

The Debate

By the end of the 1940s, American scientists began to acknowledge the feasibility of a thermonuclear weapon. Though the technical challenges were daunting, few doubted they could be overcome. However, an even more fundamental question arose: *even if hydrogen bombs could be built, should they be?* A debate ensued, which included world renowned scientists, politicians, civil servants, and eventually the president himself.

Edward Teller

The debate among the scientists centered, largely, around the opinions of two men, Edward Teller and J. Robert Oppenheimer. Teller had championed the development of a super bomb since its theoretic proposal almost a decade hence. In fact, he worked on the principal of the "Super" at Los Alamos during the war. Teller stressed the need to remain ahead of the Soviets in the arms race, recognizing the ominous shadow Stalin's empire cast over Western Europe and beyond. Only a few years before, American scientists had raced to develop an atomic bomb before Hitler's Germany could accomplish the feat. To Teller, Stalin and his ideology were no less dangerous, and Soviet power could only be checked by American science.

J. Robert Oppenheimer

J. Robert Oppenheimer, chairman of the Atomic Energy Commission's (AEC) influential General Advisory Committee (GAC), felt much differently on the issue. Oppenheimer consistently demonstrated his approval of various types of fission bombs. However, he and several colleagues considered the hydrogen bomb a very different type of weapon. In the closing days of October 1949, the GAC prepared a report outlining its recommendations for H-bomb development. The report included an addendum, written by Harvard University President James B. Conant and signed by Oppenheimer, which stated, in part: "We believe a super bomb should never be produced... In determining not to proceed to develop the super bomb, we see a unique opportunity of providing by example some limitations on the totality of war and thus of limiting the fear and arousing the hopes of mankind."¹

Military Value

While the scientists debated the ethics of the hydrogen bomb, another debate raged over its military value. Conant's GAC addendum declared "the bomb might become a weapon of genocide," because "Its use would involve a decision to slaughter a vast number of civilians" and "there is no inherent limit in the destructive power that may be attained with them."² Robert Bacher, a Project Y physicist and former AEC commissioner, also questioned how useful a hydrogen bomb might be. In a May, 1950 Scientific-American article, he argued: "From the point of military effectiveness, there seems to be little reason to attach such great significance to the hydrogen bomb. While

it is a terrible weapon, its military importance seems to have been grossly overrated in the mind of the layman." Bacher added, "The most tragic part is that the hydrogen bomb will not save us and is not even a very good addition to our military potential."³ However, the Joint Chiefs of Staff (JCS), chaired by General Omar Bradley, unanimously recommended proceeding with the development project. In a November 1949 report, JCS stated: "possession of a thermonuclear weapon by the USSR without such possession by the United States would be intolerable."⁴ It became clear, certainly within military circles, that the hydrogen bomb's value came not in its tactical effectiveness but in its awesome power to deter.

Congressional Debate

The debate eventually reached Capitol Hill, where Senator Brien McMahon (D-Connecticut), chairman of the Joint Committee on Atomic Energy, energetically called for the H-bomb's immediate development. Many Democrats, Republicans, and soldiers agreed that further negotiations with the Soviets were hopeless. McMahon's broad coalition enjoyed overwhelming support from the public, but met determined opposition from within the federal government. McMahon's chief opponent was David E. Lilienthal, chairman of the AEC. Lilienthal's position, shared by most of his fellow commissioners and the GAC, stated the H-bomb "would not further the common defense, and it might harm us, by making the prospects of the other course - toward peace - even less good than they are now."⁵ Although Lilienthal could count on the support of Oppenheimer, Bacher, Enrico Fermi, and several other noted scientists, he faced equally resolute opponents such as Teller, Ernest Lawrence, McMahon, and fellow AEC commissioners, Gordon Dean and Lewis Strauss. Strauss, a conservative businessman, argued his case in a November 1949 letter addressed to President Truman. He reached the same conclusion as the JCS had: "The danger in the weapon does not reside in its physical nature but in human behavior. Its unilateral renunciation by the United States could very easily result in its unilateral possession by the Soviet Government. I am unable to see any satisfaction in that prospect."⁶ With a multitude of articulate opinions at his disposal, the president prepared to make a decision.

Truman's Decision

Truman formed a special committee of the National Security Council, made up of Secretary of State Dean Acheson, Secretary of Defense Louis Johnson, and the AEC chief, Lilienthal, to explore all aspects (scientific, military, political, etc.) of H-bomb development. Lilienthal, contrary to his previous stance, joined Acheson and Johnson, endorsing a plan to proceed with the "Super." With this final recommendation, the president issued a public statement on the matter: "It is part of my responsibility as Commander-in-Chief to see to it that our country is able to defend itself against any possible aggressor. Accordingly, I have directed the Atomic Energy Commission to continue its work on all forms of atomic weapons, including the so-called hydrogen or super-bomb."⁷

Though his dedication to the project is unquestionable, Truman really had no other choice. Only months before, the Soviets had detonated their first atomic bomb, Joe-1. The Soviet bomb was a copy of "Fat Man," based on plans provided by Klaus Fuchs, a German expatriate who served at Los Alamos under the auspices of the British Mission. For the first time, Americans realized Soviet spies had gained access to the nation's most closely guarded secrets. The brief reign the United States had enjoyed as the world's only nuclear power was over. Joseph Stalin had claimed a share of the atom's power; only the internal weakness of his own country and a few American warheads maintained the fragile parity between the two superpowers. The realities of global, Cold War politics had, in effect, necessitated an aggressive response from Truman.

¹As quoted in Herbert F. York, "The Debate over the Hydrogen Bomb," 109.

²York, "The Debate," 109.

³Robert F. Bacher, "The Hydrogen Bomb: III," *Scientific-American*, vol. 182, no. 5 (May 1950), 14.

⁴Omar Bradley and Clay Blair, *A General's Life* (New York: Simon and Schuster, 1983), 515.

⁵David E. Lillenthal, *The Journals of David E. Lillenthal Volume II: The Atomic Energy Years, 1945-1950* (New York: Harper and Row, 1964), 582. Diary entry for 10.30.49.

⁶Lewis L. Strauss, *Men and Decisions* (Garden City, NY: Doubleday, 1962), 220-1.

⁷Harry S. Truman, *Years of Trial and Hope, 1946-1952* (Garden City, NY: Doubleday, 1956), 309.