviet project advanced at a considerably faster pace than Central Intelligence Agency analysts had anticipated. Following the commissioning of the Cheliabinsk-40 reactor—designed for the separation of radioactive isotopes—which produced Soviet plutonium in January 1949, the program entered the stage of designing and manufacturing a plutonium bomb. The fundamental concept chosen by Soviet scientists relied on the compression—or implosion—of a subcritical plutonium mass, thereby increasing its density and rendering it supercritical. This design required surrounding the plutonium core with high explosives to generate an inward-moving shock wave that would compress the material. At the center of the bomb was an intense neutron source, or initiator. When the internal explosion compressed the plutonium, the compression lasted only a microsecond before the material began to expand, making it essential to ensure that the chain reaction commenced at precisely the correct moment.³

American policymakers defined Washington's objectives regarding Soviet nuclear armament in ways that reflected the phase of the U.S. nuclear monopoly. Their primary goal was to obstruct Soviet progress as much as possible, whether by delaying the timing of the first bomb or limiting subsequent production rates. They also aimed to strengthen Washington's position in response to the Soviet Union's open rejection of the American proposal for international control and its determination to acquire nuclear weapons clandestinely. Critically, policymakers emphasized securing fissionable materials from foreign sources and reaching appropriate arrangements with the British government to ensure access to the raw materials necessary for continued operation of American reactors, as well as for the development and modernization of the U.S. nuclear weapons program. In addition, efforts focused on reducing the vulnerability of American nuclear production capacity and stockpiles by protecting them from potential destruction resulting from a sudden Soviet military attack, particularly through the establishment and safeguarding of nuclear weapons bases. Finally, all measures were directed toward ensuring that U.S. nuclear policy remained consistent with broader American foreign policy objectives.⁴

One of the most significant measures adopted to delay and obstruct Soviet progress was the prevention of exporting fissile materials and equipment used in the nuclear energy industry to the Soviet Union. Accordingly, on 18 February 1949, the U.S. administration prepared a program to be implemented in cooperation with allied countries through the establishment of export control policies governing the shipment of such materials from those states to the Soviet Union. As a foundation for this program, the United States Atomic Energy Commission issued a list of raw materials involved in the nuclear industry for monitoring and prohibiting their export. This list was transmitted through U.S. Department of State missions to friendly countries to establish effective control mechanisms within those states. In response, the British government issued an order prohibiting the export of these materials from its territory to the Soviet Union, while the Norwegian government prevented the export of a shipment of beryl to Czechoslovakia at the request of the U.S. Department of State. In the Netherlands, the government refused to authorize the export of monazite, and Belgium pledged to issue instructions banning the export of nuclear materials—particularly uranium—to areas under Soviet control. Concurrently, the U.S. Department of State pursued a policy of direct communication with foreign governments whenever information was received indicating the shipment of materials or equipment used in nuclear energy programs to Soviet-controlled regions. As a result, the majority of nuclear material sources came under the control of the U.S. administration in Washington and were subjected to strict monitoring by its allied states through export control regulations.⁵

Meanwhile, the Soviet atomic bomb reached its final stages with the fabrication of two metallic hemispheres of plutonium in May 1949, which were fully coated with nickel to enhance safety during transport to the nuclear weapons assembly facility at Arzamas-16. There, the device was assembled and its functionality verified through precise calculations to ensure the success of the forthcoming test. When the Soviet physicist Igor Kurchatov informed Moscow's leadership that the bomb assembly was complete, he requested authorization for the test schedule. Subsequently, senior scientists and engineers were summoned to the Kremlin to meet with Joseph Stalin, during which Kurchatov presented a report on the test preparations. Stalin inquired whether it would be possible to use the available plutonium to produce two lower-yield bombs instead of a single device, intending to keep one in reserve should Washington threaten nuclear confrontation. Yuly Khariton responded that such a proposal was not feasible, explaining that the quantity of plutonium had been specifically calibrated for the first bomb and was insufficient for an additional device. Although Stalin accepted Khariton's explanation regarding the

impossibility of constructing two bombs from the allocated plutonium, he remained somewhat skeptical of the Soviet physicists' credibility. For Stalin, confirming the sincerity and reliability of their work required the successful detonation of the first nuclear test, along with verification of external sources that had contributed to the project, including German scientists, technical literature, and reports submitted to the Kremlin leadership and the Soviet atomic program.⁶

As the prospect of the United States losing its advanced position in nuclear weapons drew closer, the Joint Chiefs of Staff decided to circumvent the constraints imposed by the Pentagon's budget by calling for expanded military requirements for nuclear arms. This move followed President Truman's decision to set a ceiling on the defense budget and reduce overall defense expenditures in 1948. The Joint Chiefs justified their demands on the grounds of national interest and Washington's security, arguing that an increased nuclear arsenal was necessary to implement military plans, including the execution of nuclear strikes against Soviet reactors and nuclear facilities. When the Joint Chiefs' request reached David Lilienthal, Chairman of the U.S. Atomic Energy Commission, on 26 May 1949, he informed them that their proposals would require additional production facilities to meet the new military requirements. By way of illustration, he noted that the construction of a new isotope-separation plant would cost approximately \$300 million—an amount equal to half of the Atomic Energy Commission's entire 1948 budget. In his correspondence with the Joint Chiefs, Lilienthal emphasized that an expansion of this magnitude would necessitate presidential approval.⁷

The chairman of the Joint Committee on Atomic Energy, Senator Brien McMahon, urged the U.S. Secretary of Defense, Louis Johnson, and the chairman of the U.S. Atomic Energy Commission, David Lilienthal, to expand requirements for the production of raw materials and broaden plans for nuclear weapons production. He called upon them to persuade President Truman that the central objective of the American administration should be the production of fissionable materials and the manufacture of additional nuclear weapons. This position gained particular significance as nuclear weapons strategic planning had become a cornerstone of Washington's military policy and a fundamental pillar of its foreign policy. McMahon emphasized the necessity of taking concrete steps to ensure the strength of this assumption. Although he acknowledged his lack of precise knowledge regarding the number of nuclear weapons in Washington's possession or the speed at which they were being produced, he nevertheless stressed the importance of quantitative expansion, increased production, and the need for additional facilities to keep pace with evolving political and military conditions. He further argued that a substantial increase in the rate of nuclear production could exert a preemptive effect by rapidly creating a large stockpile, thereby providing American policymakers with a broader range of alternative courses of action.⁸

A few days before Moscow's first nuclear bomb test, the Policy Planning Staff of the U.S. Department of State issued directives concerning the potential political implications of a Soviet nuclear test and the appropriate responses at the political level. The staff emphasized that the Truman administration's capacity and understanding of the timing and nature of the test were critically important for several reasons:⁹

- To reassure the American public and provide a sense of security, demonstrating that the Soviet leadership could neither conduct the test nor acquire nuclear weapons without Washington's awareness, thanks to existing detection capabilities, thereby enabling the United States to address the Soviet nuclear threat to national security.
- Understanding the Kremlin's success in the test was crucial for American policymakers to determine whether any changes in Soviet foreign policy resulted from its possession of nuclear weapons, to anticipate potential strategic shifts, and to assess the credibility of Soviet leadership by confirming the outcome of the test.
- Knowledge of Moscow's nuclear capability necessitated a reassessment of U.S. policy at the United Nations within the broader context of Washington's efforts to enforce effective international control over nuclear energy.
- Most countries around the world preferred to cooperate with Washington in light of the Soviet threat and with confidence in the United States' exclusive control over nuclear weapons. This sense of security and the resulting cooperation could be further strengthened through intelligence regarding Moscow's nuclear status.
- Confirmation by the Truman administration that Moscow possessed nuclear weapons would have required a reassessment of precautionary measures to mitigate the risk of a nuclear attack on the United States, an issue that remained a central concern for the Pentagon.

Contrary to U.S. intelligence expectations, which had predicted that the Soviet Union would be unable to produce and test a nuclear weapon before mid-1950, the first Soviet nuclear device was ready for testing by August 1949. Stalin issued a decree scheduling the test for 29 August 1949 at the Semipalatinsk-21 site in northeastern Kazakhstan. The objective was to detonate the plutonium device, confirm the occurrence of a nuclear chain reaction, and conduct research to measure its destructive power. Once all components of the bomb were assembled, it was transferred to the metal tower, and the explosives were connected to the firing circuits. At approximately 6:30 a.m. on 29 August 1949, Kurchatov gave the order to detonate. The control panel operated automatically, and it took about thirty seconds for the shockwave to reach the command center, illuminating the area with an intense flash of light followed by the rise of the explosion cloud. The successful test was met with enthusiasm, and Yuly Khariton addressed the assembled scientists and engineers, stating: "Now we have solved the problem, and we can feel relief because by possessing the nuclear weapon we have removed the threat of punishment and eliminated the possibility of it being used against us." The following day, Kurchatov submitted a report to Stalin confirming the success of the test, summarizing the key findings, and noting that the results of the explosion corresponded precisely with the scientists' calculations and expectations. The bomb yielded approximately 20 kilotons of TNT equivalent. Nevertheless, Stalin did not authorize any public announcement or indication that the Soviet Union possessed nuclear weapons.¹⁰

U.S. Strategic and Political Reactions to the First Soviet Nuclear Test

Washington acted promptly to determine the success of the Soviet nuclear test. On 3 September 1949, a U.S. Air Force aircraft conducted a reconnaissance flight from Misawa Air Base in Japan to Eielson Air Force Base in Alaska, and upon its return, technicians detected radioactive traces in its filters. Six days later, CIA Director Roscoe Hillenkoetter briefed President Truman, reporting unusually high radioactive activity over the North Pacific that far exceeded natural background levels, although he could not determine whether the contamination resulted from volcanic activity, a nuclear accident, a Soviet detonation, or another source. Following radiological analyses, it was confirmed that Moscow had conducted a nuclear test between 26 and 29 August 1949.¹¹ Once senior scientific advisors verified that the radioactive activity stemmed from a nuclear explosion, high-level discussions considered whether the test should be publicly announced. David Lilienthal, Chairman of the U.S. Atomic Energy Commission, argued that the American public should be informed and that the Soviet test should be officially acknowledged, while officials in the Pentagon and the Joint Chiefs of Staff similarly supported early disclosure to prevent leaks to the press, which could undermine the administration's competence. In contrast, Secretary of State Dean Acheson recommended against announcing the test's success, contending that public disclosure could weaken Washington's diplomatic position toward Moscow and complicate the administration's stance before both the American public and international audiences.¹²

Drawing on official records and prior analysis, the foregoing demonstrates the confusion and conflicting positions regarding whether to announce the success of the Soviet test. A U.S. declaration of Soviet possession of nuclear weapons would have portrayed the USSR to the world as a nuclear power equal to Washington. In particular, Secretary of State Dean Acheson feared that such an announcement would weaken the U.S. negotiating position vis-à-vis Soviet negotiators and grant the Kremlin an unwarranted political and military victory; for this reason, he considered silence to be diplomatically preferable to public disclosure.

There is little doubt that the Kremlin surprised the U.S. administration by conducting the nuclear test at such an early stage, achieving progress far more rapidly than American officials had anticipated. Equally striking was the fact that several weeks passed without any public acknowledgment by the Soviet leadership of its possession of nuclear weapons. In response, President Truman began preparations for an official statement regarding the Soviet achievement. On 21 September 1949, he conducted a comprehensive review of the available evidence with the Joint Chiefs of Staff, in the presence of Senator Brien McMahon, Chairman of the Joint Congressional Committee on Atomic Energy, and presented the results of analyses confirming that the Soviet Union had indeed carried out a nuclear test.¹³ Two days later, Truman issued a public statement declaring that Washington possessed conclusive evidence of a Soviet nuclear detonation. At the same time, he sought to downplay the broader significance of the Soviet achievement, noting that since 1945 scientists had recognized that the U.S. nuclear monopoly was inherently temporary, as the fundamental principles of nuclear fission were accessible to all nations. The Soviet explosion, he argued, merely confirmed this reality and reinforced the notion that no single country could maintain a permanent monopoly over nuclear weapons.¹⁴

Following President Truman's announcement, the British and Canadian governments issued similar statements, while the American and British press, along with that of several other countries, published reports expressing concern that Moscow, having acquired nuclear weapons, intended to wage a nuclear war. In response, the Soviet official news agency TASS released a communiqué denying what it described as Western allegations of a nuclear war threat and likewise rejected claims that a Soviet nuclear test had taken place. The statement emphasized that large-scale construction projects were underway across the Soviet Union—including hydroelectric power stations, mines, canals, and roads—which required extensive blasting operations employing advanced technical means, noting that such activities, conducted repeatedly in various regions, might attract attention beyond the country's borders. Regarding nuclear energy, TASS referred to a statement made by Soviet Foreign Minister Vyacheslav Molotov on 6 November 1947 concerning the secret of the atomic bomb, in which he asserted that "this secret has long since ceased to exist,"¹⁵ implicitly suggesting that the Soviet Union had already uncovered the secret of nuclear weapons. Nevertheless, American scientific circles dismissed Molotov's remarks as deceptive, maintaining that Soviet scientists would be unable to master nuclear weapons before 1953—an assessment that ultimately proved incorrect, as the Soviet Union had already acquired the nuclear secret by 1947. Consequently, the concerns raised by Western governments and the press in this regard lacked a solid factual foundation.¹⁶

The discovery that Washington had lost its position of nuclear primacy generated a profound sense of shock and disbelief among scientific, military, and political decision-makers. At the same time, it reinforced their determination to remain at the forefront of nuclear competition. Consequently, a series of debates, plans, and policy decisions emerged aimed at identifying an appropriate response to the Soviet achievement and restoring the strategic balance. The U.S. Atomic Energy Commission (AEC) entered a state of unprecedented readiness. It sought to expand the construction of nuclear reactors, recruit additional scientists for the development of nuclear weapons, integrate nuclear components into the armament of the U.S. armed forces, accelerate the construction of nuclear weapons production facilities, and intensify efforts to secure large quantities of uranium ore. John Gustafson, Director of Raw Materials at the Commission, planned to meet this demand by increasing procurement from the Belgian Congo. Lawrence Hafstad, Director of Reactor Development, considered the construction of new reactors capable of generating large quantities of neutrons to produce plutonium and tritium for nuclear weapons. Meanwhile, AEC Chairman David Lilienthal hoped that the Commission would cooperate with the National Security Council, the Department of State, and the Joint Chiefs of Staff, as well as the Joint Committee on Atomic Energy in Congress, to present President Truman with joint recommendations and a comprehensive analysis of nuclear policy issues as a measured response to the Soviet breakthrough. On 28 September 1949, he informed the other members that the Commission needed to proceed with greater speed and clearer priorities, foremost among them the production of the most advanced nuclear weapons. This course of action, he emphasized, constituted one of the Commission's fundamental principles: the maintenance of nuclear superiority as the foundation of the defense of the American nation.¹⁷

Members of the Atomic Energy Commission (AEC) viewed the Soviet test as insufficient and argued for maintaining U.S. nuclear superiority. Commission member Lewis Strauss emphasized that although the United States had enjoyed absolute

nuclear superiority until 23 September 1949, it had now been lost and needed to be restored through both quantitative advances in nuclear production and qualitative progress in developing the hydrogen bomb. Strauss first articulated this position in a memorandum to the Commission on 5 October 1949, stressing that "reliance on increased production of fissionable materials and atomic weapons as a response to Soviet progress is not sufficient; we must intensively pursue thermonuclear weapons, with a commitment comparable to that which produced the first atomic bomb. "Physicists Ernest Lawrence and Luis Alvarez also warned of the consequences of delaying thermonuclear development. Based on their knowledge of Dr. Pyotr Kapitsa, a leading expert on the physical properties of light elements, they feared that Soviet leadership might secure his assistance in mastering the hydrogen bomb before the AEC could do so.¹⁸

On 10 October 1949, the Joint Chiefs of Staff reaffirmed that maintaining overwhelming superiority in nuclear weapons was vital to U.S. security. They recommended accelerating the expansion of the American nuclear program in light of the Kremlin's acquisition of its first nuclear weapon and provided several considerations to support their recommendation. The Chiefs highlighted the significant military gains achievable through program expansion and development. For instance, they emphasized the production of new types of nuclear weapons that were lighter and smaller, capable of being deployed on guided missiles, thereby offering greater operational flexibility for potential preemptive actions against the Soviet Union. Furthermore, in response to the accumulation of the Soviet nuclear stockpile, they argued that maintaining overwhelming U.S. nuclear superiority and increasing production rates within the Atomic Energy Commission was both necessary and critical to sustaining the deterrent value of U.S. nuclear forces. The Soviet test, they concluded, underscored the military necessity of increasing production and strongly reinforced the rationale for program expansion. The U.S. Department of State endorsed the Joint Chiefs' recommendations, viewing them as an appropriate measure to address anticipated international consequences of the Soviet nuclear test. The proposed program was framed as consistent with the administration's declared policy of maintaining Washington's technological leadership. Expansion, the State Department noted, was not merely desirable but represented a positive indication of American policy planners' intent to enhance U.S. nuclear strength to safeguard both national and global security. The National Security Council judged the Atomic Energy Commission's proposals as aligned with its own policy objectives, which sought to improve the technological and defensive capabilities necessary to counter and deter the Soviet nuclear threat. These measures were deemed essential to underpin U.S. military commitments and mobilization in the event of a nuclear confrontation with the Kremlin. In light of these directives,¹⁹ President Truman approved on 20 October 1949 the restoration of U.S. leadership in nuclear technology through the expansion of the nuclear stockpile and the construction of additional fissile material production facilities.²⁰

After AEC Chairman David Lilienthal referred the proposal for an expanded effort to develop the hydrogen bomb to the General Advisory Committee (GAC), the report outlined its principles, feasibility, and the awareness of Soviet scientists regarding thermonuclear development. The AEC warned that defeating the Kremlin would require a comprehensive effort that could disrupt ongoing projects. At the GAC meeting on 30 October 1949, members unanimously opposed an all-out development effort. Chairman J. Robert Oppenheimer cautioned that the hydrogen bomb's virtually unlimited destructive power posed risks to humanity that outweighed any military advantage and would not deter the Soviets. He emphasized that existing U.S. nuclear forces were sufficient for retaliation. Enrico Fermi further argued that the hydrogen bomb transcended military necessity, entering the realm of mass destruction. Its use could not be morally justified, even against the Soviet Union, and would place the United States in a compromised ethical position internationally. Fermi recommended that any U.S. restraint in developing the bomb should be conditional on a comparable Soviet commitment and proposed inviting other nations to join in a formal pledge to refrain from pursuing such weapons.²¹

When the General Advisory Committee's report reached the five members of the Atomic Energy Commission (AEC), three supported pursuing the hydrogen bomb project, while two—including Chairman David Lilienthal—opposed it due to its risks. Lilienthal nevertheless transmitted the report to President Truman on 9 November 1949, reflecting the Commission's divided views. He advised against initiating a hydrogen bomb program, warning that it would accelerate the arms race with the Soviet Union. Lilienthal argued that maintaining U.S. nuclear strength remained essential, and that ongoing expansion of the nuclear stockpile for tactical purposes was sufficient. He noted that the hydrogen bomb would divert resources from the existing program without materially increasing deterrent capability. Even without the hydrogen bomb, the United States retained sufficient nuclear power to deter the Kremlin, and the incremental damage it might inflict on the Soviet Union did not justify the potential policy and strategic risks associated with its development.²²

By contrast, Commission member Gordon Dean argued that abandoning the project without securing Soviet concessions would be a mistake. He proposed using secret diplomatic channels to offer Washington's restraint in exchange for international controls over weapons of mass destruction, while maintaining that, if Moscow refused, the project should proceed without delay. Meanwhile, Lewis Strauss strongly defended the thermonuclear weapons program. He advised President Truman to direct the Atomic Energy Commission to devote all resources and efforts to its development, arguing that the Kremlin's nuclear achievements indicated the Soviet capacity to pursue thermonuclear weapons. Strauss warned that the Soviet program might already be significantly advanced, and that, under such circumstances, retreating from the project on ethical grounds was no longer feasible.²³

The report submitted to President Truman did not settle the fate of the hydrogen bomb. In order to assist in reaching a decision on this critical issue, Truman appointed Secretary of State Dean Acheson and Secretary of Defense Louis Johnson, along with the Chairman of the Atomic Energy Commission, David Lilienthal, as a special committee under the National Security Council on 19 November 1949. The purpose of this committee was to provide advice and to analyze all dimensions of the issue, including technical, military, and political factors, and to submit recommendations on how Washington should proceed with the development and production of the hydrogen bomb.²⁴

Senator McMahon, Chairman of the Joint Committee on Atomic Energy, was a strong supporter of developing the "super" bomb. He condemned the recommendations of the Atomic Energy Commission as a defeatist response to an immoral adversary and criticized what he viewed as a complacent attitude toward Soviet progress among opponents of the American

hydrogen bomb. in a letter to President Truman dated 21 November 1949, McMahon urged continuation of the U.S. program, arguing that the Kremlin sought to overcome its setback in the nuclear arms race by achieving thermonuclear superiority. He warned that allowing the Soviet Union access to fissionable materials and to develop thermonuclear weapons first would make catastrophe inevitable, whereas reaching that goal first offered the only chance for security.²⁵

Accordingly, on 31 January 1950 the special committee submitted its conclusions, recommending that President Truman direct the Atomic Energy Commission to assess the technical feasibility of a thermonuclear weapon and determine,²⁶ jointly with the Pentagon, the appropriate scale and pace of effort. It also advised instructing the Secretaries of State and Defense to reassess U.S. objectives in peace and war and their implications for strategic planning in light of the atomic bomb and the potential Soviet acquisition of a thermonuclear weapon. The committee further recommended that Truman publicly announce his administration's intention to proceed with production.²⁷ After Secretary of State Acheson presented the report, Truman asked whether Moscow was capable of producing a hydrogen bomb. When the committee confirmed this possibility, he concluded that there was no alternative but to move forward. Following a brief meeting, Truman approved the recommendations and ordered the Atomic Energy Commission to continue work on all nuclear weapons, including the thermonuclear bomb, declaring that it was his responsibility as Commander in Chief to ensure the nation's ability to defend itself until an acceptable plan for international control of atomic energy could be achieved.²⁸

Based on the preceding documentary evidence, it can be argued that Washington refused to acknowledge Soviet nuclear progress, as such recognition would have underscored its inability to monitor and contain the Soviet Union's nuclear activities. Rather than seeking effective means to end nuclear possession, the United States moved toward the development of thermonuclear weapons in pursuit of nuclear superiority. This approach exposed the underlying reality of American political maneuvering within the United Nations: the objective was not the elimination of nuclear weapons, but the prevention of Moscow's acquisition of them. Despite Washington's awareness that the Soviet leadership would not accept any system of control or supervision over nuclear energy—given its implications for political interference, infringement upon sovereignty, and a reduction in international standing—the United States nonetheless made the suspension of nuclear armament contingent upon Soviet consent, a condition that was difficult to achieve.

Following the Soviet nuclear test, Secretary of State Dean Acheson instructed the Policy Planning Staff to reassess U.S. international control policy. The agency concluded that the Truman administration should withdraw the Baruch Plan from UN negotiations, warning that its implementation would not serve U.S. national security. George Kennan, a Foreign Service advisor, opposed reliance on nuclear weapons and the Baruch Plan as official policy, arguing that nuclear arms complicated diplomacy and heightened the risk of war, and advising that international control be deprioritized if nuclear reliance continued. Despite Kennan's warnings, Acheson and Truman ignored his recommendations.⁽²⁹⁾ On 22 February 1950, Truman publicly reaffirmed: "Our position on the international control plan will not change... We are making every effort to enforce international control, and this remains the foundation of our foreign policy".³⁰

Based on the recommendation of Secretary of Defense Louis Johnson, who expressed concern on 1 March 1950 that the Soviet nuclear program might have made significant progress in weapons development, potentially undermining U.S. national security, President Truman approved the immediate implementation of his decision to pursue the full-scale development of thermonuclear weapons, their production means, and delivery systems.³¹ Consequently, Truman accepted Johnson's advice and directed the Atomic Energy Commission to produce thermonuclear materials, test the feasibility of thermonuclear principles, and develop the thermonuclear weapon as quickly as possible.³²

Accordingly, the National Security Council paper indicated that it would be impossible to achieve an effective international control plan unless the Kremlin's intentions were thwarted to the point of producing a genuine and fundamental change in Soviet policies. Negotiations with the Soviet Union on nuclear weapons were described as merely tactical, with Moscow's true objective being the elimination of U.S. nuclear capabilities. While U.S. nuclear strength was deemed sufficient to deliver a powerful strike against Moscow and secure victory, this alone was not considered adequate to enhance America's position in the Cold War. The paper recommended continuing such tactics to gain domestic and international support for countering Kremlin initiatives and reducing the risk of direct conflict, which could only be accomplished through increased efforts in nuclear research, development, and intelligence.³³

Meanwhile, U.S. intelligence intensified efforts to protect nuclear technology secrets, including sensitive information and critical facilities, without disrupting ongoing operations. Its primary focus was to sever the most important sources of information for the Soviet nuclear program, namely espionage. On 23 May 1950, U.S. authorities arrested chemist Harry Gold on charges of spying for the Soviet Union; his confession revealed that he acted as a liaison between Klaus Fuchs and the Soviet network. On 17 June 1950, David Greenglass was arrested and disclosed a spy ring that included Julius Rosenberg, his wife Ethel Rosenberg, and Soviet Vice Consul Anatoly Yakovlev. Greenglass admitted to providing, since November 1944, information about the Los Alamos laboratory and technical details concerning nuclear weapon design to the Rosenbergs. These revelations demonstrated that Fuchs was not an isolated case of espionage but part of an organized Soviet intelligence operation against the U.S. nuclear project.³⁴

Following the Soviet nuclear test, the U.S. administration initiated a rearmament program and expanded nuclear energy facilities. On 7 July 1950, President Truman requested \$260 million from Congress to increase the Atomic Energy Commission's production capacity for nuclear and thermonuclear weapons, aiming to maintain U.S. leadership and prevent Soviet advances.³⁵ He stressed that, without an international agreement on atomic control, Washington had to ensure the capacity to produce nuclear arms and remain ahead of potential rivals. Senator McMahon supported the request but warned against complacency, noting that the program's cost was manageable and that the Soviets were actively advancing. William Borden criticized the Commission's response as insufficient, advocating for expanded facilities at Hanford and Los Alamos to ensure rapid weapons production. Congress approved the funds on 2 January 1951.³⁶

While the U.S. administration worked to expand its nuclear capabilities, Moscow continued to reject international control over atomic energy in pursuit of parity with Washington in nuclear armament. On 3 October 1951, the U.S. government announced the discovery that the Soviet Union had conducted a second nuclear test, emphasizing that the test undermined Soviet credibility and its claims to restrict nuclear energy to peaceful uses.³⁷ This was followed by a statement from Stalin asserting the impossibility of negotiating a settlement on nuclear control, noting: "The nuclear arms gap has been perfectly closed by Moscow, such that a conditional prohibition on nuclear weapons can only be achieved after developing them to break the full American monopoly." The U.S. administration, through its ambassador in Moscow, criticized the statement, describing it as an aggressive declaration directed specifically against the United States and an attempt to threaten it through Soviet nuclear capability and the rejection of international oversight.³⁸

The Kremlin's insistence on continuing to strengthen its nuclear arsenal compelled the U.S. administration to further develop its own nuclear program and increase financial appropriations in order to achieve the highest possible defensive posture. On 17 January 1952, President Truman approved a broad program for the development of nuclear weapons.³⁹ The Atomic Energy Commission expressed reservations about this course, warning that the production of thermonuclear (hydrogen) weapons would further complicate efforts to monitor and prevent their proliferation. accordingly, on 28 April Truman appointed a committee of nuclear weapons experts and advisers from the national security and State Department establishments to assist in providing guidance on U.S. nuclear policy.⁴⁰ At its first meeting on 6 May, the committee urged the administration to halt nuclear testing, including the hydrogen bomb test scheduled for 1 November 1952, arguing that such a test would provide a strong incentive for the Soviet Union to acquire the weapon. It cautioned that the Soviet Union might already possess advanced knowledge of its design and that such a test could offer Soviet scientists valuable and conclusive guidance for developing this type of weapon. The committee further proposed exploring the possibility of reaching an agreement with the Soviet Union to suspend nuclear tests by both sides, with mutual inspections conducted by a neutral United Nations body granted access to nuclear weapons production facilities.⁴¹

Notably, Truman's decision to further expand the nuclear weapons program was primarily driven by the Soviet challenges following their nuclear detonations. His repeated resort to establishing advisory committees—though not unprecedented—reflected an effort to base political decisions on the scientific, technical, political, and military analyses of their members. This demonstrated the influential role of elites and official agencies in U.S. political decision-making. For instance, the committee's recommendation to halt thermonuclear testing highlighted concerns over an excessive nuclear arms race that could complicate monitoring and non-proliferation efforts. This concern was further reinforced by the insistence on the inspection of Soviet facilities to assess the progress of the Soviet nuclear program and the extent of their nuclear production capabilities. Such assessments were particularly difficult given the strict secrecy imposed by the Soviet Union on its nuclear program and the broader political system, coupled with the pervasive lack of mutual trust between the two nations. accordingly, on October 9, 1952, Truman ordered the postponement of the thermonuclear bomb test, directing that arrangements be made to delay the shipment of test equipment and to create additional technical obstacles to prevent the test from occurring before the U.S. presidential election scheduled for November 4, 1952. He instructed the Chairman of the Atomic Energy Commission, Gordon Dean, to ensure these measures were implemented. Truman did not specify the reasons for the postponement or clarify the circumstances regarding the decision to proceed with the test as planned. Nevertheless, the thermonuclear detonation was carried out on November 1, 1952, and no official statement was released concerning this successful test of the first American hydrogen bomb.⁴²

Conclusion

After tracing U.S. policy toward the Soviet nuclear threat, this study identifies several core findings. First, U.S. efforts to prevent the Soviet Union from acquiring nuclear weapons ultimately failed—not simply because particular plans or projects were deficient, but because a strategy of denial was inherently unsustainable amid the diffusion of scientific knowledge and technological capability. Following the first Soviet nuclear test in 1949, Washington's objective shifted from preventing Soviet nuclear acquisition to consolidating qualitative superiority and expanding American nuclear capacity. Initiatives pursued through the United Nations and via bilateral channels further demonstrated that the absence of mutual trust rendered diplomatic instruments of denial largely symbolic rather than genuinely effective, especially given the Kremlin's conviction that nuclear capability was a prerequisite for sovereignty and national security.

Second, U.S. planning for confronting the Soviet nuclear threat marked a qualitative transition from a logic of nuclear monopoly to a logic of strategic management of nuclear risk. As Washington recognized that Soviet nuclear capability had become an established reality, the centerpiece of U.S. planning no longer centered on preventing the adversary from obtaining nuclear capacity, but rather on reorganizing the foundations of American power to preserve strategic superiority. At the same time, this planning exposed internal tensions within the U.S. decision-making process, reflected in the divergence between military perspectives favoring unconstrained expansion of nuclear capabilities and civilian perspectives seeking to regulate such expansion within broader political considerations. This divergence underscores that U.S. nuclear planning emerged from institutional bargaining rather than unilateral decision-making.

Third, the study clarifies the role of U.S. agencies responsible for formulating policy and developing plans regarding Soviet nuclear armament, and their participation in U.S. decision-making toward the Soviet Union. These agencies played an influential role in shaping plans and in reaching decisive policy choices, thereby reducing doubts about their credibility among other individuals and institutions involved in the policy process.

Finally, the study finds that U.S. nonproliferation policy constituted an extension of a broader shift in American strategic thinking—from a focus on bilateral arms competition toward the management of a multilateral international nuclear order. In Washington's view, the principal threat was no longer limited to the Soviet Union; it increasingly stemmed from the risk of nuclear weapons spreading to new powers that could undermine the stability of the nuclear balance between the two superpowers. The United States approached nonproliferation as an instrument for protecting the existing strategic balance

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rather than as a step toward disarmament. Accordingly, U.S. policy aimed to entrench the prevailing nuclear status quo and to prevent allies and adversaries alike from acquiring nuclear weapons, thereby ensuring Washington's continued ability to manage the margins of deterrence and the dynamics of international alliances.

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¹ Donald P. Steury, "How the CIA Missed Stalin's Bomb: Dissecting Soviet Analysis, 1946–1950," *Studies in Intelligence* 49, no. 1 (2005): 3.

² Henry S. Lowenhaupt, "Chasing Bitterfeld Calcium: Tracing an Ingredient for the Soviet Atomic Bomb," *Studies in Intelligence*, no. 3 (1973): 21.

³ David Holloway, *Stalin and the Bomb: The Soviet Union and Atomic Energy, 1939–1956* (New Haven: Yale University Press, 1994), 197.

⁴ *Foreign Relations of the United States, 1949*, vol. I, National Security Affairs, doc. 158, "Report by the Policy Planning Staff," Washington, 7 February 1949, 420.

⁵ *Foreign Relations of the United States, 1949*, vol. I, National Security Affairs, doc. 160, "The Chairman of the United States Atomic Energy Commission (Lilienthal) to the Chairman of the Joint Congressional Committee on Atomic Energy (McMahon)," Washington, 18 February 1949, 431.

⁶ Richard Rhodes, *Dark Sun: The Making of the Hydrogen Bomb* (New York: Simon & Schuster, 1995), 351.

⁷ Rhodes, *Dark Sun*, 362.

⁸ *Foreign Relations of the United States, 1949*, vol. I, National Security Affairs, doc. 174, "The Chairman of the Joint Congressional Committee on Atomic Energy (McMahon) to the Secretary of Defense (Johnson)," Washington, 14 July 1949, 483.

⁹ *Foreign Relations of the United States, 1949*, vol. I, National Security Affairs, doc. 187, "Report by the Policy Planning Staff," Washington, 16 August 1949, 515.

¹⁰ Holloway, *Stalin and the Bomb*, 216.

¹¹ Jeffrey Richelson, *Spying on the Bomb: American Nuclear Intelligence from Nazi Germany to Iran and North Korea* (New York: Norton & Company, 2007), 13.

¹² National Security Archive, "Detection of the First Soviet Nuclear Test, September 1949 ('The Detection of Joe 1')," *Nuclear Vault* (briefing book), September 9, 2019, accessed January 9, 2026, <https://nsarchive.gwu.edu/briefing-book/nuclear-vault/2019-09-09/detection-first-soviet-nuclear-test-september-1949>.

¹³ Richard G. Hewlett and Francis Duncan, *Atomic Shield, 1947–1952: A History of the United States Atomic Energy Commission*, vol. 2 (Pennsylvania State University Press, 1972), 367.

¹⁴ United Nations Office for Disarmament Affairs, *Documents on Disarmament 1945–1956*, vol. 1, "Statement by President Truman Regarding Atomic Explosion in the Soviet Union," No. 37 (23 September 1949), 207.

¹⁵ *Foreign Relations of the United States, 1949*, vol. V, *Eastern Europe; The Soviet Union*, doc. 383, "The Ambassador in the Soviet Union (Kirk) to the Secretary of State," Moscow, 25 September 1949, 657.

¹⁶ Michael Gordin, *Red Cloud at Dawn: Truman, Stalin, and the End of the Atomic Monopoly* (New York: Farrar, Straus and Giroux, 2009), 65.

¹⁷ Hewlett and Duncan, *Atomic Shield, 1947–1952*, 412.

¹⁸ Lewis Strauss, *Men and Decisions* (New York: Doubleday & Company, 1962), 216–18.

¹⁹ *Foreign Relations of the United States, 1949*, vol. I, National Security Affairs, doc. 207, "Memorandum by the Executive Secretary of the National Security Council (Souers)," Washington, 10 October 1949, 560.

²⁰ Hewlett and Duncan, *Atomic Shield, 1947–1952*, 371.

²¹ *Foreign Relations of the United States, 1949*, vol. I, National Security Affairs, doc. 211, "The Chairman of the General Advisory Committee (Oppenheimer) to the Chairman of the United States Atomic Energy Commission (Lilienthal)," Washington, 30 October 1949, 570.

²² *Foreign Relations of the United States, 1949*, vol. I, National Security Affairs, doc. 213, "The Chairman of the United States Atomic Energy Commission (Lilienthal) to President Truman," Washington, 9 November 1949, 577.

²³ *Foreign Relations of the United States, 1949*, vol. I, National Security Affairs, doc. 219, "Mr. Lewis L. Strauss, Member of the United States Atomic Energy Commission, to President Truman", 597.

²⁴ *Foreign Relations of the United States, 1949*, vol. I, National Security Affairs, doc. 216, "President Truman to the Executive Secretary of the National Security Council (Souers)," Washington, 19 November 1949, 588.

²⁵ Foreign Relations of the United States, 1949, vol. I, National Security Affairs, doc. 217, “The Chairman of the Joint Committee on Atomic Energy (McMahon) to President Truman,” Los Angeles, 21 November 1949, 589.

²⁶ Foreign Relations of the United States, 1950, vol. I, National Security Affairs, doc. 162, “Report by the Special Committee of the National Security Council to the President,” Washington, 31 January 1950, 517.

²⁷ McGeorge Bundy, *Danger and Survival: Choices About the Bomb in the First Fifty Years* (New York: Vintage Books, 1990), 213.

²⁸ Harry S. Truman, “Statement by the President on the Hydrogen Bomb,” in *Public Papers of the Presidents of the United States: Harry S. Truman, 1950*, no. 26 (31 January 1950), 138.

²⁹ Shane J. Maddock, *Nuclear Apartheid: The Quest for American Atomic Supremacy from World War II to the Present* (Chapel Hill: University of North Carolina Press, 2010), 74.

³⁰ Harry S. Truman, “Address on Foreign Policy at the George Washington National Masonic Memorial,” in *Public Papers of the Presidents of the United States: Harry S. Truman, 1950*, no. 42 (22 February 1950), 171.

³¹ Foreign Relations of the United States, 1950, vol. I, National Security Affairs, doc. 168, “Memorandum by the Executive Secretary of the National Security Council (Lay),” Washington, 1 March 1950, 539.

³² Hewlett and Duncan, *Atomic Shield, 1947–1952*, 417.

³³ Foreign Relations of the United States, 1950, vol. I, National Security Affairs, doc. 85, “A Report to the National Security Council by the Executive Secretary (Lay),” Washington, 14 April 1950, 266.

³⁴ Hewlett and Duncan, *Atomic Shield, 1947–1952*, 372.

³⁵ Harry S. Truman, “Statement by the President Regarding a Request for Supplemental Appropriations for the Atomic Energy Commission,” in *Public Papers of the Presidents of the United States: Harry S. Truman, 1950*, no. 187 (7 July 1950), 519.

³⁶ Foreign Relations of the United States, 1950, vol. I, National Security Affairs, doc. 196, “Editorial Note,” No.196, 2 January 1951, 590.

³⁷ Harry S. Truman, “Statement by Direction of the President Announcing an Atomic Explosion in the U.S.S.R.,” in *Public Papers of the Presidents of the United States: Harry S. Truman, 1951*, no. 246 (3 October 1951), 553.

³⁸ Foreign Relations of the United States, 1951, vol. I, National Security Affairs, doc. 146, “The Chargé in the Soviet Union (Cumming) to the Secretary of State,” Moscow, 6 October 1951, 538.

³⁹ Foreign Relations of the United States, 1952-1954, vol. II, part 2, National Security Affairs, doc. 4, “Memorandum for the President,” Washington, 17 January 1952, 852.

⁴⁰ Foreign Relations of the United States, 1952-1954, vol. II, part 2, National Security Affairs, doc. 17, “Minutes of the Meeting of the Secretary of State with the Panel of Consultants on Disarmament,” Washington, 28 April 1952, 897.

⁴¹ Foreign Relations of the United States, 1952-1954, vol. II, part 2, National Security Affairs, doc. 21, “Minutes of Meeting With the Panel of Consultants on Disarmament at the Department of State,” No.21, 6 May 1952, 918.

⁴² Harry Truman, *Years of Trial and Hope*, Doubleday, Garden City Doubleday, 1956, PP.313-314.