

TAMING THE WILD WEST: UNITED STATES
NUCLEAR POLICY (1945-1961)

A thesis presented to the Faculty of the U.S. Army
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fulfillment of the requirements for the
degree

MASTER OF MILITARY ART AND SCIENCE
Art of War Scholars

by

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The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

ABSTRACT

TAMING THE WILD WEST: UNITED STATES NUCLEAR POLICY (1945-1961), by Major David Jason Wyrick, 132 pages.

While the United States adopted several national policies regulating nuclear weapons during the late 1940s and 1950s, it would take until 1961 for the United States to have a cohesive operational plan for the employment of nuclear weapons. This was known as the Single Integrated Operational Plan (SIOP). Prior to the SIOP, combatant commanders independently developed theater nuclear war plans, leading to uncoordinated, redundant, and overlapping nuclear strikes. These independently formed plans led to a state of chaos much like the American wild west. When President Eisenhower directed creation of the first SIOP, known as SIOP-62, it revolutionized nuclear war planning and effectively tamed the wild west. The SIOP integrated the various military service plans and created a master plan for the nation in time of nuclear war eliminating much of the chaos caused by lack of coordination. Studying the period 1945-1961 provides nuclear planners and policy makers with the perspective needed to understand why current United States policies exist.

Since 1945, America has relied on nuclear weapons as the last line of defense and primary deterrent preventing communist aggression. The SIOP, therefore, is the ultimate protection plan against total war. However, did SIOP-62 make the world a safer place? Yes, it did; but the true value of SIOP-62 was not formation of the perfect plan. Instead, SIOP-62, codified a planning process that created a standard for all future war plans. The study of policy in this paper focuses on the events and people that shaped United States nuclear policy and formed the first SIOP.

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ACRONYMS

AEA	Atomic Energy Act
AEC	Atomic Energy Commission
CIA	Central Intelligence Agency
CINCSAC	Commander in Chief Strategic Air Command
CJCS	Chairman of the Joint Chiefs of Staff
DGZ	Designated Ground Zeros
DOD	Department of Defense
FY	Fiscal Year
ICBM	Intercontinental Ballistic Missile
IRBM	Intermediate Range Ballistic Missile
JCS	Joint Chiefs of Staff
JSTPS	Joint Strategic Target Planning Staff
NATO	North Atlantic Treaty Organization
NSA	National Security Act
NSC	National Security Council
NSTAP	National Strategic Targeting and Attack Policy
NSTL	National Strategic Target List
SAC	Strategic Air Command
SecDef	Secretary of Defense
SIOP	Single Integrated Operational Plan
SLBM	Submarine Launched Ballistic Missile
UN	United Nations
USSR	United Soviet Socialist Republic

WWI	World War I
WWII	World War II

CHAPTER 1

INTRODUCTION

August 6, 1945, changed warfare forever. The United States dropped an atomic bomb on Hiroshima, Japan, and began the age of atomic warfare. While President Franklin D. Roosevelt made the decision to develop the atomic bomb, President Harry S. Truman made the decision to use the weapon. However, the execution order did not come from either president but from General Thom Handy, the acting Chief of Staff of the Army.¹ Since 1945, much has changed regarding how the United States employs nuclear weapons, including strict controls that require the execution order to come directly from the president. While the United States adopted several national policies regulating nuclear weapons during the late 1940s and 1950s, it would take until 1961 for the United States to have a cohesive operational plan for the employment of nuclear weapons. This is known as the Single Integrated Operational Plan (SIOP). The SIOP integrated the various military service plans and created a master plan for the nation in time of nuclear war. The formation of the first SIOP represents joint operational planning for nuclear war that did not exist prior to its development.² Studying the period 1945-1961 provides nuclear planners and policy makers with the perspective needed to understand why current

¹ Department of the Army, Execution Order, 25 July 1945, in Richard Rhodes, *The Making of the Atomic Bomb* (New York: Simon and Schuster, 1986), 691.

² Headquarters Strategic Air Command, History and Research Division, *History of the Joint Strategic Target Planning Staff: Background and Preparation of SIOP-62* (partially declassified and released by Joint Secretariat, Office of the Joint Chiefs of Staff, April 1980), 28.

United States policies exist. The study of policy in this paper focuses on the events and people that shaped United States nuclear policy and formed the first SIOP.

From 1945-1961, three distinct groups emerged and contributed to the formation of national nuclear policy. These groups were the National Security Council (NSC), the Joint Chiefs of Staff (JCS) and the Strategic Air Command (SAC) nuclear planners.³ Each group saw its identity and powers evolve during this time, most notably due to the National Security Act of 1947 (NSA) and the 1949 amendment. The president, however, occupied a unique role at both ends of the hierarchy of nuclear weapons policy. The president was both the initiator of policy formation to the NSC and the end user of the nuclear war plans developed by SAC. Due to this unique system, nuclear weapons provide an excellent case study in how policy makers and planners interpret, manipulate, and use strategic guidance from the president to form subordinate policies.

Thesis Statement

Nuclear weapons provide a military force so powerful that only the president has the power to decide when to employ them. Nuclear war plans, therefore, become instruments of foreign policy and national security. Prior to development of the SIOP, each military command planned independently for nuclear war. When President Eisenhower directed creation of the first SIOP for nuclear war, which eventually became designated SIOP-62, it revolutionized nuclear war planning and created a standard for future war plans. However, when President Eisenhower received the details of SIOP-62

³ David Allen Rosenberg, "U.S. Nuclear War Planning, 1945-1960," in *Strategic Nuclear Targeting*, ed. Desmond Ball and Jeffrey Richelson (Ithaca, NY: Cornell University Press, 1986), 36-37.

he confided in his military assistant that it “frightened the devil out of me.”⁴ Later, when SIOP-62 went into effect on April 1, 1961, the Kennedy administration dismissed the Massive Retaliation plan with thousands of nuclear strikes against every communist and Sino-Soviet bloc country as “overkill.”⁵ Since 1945, America has relied on nuclear weapons as the last line of defense and primary deterrent preventing communist aggression.⁶ The SIOP, therefore, is our ultimate protection plan against total war. However, did SIOP-62 make the world a safer place or merely bring us closer to Armageddon? Perhaps it is time to reconsider how we formed the first operational plan for nuclear war.

This paper will attempt to explain the development of nuclear doctrine, and what it can teach nuclear planners about the current system of providing options to the president. In order to explain the evolution of doctrine, it is important to study the policies and strategies from the dawn of the nuclear age. This study examines the policies and decisions leading to formation of the first SIOP and draws conclusions to assist current nuclear planners and policy makers.

Methodology

Research for this thesis relied heavily on primary sources found in the Harry S. Truman Presidential Library, Dwight D. Eisenhower Presidential Library, and John F.

⁴ Scott D. Sagan, *Moving Targets: Nuclear Strategy and National Security* (Princeton, NJ: Princeton University Press, 1989), 25.

⁵ Headquarters Strategic Air Command, 28.

⁶ Lawrence Freedman, *The Evolution of Nuclear Strategy*, 3rd ed. (New York: Palgrave MacMillan, 2003), 39.

Kennedy Presidential Library. Source documents included many declassified NSC papers and commissioned reports. However, documents regarding the employment of nuclear weapons contain the nation's most guarded secrets and therefore much of the data remains classified. Fortunately, several partially declassified documents provided invaluable insight to nuclear planning during the 1940s and 1950s. The Office of the Historian for United States Strategic Command also provided a very thorough declassified history of the Joint Strategic Targeting Planning Staff and Strategic Air Command.

The primary source for SIOP-62 is a declassified (previously top secret) transcript of the September 13, 1961, briefing by General Lyman L. Lemnitzer, Chairman of the Joint Chiefs of Staff, to President John F. Kennedy detailing the nuclear war plan. While many scholars have written about the SIOP, Scott D. Sagan provided the best account featured in *International Security*, summer 1987, less than one year after the briefing was declassified.

This paper will follow a chronological account of events beginning with the death of President Franklin D. Roosevelt on April 12, 1945. This event marks both the beginning of the Truman administration and Truman's first knowledge of the atomic bomb, commonly known as the Manhattan Project. While Roosevelt authorized the Manhattan Project, he did not form any policies regarding the use or control of the completed atomic bomb. Therefore, policies regarding the use of the bomb began with President Truman. The presidential administrations of Truman, Eisenhower, and Kennedy form the structure of chapters 2, 3, and 4. The chronology ends with the presentation of the SIOP briefing to President John F. Kennedy on September 13, 1961.

Kennedy immediately dismissed the plan and its strategy of Massive Retaliation. Therefore, this event marks both Kennedy's official knowledge of the plan and the moment the plan became obsolete.

Notable Works

This section identifies various books and articles representing the best scholarly accounts of the historical events surrounding formation of the SIOP. While these works do not constitute an exhaustive list of historical Cold War literature, they represent the seminal works covering specific aspects of the development of nuclear strategy, policy, and doctrine. This list provides an excellent starting point for anyone studying United States nuclear strategy. This section provides an introduction of the author and brief description of the overall relevance of each work.

Lawrence Freedman, *The Evolution of Nuclear Strategy*: Freedman is a professor of War Studies at Kings College in London. He is a noted historian, strategist, and former foreign policy advisor to Prime Minister Tony Blair. Freedman gives a very detailed account of the history of nuclear weapons strategy from Hiroshima to the Gulf War by evaluating the public policies and politics that shape American and allied use of nuclear weapons.⁷

Scott D. Sagan, *Moving Targets Nuclear Strategy and National Security*: Sagan is a professor of political science at Stanford University in California. He is an outspoken advocate for non-proliferation and nuclear arms control. Sagan is an award-winning scholar and in his book, *Moving Targets* addresses questions such as, does the United

⁷ Freedman, *The Evolution of Nuclear Strategy*, xi-xix, cover.

States nuclear doctrine enhance or decrease the likelihood of nuclear war? To answer these questions, Sagan analyzes the operational planning of nuclear war to include the SIOP and leans heavily on experiences gained while developing United States nuclear strategy during his Council International Affairs Fellowship with the Joint Staff at the Pentagon, 1984-1985.⁸

Richard Rhodes, *The Making of the Atomic Bomb*: Richard Rhodes, a historian and author, wrote the definitive history of the development of the atomic bomb. *The Making of the Atomic Bomb* chronicles the Manhattan Project including a detailed account of the dropping of the bombs on both Hiroshima and Nagasaki. Understanding development of the bomb provides perspective to our only use of the atomic weapons, an event that shaped our understanding of the weapons in the future. Published in 1986, the book won many awards including the Pulitzer Prize. Rhodes also wrote *Dark Sun: The Making of the Hydrogen Bomb*, in 1995, a historical account of the making of the hydrogen bomb.⁹

Peter Douglas Feaver, *Guarding the Guardians: Civil Control of Nuclear Weapons in the United States*: Feaver is a professor of political science at Duke University. He served on the National Security Councils for former Presidents George W. Bush and William J. Clinton. He was an officer in the Naval Reserves and is a leading scholar of civil-military relations. *Guarding the Guardians* is a published version of Feaver's Ph.D. dissertation at Harvard University. In this book, Feaver details the

⁸ Sagan, *Moving Targets: Nuclear Strategy and National Security*, xi-9.

⁹ Rhodes, *The Making of the Atomic Bomb*, cover; Richard Rhodes, "Richard Rhodes," accessed May 17, 2015, www.richardrhodes.com.

evolution of civilian control of weapons, targeting, and code systems associated with development of the SIOP. He contrasts administrative policies of assertive versus delegative control and concludes that to be effective, policy must balance the two ideas and trust both civilian and military leaders to uphold their duty to the nation.¹⁰

Colin S. Gray, *Strategic Studies and Public Policy: The American Experience*: Gray is a professor of International Politics and Strategic Studies at the University of Reading in England. He has written extensively on the effect national security strategy has on foreign policy. His 1982 book, *Strategic Studies and Public Policy*, claims that many of the significant events in recent American history, such as the Vietnam War, are the result of continual misjudgments of our relationship with the Soviet Union and failures in foreign policy in the post-nuclear age. This account explains misunderstandings of the strategy of Containment and Massive Retaliation used to form the SIOP.¹¹

John Lewis Gaddis, *Strategies of Containment: A Critical Appraisal of Postwar American National Security Policy*, and *We Now Know, Rethinking Cold War History*: Gaddis is a professor of Naval and Military History at Yale University. He has published numerous works on Cold War history and particularly on the influence of George F. Kennan and the strategy of Containment. In 1997, Gaddis wrote a synthesis of the Cold War history drawing on extensive research in newly available Russian archives, titled *We Now Know, Rethinking Cold War History*. In this book, he identifies Joseph Stalin as the

¹⁰ Peter Douglas Feaver, *Guarding the Guardians: Civilian Control of Nuclear Weapons in the United States* (Ithaca, NY: Cornell University Press, 1992), 252-253.

¹¹ Colin S. Gray, *Strategic Studies and Public Policy: The American Experience* (Lexington: The University Press of Kentucky, 1982), 1-10.

central personality making the Cold War inevitable and effectively explains the rationale for United States nuclear strategy during the Cold War. In 2012, Gaddis won the Pulitzer Prize for his biography of George F. Kennan.¹²

Samuel R. Williamson, Jr., and Steven L. Rearden, *The Origins of US Nuclear Strategy, 1945-1953*: Williamson and Rearden trace the origins of United States nuclear strategy directly to the Truman Administration. Their account asserts that Truman did not want to rely on atomic bombs, but his own policies sabotaged efforts to reduce their role in foreign policy. The book relies heavily on personal accounts of events found in memoirs and diaries. It attempts to put the development of nuclear strategy and the impact of presidential policies in perspective using personal and private accounts.¹³

Scott D. Sagan, “SIOP-62: The Nuclear War Plan Briefing to President Kennedy,” In this article Sagan analyzes the declassified transcript of the briefing given by General Lyman L. Lemnitzer, Chairman of the Joint Chiefs of Staff to President Kennedy. The briefing details the plan as approved by President Eisenhower as the product of the New Look. Sagan’s article, written in 1987, used the recently declassified briefing transcripts to identify the myth of the “missile gap” and the lack of flexibility of

¹² John Lewis Gaddis, *Strategies of Containment: A Critical Appraisal of Postwar American National Security Policy* (New York: Oxford University Press, 1982), vii-xi, cover; John Lewis Gaddis, *We Now Know: Rethinking Cold War History* (New York: Oxford University Press, 1998), vi-x, cover.

¹³ Samuel R. Williamson, Jr. and Steven L. Rearden, *The Origins of U.S. Nuclear Strategy, 1945-1953* (New York: St. Martin’s Press, 1993), ix-xi.

the nuclear war plan to advocate for greater involvement by civilian leaders in formulating nuclear strategy and the SIOP.¹⁴

Richard Smoke, *National Security and the Nuclear Dilemma: An Introduction to the American Experience in the Cold War*: Smoke is a professor of Political Science at Brown University. His book, *National Security and the Nuclear Dilemma*, provides an easily understandable explanation of the link between national security policy and the historic events that led to their development. Written in 1993, the book provides a consistent overview of the American way of war through the Cold War and the fall of the Soviet Union.¹⁵

David Allen Rosenberg, “The Origins of Overkill: Nuclear Weapons and American Strategy, 1945-1960”: Rosenberg, a military historian and former professor at the National War College, uses declassified documents and scholarly research to describe the evolution of United States nuclear war plans. His chronology culminates with the approval of the first SIOP.¹⁶

Fred Kaplan, *The Wizards of Armageddon*: Kaplan, a Pulitzer Prize winning journalist received his Ph.D. in Political Science from Massachusetts Institute of Technology. In this book, Kaplan presents an extremely readable and relatable account of

¹⁴ Scott D. Sagan, “SIOP-62: The Nuclear War Plan Briefing to President Kennedy,” *International Security* 12, no. 1 (Summer 1987): 22-51.

¹⁵ Richard Smoke, *National Security and the Nuclear Dilemma: An Introduction to the American Experience in the Cold War*, 3rd ed. (New York: McGraw-Hill, 1993), v-xii, cover.

¹⁶ David Allen Rosenberg, “Origins of Overkill: Nuclear Weapons and American Strategy, 1945-1960,” in *Strategy and Nuclear Deterrence*, ed. Steven E. Miller (Princeton, NJ: Princeton University Press, 1984), ix-xiii.

the civilian strategists that shaped how the United States use nuclear weapons. Kaplan details the service of the brilliant men, mostly working for or associated with the RAND Corporation, providing the strategy that drove national nuclear policy and formation of the SIOP.¹⁷

Contributors to Nuclear Strategy

This section introduces the people that made the history. They lived through uncertain times and toiled over what they felt was best for America. For better or worse, they formed the nuclear strategy. This list provides a cursory overview of the key contributors to nuclear strategy. Later chapters of this paper chronicle a more detailed account of their contributions.

Bernard Brodie: Brodie, a Yale professor (1945-1951) and later RAND Corporation staff member (1951-1966) wrote the first book on nuclear strategy in 1946 entitled, *The Absolute Weapon: Atomic Power and World Order*. This book introduced the fundamentals of nuclear deterrent strategy stating, “Thus far the chief purpose of our military establishment has been to win wars. From now on, its chief purpose must be to avert them. It can have almost no other useful purpose.”¹⁸ Nuclear strategists still accept Brodie’s ideas of nuclear deterrence theory as valid today.¹⁹

¹⁷ Fred Kaplan, *Wizards of Armageddon* (Stanford, CA: Stanford University Press, 1991), 1-6, cover.

¹⁸ Bernard Brodie, ed., *The Absolute Weapon* (New York: Harcourt, Brace, 1946), 76.

¹⁹ Miller, x.

Arleigh Burke: Burke was Chief of Naval Operations from 1955-1961. He championed the Navy's inclusion in the nuclear mission by introducing the first Polaris submarines, a vital component of the strategic nuclear triad. He convinced Eisenhower to include the Navy in nuclear war planning leading to creation of the Joint Strategic Target Planning Staff (JSTPS) and the SIOP.²⁰

John Foster Dulles: Dulles was Secretary of State for President Eisenhower, 1953-1959. A passionate anti-communist, Dulles coined the term "Brinkmanship" in an article for *Life* magazine where he stated, "If you are afraid to go to the brink, you are lost."²¹ In a 1954 speech, he outlined the key nuclear strategy of the Eisenhower administration known as Massive Retaliation that became the basis for the SIOP. That same year, at the age of sixty-six, *Time* magazine named him "Man of the Year."²²

Dwight D. Eisenhower, President (1953-1961): President Eisenhower adopted the nuclear strategy of Massive Retaliation and commissioned the New Look to conduct a review of the nuclear targeting plans. Upon learning that military commanders had developed multiple war plans to independently employ nuclear weapons without coordination, he directed formation of the SIOP.²³

Leslie M. Groves: Groves was head of the Manhattan Engineering District, the secret military organization created to develop the atomic bomb, commonly known as the

²⁰ Freedman, 157, 227.

²¹ Kaplan, 180-181.

²² "The Nation: Man of the Year," *Time*, January 3, 1955, accessed May 23, 2015, <http://content.time.com/time/magazine/article/0,9171,892871,00.html>.

²³ Freedman, 76-79.

Manhattan Project. In addition, he led the Target Committee to select the targets for Fat Man and Little Boy, the atomic bombs used during World War II (WWII). He also wrote the order signed by General Handy directing the 509th Composite Group to drop the atomic bombs on Hiroshima and Nagasaki. Groves, an iconic WWII general, set many precedents for use of nuclear weapons including target selection criteria.²⁴

George F. Kennan: American diplomat to the Soviet Union in 1946, Kennan was asked by the State Department to assess the status of United States and Soviet foreign relations. He replied with an 8,000-word cable that identified the Soviet ambitions for expansion and outlined a policy of Containment to limit Soviet influence. Containment became the cornerstone of United States policy regarding the Soviet Union and heavily influenced the SIOP. Kennan later served as the Director of the Policy Planning Staff at the State Department and heavily influenced United States and Soviet relations throughout his tenure.²⁵

Curtis LeMay: LeMay is best known as the father of SAC. He was the longest serving commander of SAC from 1948-1957. He was a key Army-Air Corps (later, Air Force) commander and actively involved in many famous air campaigns throughout his career such as, the fire-bombing raids on Japan; the bombing of Hiroshima and Nagasaki, Japan; and the Berlin Airlift. LeMay personally oversaw creation of the nuclear war plans and heavily influenced the acquisition of bomber aircraft to support the SIOP strategy of Massive Retaliation. In 1961, LeMay became Chief of Staff of the Air Force and retired

²⁴ Leslie M. Groves, *Now It Can Be Told: The Story of the Manhattan Project* (New York: De Capo Press, 1983), iii-xviii, cover.

²⁵ Gaddis, *Strategies of Containment*, 25-26.

in 1965 to run as the vice presidential candidate with George Wallace as nominees of the American Independence Party.²⁶

Paul H. Nitze: In 1945, Nitze served as Director of the Strategic Bombing Survey for Hiroshima and Nagasaki, Japan. He later replaced George F. Kennan as Director of the Policy Planning Staff at the State Department. In 1949, Nitze authored NSC-68, a key policy memorandum that called for build-up of conventional and nuclear forces to combat the Soviet threat. His policies assisted with developing the hydrogen bomb and creating the United States and Soviet strategic arms race that characterized the SIOP as a capabilities based plan. Nitze continued to serve as an advisor for several United States presidents including Eisenhower and Kennedy.²⁷

Robert J. Oppenheimer: Oppenheimer was Director of the Los Alamos Laboratory during the Manhattan Project where his team developed and produced the atomic bombs dropped on Hiroshima and Nagasaki, Japan.²⁸ After WWII, he served as Chairman of the General Advisory Committee of the Atomic Energy Commission providing technical advice for use and control of nuclear weapons. Oppenheimer later had his security clearance revoked by Congress resulting from hearings investigating his pre-war affiliation to the Communist Party.²⁹

²⁶ Kaplan, 42-44.

²⁷ Ibid., 136-141.

²⁸ Charles R. Loeber, *Building the Bombs: A History of the Nuclear Weapons Complex*, 2nd ed. (Albuquerque, NM: Sandia National Laboratories, 2005), 24. This site was originally called the Los Alamos Laboratory. In 1947, its name was changed to the Los Alamos Scientific Laboratory. In 1979, it was renamed the Los Alamos National Laboratory.

²⁹ Loeber, *Building the Bombs*, 17-18, 102-106.

Henry L. Stimson: Born in 1867, Stimson served as Secretary of War (1911-1913) under President William Howard Taft and Secretary of State (1929-1933) under President Herbert Hoover. Once again serving as Secretary of War during WWII (1940-1945), Stimson chaired the Interim Committee that recommended use of the atomic bomb against Japan.³⁰

Edward Teller: Teller managed the Los Alamos research and development of the hydrogen bomb. His tenacious pursuit of a thermonuclear weapon led to the design of using radiation from a primary explosion to compress a secondary explosion causing a super critical mass. This design revolutionized nuclear weapons creating the super bomb. The super bomb changed nuclear war planning by greatly increasing the destructive power of weapons and thereby increasing the amount of overkill that was characteristic of the SIOP. Teller famously testified against Oppenheimer to Congress leading to removal of Oppenheimer's security clearance and fueling a long-term animosity between the physicists. Teller left Los Alamos and helped form Lawrence Livermore National Laboratory becoming Director in 1958. Some believe the relationship between Teller and Oppenheimer is at the heart of a rivalry between Lawrence Livermore and Los Alamos National Laboratories that still fuels competition between the labs today.³¹

Harry S. Truman, President (1945-1953): President Truman is the only president to authorize use of the atomic bomb against an enemy. It is noteworthy that he made this decision only four months after first learning of the existence of the atomic bomb project.

³⁰ Rhodes, *The Making of the Atomic Bomb*, 617-618.

³¹ Loeber, 95-96, 104-106, 113-114.

He continued to serve as president for almost two full terms and during his administration wrote many of the foundational policies regarding use and control of nuclear weapons.³²

Albert Wohlstetter: A RAND Corporation analyst from 1951-1970, Wohlstetter authored a 1958 paper entitled “The Delicate Balance of Terror,” identifying the vulnerability of SAC bases to a surprise nuclear attack. He argued that this vulnerability could invite aggression and would lead to instability. This influenced formation of SAC’s massive first-strike nuclear options designed to use them or lose them. Wohlstetter heavily influenced both the nuclear strategy and nuclear stockpile used in the SIOP.³³

Key Terms

It is important to define a few terms and phrases used when discussing nuclear doctrine and strategy. While this list is not all-inclusive, it should reduce the ambiguity often resulting from such discussions. The following list will assist in navigating this paper and provide a common lexicon for the discussion.

Containment: United States strategy for controlling (or containing) Soviet expansionism adopted by President Truman and first introduced by George F. Kennan in 1946.³⁴

Counter-force Strategy: Nuclear strategy that targets the enemy’s military forces in an effort to threaten strategic capabilities, such as bomber bases and missile silos.³⁵

³² Williamson and Rearden, 189, 192.

³³ Kaplan, 94-97.

³⁴ Gaddis, *Strategies of Containment*, 27.

³⁵ Richard Smoke, *National Security and the Nuclear Dilemma: An Introduction to the American Experience in the Cold War* (New York: McGraw-Hill, 1993), 111.

Counter-value Strategy: Nuclear strategy that targets the enemy's cities and industrial districts in an effort to threaten what the enemy valued most, their population and economy.³⁶

Deterrence: The ability to discourage or prevent someone from acting.³⁷ Nuclear deterrence refers to the ability to prevent enemy action by threatening nuclear war. Deterrence can never be proved successful because one never knows whether the opponent did not attack because he was deterred or for some other reason.³⁸ Deterrence theorists argue that the ability to deter a nuclear attack requires the ability to retaliate after receiving the attack creating the fear of retaliation.³⁹

First Strike Capability: More than the ability to strike first, it represents the ability to make a disarming strike or the ability to strike first and destroy the enemy's ability to effectively strike back. First strikes inherently focus on counter-force targets.⁴⁰

Flexible Response: Nuclear strategy adopted by President Kennedy and SecDef Robert S. McNamara to replace Eisenhower's Massive Retaliation strategy. Flexible Response included smaller nuclear options and controlled negotiating pauses to provide opportunities to end the war.

³⁶ Ibid., 110.

³⁷ David M. Kunsman and Douglas B. Lawson, *A Primer on US Strategic Nuclear Policy* (Albuquerque: Sandia National Laboratories, 2001), 9.

³⁸ Smoke, 71-72.

³⁹ Freedman, 129.

⁴⁰ Freedman, 128; Smoke, 90.

Limited War: Wars fought for limited objectives without mobilizing the nation's full economic or industrial capability. Korea was the first limited war for the United States.

Massive Retaliation: The nuclear strategy adopted by the Eisenhower administration. It called for large-scale atomic strikes against the United Soviet Socialist Republic (USSR) and China in the event they sponsored an attack on allies of the United States. The strategy was an attempt to prevent further limited wars such as Korea.⁴¹

Nuclear Triad: Nuclear force structure utilizing three complementing capabilities to employ nuclear weapons, each has a unique quality that provides effectiveness throughout nuclear war: Bomber aircraft are flexible due to the ability to recall the aircraft before weapon release; Intercontinental ballistic missiles (ICBM) are responsive due to their continuous alert status and ability to launch rapidly; and Submarine launched ballistic missiles (SLBM) are survivable due to the ability to launch missiles below water while remaining undetected.

Preemptive Attack: A counter-attack to an enemy nuclear strike that is on its way or about to be delivered in an effort to launch nuclear weapons before enemy strikes destroy them on the ground.⁴²

Preventive War: Deliberately initiating and waging a war before the enemy nuclear forces became a serious threat to national security.⁴³

⁴¹ Smoke, 337.

⁴² Sagan, "SIOP-62: The Nuclear War Plan Briefing to President Kennedy," 20.

⁴³ Ibid., 21.

Second Strike Capability: The ability to absorb an enemy's first strike (normally due to a superior number of weapons or survivability of forces) and retain enough forces to strike back effectively. Second strikes typically include more counter-value targets.⁴⁴

Total War: Wars utilizing the full economic, industrial, and military capability of the nation.

Conclusion

While historians debate whether the atomic bombs dropped on Hiroshima and Nagasaki directly ended WWII, one thing is clear, the use of these weapons marked the last total war effort of the United States. To prevent the re-emergence of total war, the president required the ability to wield nuclear weapons in such a way to threaten any adversary and assure every ally. From 1945-1961 nuclear war plans consisted of a series of independent and overlapping theater-level nuclear plans. The SIOP provided the president an integrated operational plan supporting a single strategy. The credibility of this strategy was based on the clear explanation of intent (declaratory policy), the forces available to execute the intent (force acquisition policy), and the actual plans to carry out the intent (employment policy).⁴⁵ These policies must complement one another to each be effective. If there is a wide gap between declaratory policy (what nations say they will do) and employment policy or force structure (what nations can do or have the forces to

⁴⁴ Freedman, *The Evolution of Nuclear Strategy*, 128; Smoke, 91.

⁴⁵ Desmond Ball, *Adelphi Paper No. 185: Targeting for Strategic Deterrence* (London: The International Institute for Strategic Studies, 1983), 37.

do it with), then the nation's nuclear war plans may be based on nothing more than a bluff.⁴⁶

Throughout history United States presidents relied on declaratory and force acquisition policies to regulate the untamed frontier of nuclear warfare. This is the story of how political and military leaders attempted to tame the Western frontier of nuclear warfare. SIOP-62 and its formation are the taming of the Wild West and provide an excellent historical case study in how practitioners of the operational art must adapt to a military revolution such as the emergence of nuclear weapons. The following chapters of this thesis will examine the policies formed from 1945-1961 in order to understand how they influenced the first national plan for nuclear operations, known as SIOP-62.

⁴⁶ Stephen J. Cimbala, "The SIOP," *Airpower Journal* (Summer 1988), accessed May 23, 2015, <http://www.airpower.maxwell.af.mil/airchronicles/apj/apj88/sum88/cimbala.html>.

CHAPTER 2

THE TRUMAN ADMINISTRATION'S INFLUENCE ON THE SIOP (1945-1952)

Introduction

The policies developed by President Truman for the use and control of nuclear weapons provide the foundation of United States nuclear doctrine. However, the period 1945-1952 was also rich with diplomatic issues and decisions that influenced the development of nuclear policy, such as formation of the United Nations (UN), North Atlantic Treaty Organization (NATO), and the start of the Cold War. In addition, the United States economy and defense budget transitioned from the height of a total war effort to peacetime defense spending. Because of this transition, the military underwent a massive reorganization during Truman's presidency and ownership over the nuclear mission was at the heart of many debates among the military services. Policies written during the Truman administration reflected the influence of many historical events and they formed the foundation of our nation's first nuclear war plan written over the fifteen years following the first use of the atomic bomb.

President Truman was determined to prevent the U.S. economy from returning to the pre-war depression; however, by the end of WWII, the defense budget represented the largest share of the national budget. Truman needed a way to reduce defense spending to control the rate of inflation and prevent the economy from collapsing. The atomic bomb offered a far greater military capability for far less money than conventional forces. A robust atomic program also allowed for downsizing conventional forces, while maintaining a strong defense posture. However, much of the infrastructure needed to

mass produce atomic weapons still needed development. Nevertheless, Truman's prudent fiscal policies tended to favor an increased reliance on the atomic bomb.⁴⁷

Not only did Truman's fiscal policies influence how nuclear weapons are used, but also his NSC staff authored two memorandums, NSC-30 and NSC-68, establishing key principles governing military use of atomic weapons. The first document, NSC-30, written in 1948, established two key policies. First, the president became the authority on when to use nuclear weapons. Second, the president required the military to include nuclear weapons in all war plans. NSC-68, written two years later, in 1950, rejected the idea of a preventative war, but did maintain the right to launch a preemptive attack.⁴⁸ While President Truman viewed nuclear weapons as too important to leave in the hands of the military, his policies failed to provide specific guidance for weapon employment.⁴⁹ Unfortunately, vague presidential guidance and a lack of oversight led to the development of multiple war plans that included redundant targeting and weapon fratricide.⁵⁰ President Truman's reluctance to view the bomb as a military weapon, combined with policies of deliberate ambiguity for when to use nuclear weapons, left the military to determine independently how to target, plan, and organize for nuclear war.

⁴⁷ Williamson and Rearden, 191.

⁴⁸ Richard A. Paulsen, *The Role of US Nuclear Weapons in the Post-Cold War Era* (Maxwell Air Force Base, AL: Air University Press, 1994), 3.

⁴⁹ Freedman, *Evolution of Nuclear Strategy*, 49.

⁵⁰ Headquarters Strategic Air Command, 4. The report notes "from 1958-1960, JCS exercises with over 200 time over target (TOT) conflicts highlighted the degree of conflict in existing execution plans. In wartime, with disrupted communications this could result in needless loss of aircraft and crews."

These contradictory actions created an imbalance between the military and the Commander-in-Chief over the importance of the nuclear mission.

By the end of Truman's administration, the United States relied upon nuclear weapons for diplomatic, economic, and military power. His administration began by using nuclear weapons to terminate WWII and ended with the realization of the failure of nuclear weapons to deter limited war in Korea. Throughout his tenure, President Truman relied on nuclear weapons to influence world events. In spite of the fact that Truman repeatedly showed apprehension about using atomic weapons, his policies continued to leverage the weapons and led to the undeniable United States dependence on nuclear capabilities.⁵¹

Truman Takes Office

On April 12, 1945, Harry S. Truman became the thirty-third president of the United States following the death of President Franklin D. Roosevelt. It came as a shock to the nation, but no one was more shocked than the former Missouri businessman with only a high school education.⁵² In the days that followed, cabinet members and advisors briefed President Truman on the many programs and policies of the executive branch.

⁵¹ Williamson and Rearden, 191. Reportedly, Truman would not even allow atomic energy information (known as "Restricted Data") to be stored in White House safes.

⁵² Alden Whitman, "Harry S. Truman: Decisive President," *New York Times*, accessed November 9, 2014, <http://www.nytimes.com/learning/general/onthisday/bday/0508.html>. Reportedly, as Truman received the news from Mrs. Roosevelt he asked her, "Is there anything I can do for you?" Mrs. Roosevelt responded with her characteristic empathy "Is there anything we can do for you? For you are the one in trouble now."

After all, he had only been vice president for eighty-three days and was not fully informed regarding matters of the presidency.

On April 24, Secretary of War, Henry L. Stimson wrote to President Truman requesting a meeting to discuss a highly secret matter.⁵³ The following day Secretary Stimson and General Leslie Groves, briefed President Truman on the atomic bomb program. During the briefing, Secretary Stimson recommended forming a special advisory committee to explore the broader political and diplomatic issues of the bomb during and after the war. Truman accepted Stimson's recommendation.

The committee was known as the Interim Committee due to the assumption that Congress would eventually appoint, by law, a permanent body to supervise, regulate, and control the entire atomic field. Stimson, who appointed himself Chairman of the Interim Committee, also directed that all recommendations be submitted through him to the president. Members of the committee included: Honorable Ralph A. Bard, Undersecretary of the Navy; Dr. Vannevar Bush, Director, Office of Scientific Research and Development; Honorable James F. Byrnes, Special Representative of the President; Honorable William A. Clayton, Assistant Secretary of State; Dr. Karl T. Compton, Chief, Office of Field Service, Office of Scientific Research and Development; Dr. James B. Conant, Chairman, National Defense Research Committee; and Mr. George L. Harrison, Special Consultant to the Secretary of War and Alternate Chairman of the Interim

⁵³ Henry Stimson to Harry S. Truman, April 24, 1945, "The Decision to Drop the Atomic Bomb," Confidential File, Truman Papers, Harry S. Truman Library and Museum, accessed December 14, 2014, http://www.trumanlibrary.org/whistlestop/study_collections/bomb/large/index.php.

Committee.⁵⁴ According to Stimson's agreement with President Truman, the Interim Committee's function was to advise on matters of policy, not strategy. However, in practice, Stimson used the Interim Committee to influence Truman to continue the plans and decisions already set in motion by Roosevelt.⁵⁵ R. Gordon Arneson, the Army second lieutenant appointed as the committee's recorder, recalled, "Stimson didn't want advice. The operation was a train and no one wanted to stop it."⁵⁶ Secretary Stimson was using the power of bureaucracy to shape the president's choices.

The Interim Committee also formed a Scientific Panel for technical advice composed of Manhattan Project scientists: Dr. A. H. Compton, Dr. J. Robert Oppenheimer, Dr. E. O. Lawrence, and Dr. Enrico Fermi.⁵⁷ In addition, Secretary Stimson gave the panel the latitude to advise the committee "on any other phase of the subject on which the panel might care to express its views."⁵⁸ The panel soon used this latitude as an invitation to voice opposition to the committee's recommendation to use the bomb against Japan.

Secretary Stimson outlined the Interim Committee's charter as covering the whole field of atomic energy, in its political, military, and scientific aspects. Interestingly, there

⁵⁴ Log of the Interim Committee of the Manhattan Project, May 9, 1945, "The Decision to Drop the Atomic Bomb," Subject File, Arneson Papers, Harry S. Truman Library and Museum, accessed December 14, 2014, http://www.trumanlibrary.org/whistlestop/study_collections/bomb/large/index.php.

⁵⁵ Williamson and Rearden, 12.

⁵⁶ John Newhouse, *War and Peace in the Nuclear Age* (New York: Knopf, 1989), 44.

⁵⁷ Log of the Interim Committee of the Manhattan Project.

⁵⁸ Ibid.

were no official military advisors assigned to the panel.⁵⁹ While committee members suggested on two occasions, the May 14 and June 7 meetings, the organization of a Military Panel with members drawn from high levels of the Army and Navy, other members, mainly Secretary Stimson, decided the committee would solicit input from those military members most directly concerned with the project, but not form a military panel.⁶⁰

Meanwhile, General Groves began work on target selection for the atomic bomb. In close coordination with the Army Air Forces, Groves formed a target committee to advise on the selection of aim points.⁶¹ The target committee included Major General Thomas F. Farrell and Major J. H. Derry, both members of Groves' staff. In addition, the target committee contained three members from the Air Force Operations Analysis Group: Colonel William P. Fisher, Dr. Joyce C. Stearns, and David M. Dennison. Finally, three members from the Manhattan Project; Dr. John von Neumann, Dr. Robert R. Wilson, and Dr. William G. Penney, were assigned to the committee.⁶² The committee initially considered six target sites in Japan: Kyoto, Hiroshima, Yokohama, Kokura Arsenal, Niigata, and the Emperor's palace in Tokyo. However, after carefully considering the target locations, the committee recommended the following cities as the first four targets: Kyoto, Hiroshima, Niigata, and Kokura Arsenal.

⁵⁹ Williamson and Rearden, 12.

⁶⁰ Log of the Interim Committee of the Manhattan Project.

⁶¹ Vincent Jones, *Manhattan: The Army and the Atomic Bomb* (Washington, DC: Center of Military History, 1985), 528-530.

⁶² Groves, 268.

On June 1, 1945, the Interim Committee unanimously agreed to make the recommendation to the president to use the bomb against Japan. There was substantial debate regarding the circumstances of when and how to use the bomb. Should America use the bomb in concert with a planned invasion, or should Washington delay an invasion to coincide with its employment? According to General Groves' account, "To any experienced soldier it was obvious that, once an advantage had been gained over an enemy as dangerous as Japan, no respite should be given;" in addition, "I would consider it a serious mistake to postpone any feasible military operation in the expectation that the bomb would be ready as a substitute at some later date."⁶³ However, a group of scientists involved with the Manhattan Project, known as the Committee on Social and Political Implications, disagreed with the Interim Committee's assessment. In addition, a petition to the president signed by sixty-four Manhattan Project scientists echoed the disagreement. They believed the new weapon was so powerful it would be unethical to introduce it to the world without at least a warning. However, the Interim Committee and the Scientific Panel saw no utility in staging a demonstration or compromising the secrecy the Manhattan Project worked so hard to maintain. Therefore, the recommendation was to use the bomb immediately when available against a military target in Japan without warning.⁶⁴ This recommendation drew parallels to the Japanese strike against Pearl Harbor, on December 7, 1941. The Japanese brought the United

⁶³ Groves, 264.

⁶⁴ Notes of Meeting of the Interim Committee, June 1, 1945, "The Decision to Drop the Bomb," Miscellaneous Historical Documents Collection, Harry S. Truman Library and Museum, accessed December 14, 2014, http://www.trumanlibrary.org/whistlestop/study_collections/bomb/large/index.php.

States into WWII by striking a military port in our country without warning. While some scientists argued for a strong warning of atomic capabilities prior to use and even a publicized detonation of the bomb to demonstrate its power, the committee's recommendation to the president would end the war with Japan just as it began, mercilessly.

Stimson presented this recommendation to Truman hoping to get immediate agreement of a decision to use the bomb, but Truman did not reveal his intentions. He neither officially accepted nor rejected the committee's recommendation. However, some of those involved, such as General Groves, took Truman's lack of restriction as clearance to proceed. Groves, head of the target committee, later said, "As far as I was concerned, his decision was one of non-interference—basically, a decision not to upset the existing plans."⁶⁵ The atomic program, to include target selection, continued uninterrupted.

On July 16, 1945, President Truman traveled to the Potsdam Conference in Germany for a meeting with Soviet leader Joseph Stalin and British Prime Minister Winston Churchill. One goal of the conference was to draft the terms for Japanese surrender. This became known as the Potsdam Declaration. While traveling to the conference, Secretary of War Stimson received a telegram from George L. Harrison that the first full test of an atomic bomb was successful. Stimson shared the message with Truman. The cryptic message resembled the notification of a medical emergency.

Operated on this morning. Diagnosis not yet complete but results seem satisfactory and already exceed expectations. Local press release necessary as

⁶⁵ Groves, 265.

interest extends great distance. Dr. Groves pleased. He returns tomorrow. I will keep you posted.⁶⁶

Stimson and Truman received a follow-up message the next day.

Doctor has just returned most enthusiastic and confident that the little boy is as husky as his big brother. The light in his eyes discernible from here to High Hold and I could have heard his screams from here to my farm.⁶⁷

This cryptic message attempted to relay the significance of the explosion. The little boy was the gun-type uranium weapon nicknamed “Little Boy” and his husky brother was the plutonium implosion weapon detonated in the Trinity test similar in design to the weapon nicknamed “Fat Man.”⁶⁸ The message related that the light flash was seen from 200 miles and the explosion was heard from fifty miles away. While the style of the message was a juvenile form of encryption, it did capture the air of giddy enthusiasm felt by those sharing the news.

A week later at the Potsdam Conference, Truman told Stalin of the existence of a new weapon of unusual destructive force. Truman was left dismayed by Stalin’s unimpressed response.⁶⁹ The Soviet leader took the news in calm stride, stating he was glad and hoped the United States would make good use of the weapon against Japan. In fact, the Soviets were already aware of the Americans’ development of the atomic bomb due to the efforts of an elaborate industrial espionage ring operating within the United States. This ring included three spies at Los Alamos, NM, assigned to the Manhattan

⁶⁶ Rhodes, *The Making of the Atomic Bomb*, 685-686.

⁶⁷ Ibid., 688.

⁶⁸ Loeber, 33.

⁶⁹ Rhodes, *The Making of the Atomic Bomb*, 690.

Project: Klaus Fuchs, Ted Hall, and David Greenglass.⁷⁰ The interaction with Stalin left Truman bewildered and wondering if Stalin understood the significance of the weapon. However, Soviet Marshal Georgii Zhukov later recorded the encounter in his memoirs:

at that moment Churchill fixed his gaze on Stalin's face, closely observing his reaction. However, Stalin did not betray his feelings and pretended that he saw nothing special in what Truman had imparted to him. Both Churchill and many other Anglo-American authors subsequently assumed that Stalin had really failed to fathom the significance of what he had heard.

In actual fact, on returning to his quarters after this meeting Stalin, in my presence, told Molotov about his conversation with Truman. The latter reacted almost immediately. "Let them. We'll have to talk it over with Kurchatov and get him to speed things up." I realized that they were talking about (Soviet) research on the atomic bomb.⁷¹

While the Soviets sped up efforts to develop an atomic bomb, General Groves prepared the atomic bomb release directive.

On July 24, 1945, General Groves transmitted a draft of the directive to General Marshall, Army Chief of Staff, at Potsdam to obtain approval. The order authorized release of the bomb over one of four target sites: Hiroshima, Kokura, Niigata, and Nagasaki. He recorded in his private diaries on July 25, 1945 that, "This weapon is to be used against Japan between now and August 10th . . . we will issue a warning statement asking the Japs to surrender and save lives. I'm sure they will not do that."⁷² The following day, July 26, 1945, President Truman, Prime Minister Winston Churchill, and

⁷⁰ Loeber, 64.

⁷¹ Gene Dannen, Atomic Bomb Decision, Truman Tells Stalin, July 24, 1945, "Soviet Marshal Georgii Zhukov's Version," quoted in Georgii Konstantinovich Zhukov, *The Memoirs of Marshal Zhukov* (New York: Delacorte Press, 1971), 674-675, accessed May 3, 2015, <http://www.dannen.com/decision/potsdam.html>.

⁷² Robert H. Ferrell, *Off the Record: The Private Papers of Harry S. Truman* (New York: Penguin Books, 1980), 56.

Chinese President, Chiang Kai-shek issued the Potsdam Declaration calling for Japan's surrender. While the Declaration included a warning that the only alternative for Japan was prompt and utter destruction it did not mention the atomic bomb.⁷³

On July 25, 1945, General Marshall approved the draft directive to General Spaatz, Commander United States Army Strategic Air Forces, authorizing the 509th Composite Group to drop a special weapon on one of four targets cities after about August 3, 1945. President Truman asserts, "The final decision had to be made by the president, and was made after a complete survey of the whole situation had been made."⁷⁴ However, it was not until July 26, the day that the allies issued the Potsdam Declaration calling for Japanese surrender. General Groves confirmed, "General Marshall's approval of this plan put our operation fully in motion."⁷⁵

General Spaatz arrived in Guam on July 29 and quickly completed final preparations. General Curtis LeMay acknowledged by cable to General Groves that the 509th Composite Group and the bomb were ready on August 1, noting that this was within the intent of the directive that stated "after about 3 August."⁷⁶ As General Groves points out in his memoirs, "the word 'about' is thoroughly understood in the American Army. Official travel regulations of that period even defined 'about' as normally

⁷³ Wesley F. Craven and James L. Cate, *The Army Air Forces in World War II*, vol 5, *The Pacific: Matterhorn to Nagasaki June 1944 to August 1945* (Chicago, IL: The University of Chicago Press, 1953), 712.

⁷⁴ *Ibid.*, 713.

⁷⁵ Groves, 311.

⁷⁶ *Ibid.*, 311-312.

including a period of four days before and four days after the specified date cited.”⁷⁷

Indeed, General Groves’ August 6 report to General Marshall opened with the sentence,

“The gun-type bomb was ready at Tinian on 31 July awaiting first favorable weather.”⁷⁸

President Truman later wrote in a letter to historian James L. Cate defending this discrepancy, “I ordered atomic bombs dropped on the two cities named on the way back from Potsdam, when we were in the middle of the Atlantic Ocean.”⁷⁹ However, President Truman sailed on the USS *Augusta* on August 2, more than twenty-four hours after the aircrews began diligently awaiting favorable weather to drop the bomb. No record of any cable or account of any of those present identifies the issuing of an order by Truman.⁸⁰

On August 6, 1945, the United States dropped a fourteen-kiloton atomic bomb on Hiroshima, Japan. The detonation immediately killed 66,000 people.⁸¹ President Truman received news of Hiroshima from the Navy Department by telegram while aboard the USS *Augusta* returning from the conference at Potsdam. Upon reading the telegram he exclaimed, “This is the greatest thing in history.”⁸² He quickly assembled the crew and

⁷⁷ Groves, 311-312.

⁷⁸ Ibid., 312.

⁷⁹ Craven and Cate, 712-713.

⁸⁰ On display in the Truman Library Museum is a copy of the press release written at Potsdam with a hand-written message to “Sec War” stating, “Reply to your 41011, suggestions approved. Release when ready but not sooner than August 2. HST” While it appears to reference release of the press statement, it is acknowledged as the only record in existence of Truman authorizing use of the atomic bomb.

⁸¹ Vincent Jones, 547.

⁸² William D. Leahy, Fleet Admiral, *I Was There: The Personal Story of the Chief of Staff to Presidents Roosevelt and Truman Based on His Notes and Diaries Made at the Time*. (New York: Whittlesey House McGraw-Hill Book Company, 1950), 430.

announced the successful employment of this new weapon against the Japanese. The crew cheered and celebrated a promising turn of events for the allies.

Washington immediately released a statement previously prepared by President Truman announcing the attack on Hiroshima to the American people. The announcement declared, “We have spent two billion dollars on the greatest scientific gamble in history—and won . . . It was to spare the Japanese public from utter destruction that the ultimatum of July 26 was issued at Potsdam.”⁸³ The announcement concluded with a warning to Japan, “If they do not now accept our terms they may expect a rain of ruin from the air.”⁸⁴

Three days later, the United States dropped another twenty-kiloton atomic bomb on Nagasaki, Japan killing an estimated 39,000 people.⁸⁵ Over the next year, 125,000 Japanese citizens died from residual effects of the two atomic bombs.⁸⁶ On August 14, under threat of additional bombings, Japan agreed to unconditional surrender and ended WWII.

The bombs dropped on Japan represent the only instance of nuclear war in action for scholars and historians to study. The events that unfolded in 1945 from August 6, when the world first witnessed the devastation of the atomic bomb, until August 15, when Japan unconditionally surrendered, provide our only view of actual nuclear war. Albeit

⁸³ Leahy, 432.

⁸⁴ Ibid.

⁸⁵ Vincent Jones, 547.

⁸⁶ United States Strategic Bombing Survey, *Summary Report (Pacific War)* (Washington, DC: Government Printing Office, 1946) 15-17, 22-25.

this was a one-sided exchange, it captured the principles of escalation control, deterrence, and brinksmanship.

International Control

Once the world knew the American atomic bomb worked, it was not long before other nations wanted to share the technology. Great Britain, our closest ally, made the first request to share atomic secrets. However, the British request was not without precedence. In fact, the first atomic bomb project was British. In 1939, refugee German scientists introduced nuclear fission research to British scientists. The following year, England formed a scientific study group known as the Maud Committee to study nuclear fission. The committee concluded that a fission weapon was feasible and the British government authorized research on the weapon. America immediately asked to participate in the project, but Britain denied the request and agreed only to share technical information.

By 1943, the British project had lost momentum due to insufficient scientific, technological, and material resources.⁸⁷ Britain turned to the United States for collaboration, but at this point, the American program did not need assistance and denied the request citing security concerns. Winston Churchill continued to petition for British involvement in the Manhattan Project. Finally, at the Quebec Conference in 1944, the United States agreed to allow British scientists information regarding industrial use of atomic energy, but their involvement in the American project remained limited.⁸⁸

⁸⁷ David N. Schwartz, *NATO's Nuclear Dilemmas* (Washington, DC: The Brookings Institution, 1983), 26-27.

⁸⁸ Leahy, 433.

Immediately following the end of WWII, newly elected Prime Minister Clement R. Attlee hoped to renew collaboration on the atomic project. However, President Truman, seeing no reason to share the military secrets of the atomic bomb, denied the request. Instead, he authorized public release of a report commissioned by Major General Leslie Groves, to document the administrative history and basic scientific principles of the Atomic Bomb Project.⁸⁹ The report was entitled *Atomic Energy for Military Purposes: The Official Report on the Development of the Atomic Bomb under the Auspices of the United States Government, 1940-1945*, and known as the Smyth Report after its author, Henry D. Smyth, Chairman of the Department of Physics at Princeton University and consultant for the Manhattan Project. Truman released the report on August 10, 1945, the very day that Japan announced publicly its acceptance of the Potsdam Declaration. Within the year, Congress passed the McMahon Act prohibiting nuclear collaboration with any foreign countries.⁹⁰ While Truman made it clear that he did not intend to share military nuclear secrets with allies, the act made it illegal to do so. It would not be until 1952 that Britain would detonate its first atomic bomb, three years after the Soviet Union.⁹¹

Truman now faced two serious debates regarding atomic energy. The first debate dealt with civilian versus military control of atomic weapons. While the Army had controlled the Manhattan Project during the war, Truman did not want the military to

⁸⁹ Henry D. Smyth, *Atomic Energy for Military Purposes: The Official Report on the Development of the Atomic Bomb under the Auspices of the United States Government, 1940-1945* (New York: Carey Press Corporation, 1946), v.

⁹⁰ Feaver, 104.

⁹¹ Schwartz, 27-28.

have day-to-day control of atomic weapons and risk having “some dashing lieutenant colonel decide when would be the proper time to drop one.”⁹² The second debate was to establish international control over atomic weapons. Truman knew the United States’ atomic monopoly could not last and sought to establish international authority over the weapons and end proliferation by other countries. Both debates centered on retaining military utility over the weapons and both would shape the future of atomic energy but with different outcomes.

In December 1941, just weeks after the Japanese attack on Pearl Harbor, President Franklin D. Roosevelt, and British Prime Minister Winston Churchill wrote the first Declaration of the United Nations to signify their alliance against the axis powers of Germany, Japan, and Italy. During the war, the official term for the alliance was the UN. In order to join the alliance, the allies required countries to sign the Declaration of United Nations and formally declare war against the axis powers.

As the war ended, several allies led by President Roosevelt proposed the UN become an officially chartered organization for peace and stability to replace the League of Nations formed following World War I. The League of Nations proved to be ineffective by failing to manage international harmony. This failure was due to several reasons including a significant lack of representation from countries such as Germany, Japan, USSR, and the United States. In January 1946, the UN held their first meeting in

⁹² Feaver, 120.

London, England. The first order of business was “to deal with the problems raised by the discovery of atomic weapons.”⁹³

On August 1, 1946, President Truman signed the Atomic Energy Act of 1946 (AEA) known as the McMahon Act. The act established the United States Atomic Energy Commission (AEC) placing atomic weapons in civilian control.⁹⁴ Several military members disagreed with the concept of civilian control of atomic weapons. General Leslie Groves was one such opponent. Groves exercised absolute control over the atomic weapons program during the Manhattan Project. He determined who had access to information as director of the Manhattan Engineering District, selected the targets in Japan as head of the Target Committee, and even wrote the order authorizing the 509th Bombardment Group to drop the bombs on Hiroshima and Nagasaki. When Congress requested Manhattan Engineering District information to research civilian control, Groves refused and insisted on direct orders from the president prior to granting Congress access to atomic information. This enraged Senator Brien McMahon and made him determined to exclude the military from any level of input regarding control of atomic weapons.⁹⁵ Secretary of War James Forrestal also fought against civilian control over the weapons citing the need for the military to control weapons in order to maintain readiness for war. Forrestal challenged the civilian control of atomic weapons so much that newly

⁹³ United Nations, “Global Issues: Atomic Energy,” accessed January 15, 2015, <http://www.un.org/en/globalissues/atomicenergy/>.

⁹⁴ Frank Klotz, Jr., “The President and the Control of Nuclear Weapons,” in *The American Presidency: A Policy Perspective from Readings and Documents*, ed. David C. Kozak and Kenneth N. Ciboski (Chicago, IL: Nelson-Hall, 1985), 48-50.

⁹⁵ Feaver, 92-98.

appointed AEC Chairman, David Lilienthal, brought it to the attention of the president. Truman responded, “You can count on it, I am your advocate . . . I know how they [military officers] are, they are trained never to give up. I know because I am one of them.”⁹⁶ While the military would continue to argue for their need to control atomic weapons to ensure efficient military use, the system of civilian control over atomic weapons was firmly established.

Following the end of WWII, President Truman was eager to restore political stability. While Congress attempted to prevent proliferation of atomic weapons with legislation like the McMahon Act, Truman knew he could not un-invent the bomb and eventually other countries would gain the technology. He therefore proposed the idea of international control of nuclear weapons. On June 14, 1946, the United States proposed the Baruch Plan to the UN AEC. The plan stated that America would eliminate its atomic arsenal provided the UN imposed controls on further atomic development by all countries.⁹⁷ The controls would ensure only peaceful uses for atomic energy were developed. The Soviet Union refused to agree to the Baruch Plan and the debate continued until 1948 during which time the USSR continued development of their nuclear program.⁹⁸

The Baruch Plan required a unanimous vote of the UN Security Council, but only received ten of twelve yes votes, with the USSR and Poland both abstaining from the vote, an effective veto. While this debate marked a unique opportunity in history that

⁹⁶ Feaver, 111.

⁹⁷ Sagan, *Moving Targets*, 14.

⁹⁸ Vincent Jones, 573-578.

could have drastically reduced the influence of nuclear weapons, ultimately, this debate simply bought time for the Soviet Union to advance its own nuclear program.

Containment

President Roosevelt's foreign policy with the Soviet Union during WWII formed the basis for a quid pro quo strategy using a series of sticks (atomic bombs) and carrots (Lend-Lease, post war reparations, economic aid) aligned the quid pro quo strategy. However, he refused to leverage these issues in negotiations until after the war.⁹⁹ Roosevelt continued to be elusive regarding his intent to employ the quid pro quo tactics and never shared this intent with his vice president. Therefore, upon Roosevelt's death, it fell to his advisors to relay the intent of current policies to the new president. Truman, eager to appear decisive and in command, readily accepted Harriman's direction that quid pro quo tactics were necessary. Ironically, in doing this, Truman believed he was continuing the policies of Roosevelt but in actuality, due to the manipulation of Roosevelt's trusted advisors, proved to the Soviets that policies were changing.¹⁰⁰

The policy of quid pro quo was only drawing increased hostility from Stalin. Secretary of State, James F. Byrnes realized the system of sticks and carrots was failing. The sticks available to the United States were either unimpressive, such as publicizing domestic atrocities, or unusable, such as the atomic bomb. The carrot of economic aid was appealing to the USSR, but not enough to convince Stalin to agree to unfavorable

⁹⁹ Gaddis, *Strategies of Containment*, 15.

¹⁰⁰ Ibid., 15-16.

concessions.¹⁰¹ In December 1945, Secretary Byrnes at the Moscow foreign ministers' conference set out to negotiate terms of the post war control of Europe, however, his system of sticks and carrots appeared to the United States Congress as appeasement of the Soviets. Seeing the quid pro quo strategy as a political liability, President Truman was eager to establish an effective relationship with the Soviet Union.¹⁰² The State Department reached out to the Soviet Office for clarification on the state of affairs in the Soviet Union.

On February 22, 1946, George F. Kennan, then the senior American diplomat in the USSR developed a primer on Soviet foreign policy. In a famous 8,000-word telegram, Kennan transmitted from Moscow a message that changed the course of American foreign policy. Kennan asserted that the entire strategy of quid pro quo was irrelevant to actions taken by the Soviet government. He explained that the level of repressive dictatorship in the USSR, inflicting repressive cruelties and demanding excessive sacrifices of its people, depended upon viewing the world "as evil, hostile and menacing."¹⁰³ Therefore, with the "disappearance of Germany and Japan (the only real dangerous enemies) from [the] Soviet horizon left . . . no choice but to build up [the] US and United Kingdom to fill this gap."¹⁰⁴ Washington immediately received this cable as a revelation in diplomatic strategy and George Kennan's career propelled him from

¹⁰¹ Gaddis, *Strategies of Containment*, 18.

¹⁰² Ibid.

¹⁰³ Ibid., 20.

¹⁰⁴ Ibid.

regional diplomat to the foremost expert on Soviet political strategy.¹⁰⁵ When George C. Marshall replaced Secretary of State Byrnes a year later, he named Kennan as the first director of his newly formed Policy Planning Staff in an effort to bring “greater coherence to American diplomacy.”¹⁰⁶ However, Kennan’s influence would soon extend beyond the State Department straight to the president with modification of his charter to reflect “preparation of the position of the Department of State on matters before the National Security Council,” an agency formed by the new NSA.¹⁰⁷

In March 1947, during an address to Congress, Truman argued that the United States was compelled to assist “free peoples” in their struggles against “totalitarian regimes,” because the spread of authoritarianism would “undermine the foundations of international peace and hence the security of the United States.”¹⁰⁸ This policy marked a departure from the previous American policy of non-interventionism. Truman requested financial aid; however, in order to contain the spread of communism the United States also provided military support. This policy became known as the Truman Doctrine.

National Security Act of 1947

On July 26, President Truman signed the NSA reorganizing the national security and defense establishment. In the past, the Army and Navy had existed as separate

¹⁰⁵ Gaddis, *Strategies of Containment*, 25.

¹⁰⁶ Ibid.

¹⁰⁷ Paul H. Nitze, *NSC-68: Forging the Strategy of Containment*, ed. S. Nelson Drew (Washington, DC: National Defense University Press, 1996), 21.

¹⁰⁸ U.S. Department of State, Office of the Historian, “Milestones: 1945-1952: The Truman Doctrine, 1947,” U.S. Department of State, accessed November 14, 2014, <https://history.state.gov/milestones/1945-1952/truman-doctrine>.

entities. The Army reported to the Secretary of War for peacetime matters and in wartime, the Chief of Staff of the Army reported directly to the president. The Navy chain of command was similarly reporting to the Secretary of the Navy for peacetime matters and the president during war. The NSA unified the services under a single SecDef. The act also separated the Army Air Corps from the Army and created the Air Force as a coequal military service. Each service kept the civilian secretary who now reported to the SecDef, a presidential cabinet-level position.

The NSA also established a key advisory body to the president known as the NSC. Members of the NSC included the Vice President, Secretary of Defense, Secretary of State, Director of Central Intelligence (CIA), and Chairman of the Joint Chiefs of Staff (CJCS). However, President Truman saw the NSC as a mere congressional ploy to limit his freedom of action in foreign affairs and chose instead to work with advisors from the various executive departments such as the Policy Planning Staff headed by George F. Kennan.¹⁰⁹

The act also formalized the JCS. Until 1947, the JCS met as an informal committee of service chiefs, but now they became a formal organization with a dedicated staff and direct access to the president. In addition, the act created the position of CJCS that became the senior military advisor to the president. However, this did not end the conflict between services because now it was the job of the SecDef to submit a single defense budget. In the past, the Department of the Navy and Department of War operated on separate budgets secured by their respective civilian secretaries. The 1949 ammendment to the NSA divided the DoD budget among the services internally. This

¹⁰⁹ Nitze, 22.

change might have simplified the interaction with the president, but it complicated service relationships by creating an enormous military establishment.¹¹⁰ This issue became all too real in May of 1948, when President Truman directed newly appointed SecDef James Forrestal to prepare the fiscal year 1950 budget at \$15 billion, approximately half of the 1947 budget.

Fiscal Year 1950 Budget Battle

In the spring of 1948, Secretary Forrestal and President Truman squared off over the pending fiscal year (FY) 1950 defense budget. The disagreement signaled the beginning of the end for Forrestal as the Defense Secretary.¹¹¹ While Truman and Forrestal were the two most directly opposed over the budget battle, the debate sparked a divide throughout Washington. On one side were those, such as Truman, seeking to continue to demobilize the massive post-WWII military and shrink the defense budget to avoid the type of over inflation that led to the great depression. While on the other side were those, such as Forrestal, warning that military weakness would present the same temptation that brought Mussolini and Hitler in 1939.¹¹² Ultimately, the outcome would have great consequences for both the DoD and the economy.

Strategic Air Command

General Leslie Groves formed the original nuclear targeting board during preparation for use of the atomic bomb against Japan. However, in 1948, the job

¹¹⁰ Smoke, 43-46.

¹¹¹ Williamson and Rearden, 84.

¹¹² Ibid.

belonged to SAC. General Curtis LeMay took command of SAC in October 1948 and remained in that position for nine years. The legendary warrior and architect of the Berlin Airlift became the face of the Air Force's nuclear bomber force. LeMay set out to rebuild SAC, which suffered operational neglect since its formation in 1946, into a "cocked weapon" capable of delivering at least 80 percent of the United States atomic stockpile in a single devastating blow "telescoping mass and time."¹¹³ At the time, the Air Force still relied on war plans using a combination of conventional and atomic weapons. However, LeMay set about to maximize SAC's capabilities to wage atomic war.¹¹⁴ He convinced the Air Force to cancel its plans to procure the B-54, a medium-range bomber in place of additional intercontinental B-36s nuclear capable bomber. This shift in procurement added to the existing reliance on nuclear forces and further reduced the buildup of more expensive conventional capabilities.¹¹⁵ However, any alteration to the budget procurement plan required President Truman's signature. Frank Pace, Director of the Bureau of the Budget warned Truman that the change could create a situation, which would not permit the president any alternative to the use of nuclear weapons in an emergency. Truman later asked his Air Force aide, Brigadier General R. B. Landry, if the United States was putting "all its eggs in in one basket" but Landry assured him the American strategy was a balanced one.¹¹⁶

¹¹³ Rosenberg, 39.

¹¹⁴ Williamson and Rearden, 103.

¹¹⁵ Rosenberg, 39.

¹¹⁶ Williamson and Rearden, 103.

War Plans

Following WWII, the military quickly began basing war plans on an attack by the Soviet Union on Western Europe. Beginning in March 1946, these plans contained atomic weapons. The first formal plan was code named Pincher. These early nuclear war plans did not include political guidance from the president. In fact, President Truman did not receive his first briefing on the size of the atomic stockpile until 1947.¹¹⁷ Truman showed little interest in military plans, but took great interest in the concept of assertive civilian control over atomic weapons.¹¹⁸ In May 1948, the JCS briefed President Truman on war plan Halfmoon and he immediately ordered an alternate contingency plan developed that included only conventional forces.¹¹⁹ He considered completely rejecting the plan but would not support the military budget required to pay for the more expensive conventional forces.¹²⁰ However, President Truman soon found reason to increase the budget due to Soviet actions.

The Berlin Airlift

On June 24, 1948, the Soviet Union initiated a blockade on the post-WWII multinational occupied Berlin. The Soviet Union sealed off road, rail, and canal traffic into Berlin, creating a surface blockade of Berlin preventing critical food and supplies from entering the town. This action escalated tensions between the United States and the

¹¹⁷ Sagan, *Moving Targets*, 14.

¹¹⁸ Feaver, 123-128.

¹¹⁹ Sagan, 15.

¹²⁰ David M. Kunsman and Douglas B. Lawson, *A Primer on US Strategic Nuclear Policy* (Albuquerque, NM: Sandia National Laboratories, 2001), 23.

USSR. Secretary Forrestal became even more doubtful that the \$15 billion FY50 budget was adequate.¹²¹ He therefore opted to employ the NSC to provide policy guidance that might show the need for increased military capabilities.

On July 10, 1948, SecDef Forrestal requested the NSC to prepare a statement that “specifies and evaluates the risks of the future, states our objectives, and outlines measures to be followed in achieving them.”¹²² In order to answer this question, the NSC called upon George F. Kennan, director of the Policy Planning Staff, who was currently working on a study of United States foreign policy objectives. This led to a series of memoranda culminating in NSC-20/4, US Objectives with Respect to the USSR to Counter Soviet Threats to US Security. The memorandum outlined, “The gravest threat to the security of the United States within the foreseeable future stems from the hostile designs and formidable power of the USSR, and from the nature of the Soviet system.”¹²³ It called for the United States to “develop a level of military readiness which can be maintained as long as necessary as a deterrent to Soviet aggression . . . and for rapid mobilization should war prove unavoidable.”¹²⁴ Secretary Forrestal hoped that this declaration would persuade Truman to increase the 1950 defense budget to enable the military to show a stronger presence in Europe. However, the language in NSC-20/4 failed to convince President Truman to raise the defense budget, but it did codify

¹²¹ Williamson and Rearden, 95-96.

¹²² NSC 20/4 is published in its entirety in the National Defense University lectures of Paul Nitze. See Nitze, 23.

¹²³ Nitze, 23-31.

¹²⁴ Ibid.

objectives regarding the USSR and Truman therefore accepted NSC-20/4 as national security policy.

NSC-20/4 codified the following objectives:

- a. To reduce the power and influence of the USSR to limits which no longer constitute a threat to the peace, national independence, and stability of the world family of nations.
- b. To bring about a basic change in the conduct of international relations by the government in power in Russia, to conform with the purposes and principles set forth in the UN charter.¹²⁵

While NSC-20/4 did not succeed in convincing Truman to increase the defense budget, it did provide Forrestal the national security objectives he sought. In light of these commitments and fiscal constraints, Forrestal now saw no other option but to increase reliance on strategic air power and nuclear weapons. Therefore, Truman's determination to reduce the size of the military and limit the defense budget served to increase the United States reliance on atomic weapons.

Following WWII, the allies divided defeated Germany into four occupied zones. Each of the following four nations controlled a zone: United States, France, Great Britain, and Soviet Union. The capital, Berlin, was also divided into four similar zones, but it was located deep inside the USSR zone. On June 24, 1948, the USSR, in an effort to drive the western nations out of Berlin, blocked all food, supplies, and personnel from moving into or out of Berlin. To mitigate the blockade, allied Air Forces, organized under General Curtis LeMay, formed the Berlin Airlift. This effort is noteworthy because it marked the first true test of nuclear deterrence. While the USSR blocked road and rail avenues into Berlin, it did not interfere with the airlift. In 1948, the United States' atomic stockpile

¹²⁵ Nitze, 30.

consisted of fifty bombs and thirty specially modified B-29 aircraft.¹²⁶ With the blockade in effect, the United States positioned B-29s in British airbases to deter the USSR from interfering with the airlift. While Truman did not verbally threaten the Soviet Union, he used placement of the B-29s as a deterrent against the USSR from attempting to stop the airlift.¹²⁷ There is no proof that the B-29s factored into the Soviet's decision. However, it is documented that Truman did not send the nuclear capable "Silverplate" B-29s and no actual atomic bombs were aboard.¹²⁸ This was for two reasons. First, each bomb required two days of preparation by a specialized crew of forty men prior to transport.¹²⁹ Second, unresolved issues over the ability to maintain civilian control of atomic weapons caused the AEC to deny the transfer of custody of weapons to the military. Nevertheless, the Berlin Airlift reinforced the American belief in the deterrent effect of nuclear weapons. However, over the nearly yearlong blockade the question of nuclear readiness and criteria for escalation to nuclear conflict continued to surface in the NSC.

NSC-30

In 1948, Truman had not yet provided strategic guidance regarding use of atomic weapons. This bothered many war planners in the DoD. However, the Air Force drafted a memorandum for the NSC regarding results from a study on atomic warfare. The memorandum, known as NSC-30, United States Policy on Atomic Weapons," outlined

¹²⁶ Loeber, 81-82.

¹²⁷ John Lewis Gaddis, *The Long Peace* (New York: Oxford University Press, 1989), 110.

¹²⁸ Ibid.

¹²⁹ Sagan, *Moving Targets*, 17.

national policy regarding how to plan and prepare for atomic warfare. The memorandum played to Truman's style of decision avoidance by promoting a policy of deliberate ambiguity.¹³⁰ The vague references in NSC-30 directed that any final decision on use of atomic weapons rested with the president and no attempt should be made to gain a determination on when, in the future, such weapons would be used. It included two key paragraphs:

It is recognized that, in the event of hostilities, the National Military Establishment must be ready to utilize promptly and effectively all appropriate means available, including atomic weapons, in the interest of national security and must therefore plan accordingly.

The decision as to the employment of atomic weapons in the event of war is to be made by the Chief Executive when he considers such decisions to be required.¹³¹

Truman received NSC-30 without concurring or dissenting. However, this lack of direction provided an endorsement for the memorandum and it therefore became policy.¹³²

One reason NSC-30 is a key historical document is because it directed presidential authorization for the release of nuclear weapons. On the surface, it would appear to provide Truman with ultimate authority over use of the bomb. This fit his views that the bomb was an instrument of terror "used to wipe out women, children and unarmed people, and not for military use"¹³³ However, the mandate that atomic weapons

¹³⁰ Rosenberg, 38.

¹³¹ National Security Council, "NSC-30, United States Policy on Atomic Warfare, September 10, 1948," *Foreign Relations of the United States 1948*, vol. 1 (Washington, DC: Government Printing Office, 1975), 625-628.

¹³² Williamson and Rearden, 91.

¹³³ Freedman, *The Evolution of Nuclear Strategy*, 49.

be included in war plans placed decisions regarding probable circumstances of use and nature of targets in the hands of his military advisors.¹³⁴ Therefore, NSC-30 granted power to the military planners to determine employment options. As more weapons became available, the recurring military planning cycle produced increasingly destructive nuclear options. These options grew more lethal and complex, serving to limit the flexibility of the options available. This planning process soon became the mechanism for limiting the president's choices.

The second noteworthy precedent of NSC-30 is the military's requirement to plan for a nuclear response to support all war plans. The military interpreted NSC-30 as exclusive control over the writing of war plans without input from politicians. Prior to this mandate, the United States atomic plan consisted of broad national strategy and unit-level tactics. NSC-30 introduced the operational level of war to the nuclear planning process. This meant that every regional or combatant commander had to include objectives to employ the atomic bomb as part of every war plan. This included plans to assist other countries. NSC-30 marked the formalization of America's mission to assure our allies using the global nuclear umbrella.

However, Truman was still reluctant to see the bomb as "just another weapon" and preferred to view it as a weapon of "last resort."¹³⁵

I don't think we ought to use this thing unless we absolutely have to. It is a terrible thing to order the use of something that is so terribly destructive beyond anything we have ever had. You have got to understand that this isn't a military weapon. It is used to wipe out women, children and unarmed people, and not for

¹³⁴ Williamson and Rearden, 91.

¹³⁵ Freedman, *The Evolution of Nuclear Strategy*, 49.

military use. So we have to treat this differently from rifles and cannons and ordinary things like that.¹³⁶

Unfortunately, Truman's words did not match his policies. The weapons offer great military strength with low cost comparative to conventional weapons. With the NSC-30 requirements to include plans for atomic weapons in every war plan, limiting the defense budget drove military members to over-rely on the atomic option. Since the DoD could not afford to develop and maintain both atomic and conventional weapons, the budget presented little choice. Choosing between conventional weapons and atomic weapons led to an overreliance on the bomb for military readiness.

In December 1948, Secretary Forrestal forwarded two defense budget proposals for FY50 to President Truman. One budget was for \$14.4 billion (reflecting the \$15 billion cap set by Truman and \$600 million for stockpile of critical materials) and the other was \$16.9 billion, an amount he personally recommended to balance the armed forces and meet the nation's most probable threats. He hoped NSC-20/4 provided the advantage needed to defend a budget of \$16.9 billion; however, Truman was in no mood to compromise. He remarked to Budget Director Webb, "I don't know why he sent two; the \$14.4 billion budget is the one we will adopt."¹³⁷ Therefore, President Truman's limits on the FY50 budget effectively forced military reliance on atomic weapons by placing conventional weapons out of reach.¹³⁸

¹³⁶ Freedman, *The Evolution of Nuclear Strategy*, 49.

¹³⁷ Williamson and Rearden, 95.

¹³⁸ Rosenberg, 39.

On August 29, 1949, The Soviet Union tested its first atomic bomb codenamed First Lightning.¹³⁹ The test surprised the United States because official intelligence estimates predicted the Soviets would not have atomic capabilities until 1953. Nicknamed Joe 1 by the United States, the device was a twenty-two kiloton implosion weapon similar to the United States Fat Man weapon.¹⁴⁰ The test established the Soviet Union as a nuclear power and ended the American nuclear monopoly. With these changing circumstances, it was also time for Truman's declaratory policies to change.

NSC-68

In January of 1950, shortly after the Soviets tested their first nuclear weapon, President Truman directed Secretary of State Dean Acheson and newly appointed SecDef Louis Johnson to "undertake a reexamination of our objectives in peace and war . . . in light of the probable fission bomb capability and possible thermonuclear bomb capability of the Soviet Union."¹⁴¹ The task once again went to the Policy Planning Staff. By now, Paul Nitze had replaced George Kennan as the Director. Building off Kennan's widely accepted philosophy of Containment, the result became the seminal strategic document of the Cold War era: NSC-68.¹⁴²

NSC-68 did not mark a departure from the current United States policy. The report drew from many existing studies and established theories. The report reaffirmed

¹³⁹ Richard Rhodes, *Dark Sun: The Making of the Hydrogen Bomb* (New York: Simon and Schuster, 1995), 364.

¹⁴⁰ Loeber, 82.

¹⁴¹ Nitze, 33.

¹⁴² *Ibid.*, 1.

the objectives outlined in NSC-20/4. In addition, it emphasized strengthening American military defense capabilities instead of merely providing economic and military aid to allies.¹⁴³ The memorandum served as a warning to the seriousness of the Soviet threat and called for increased military spending to provide additional preparedness including continued reliance on nuclear weapons until build-up of a sufficient conventional force. For this reason, Secretary Johnson did not accept the report seeing it as a conspiracy between the military and the State Department to force a budget increase.¹⁴⁴ Ultimately, Acheson, the military service secretaries, and JCS each signed the report compelling Johnson to sign the report.¹⁴⁵ Most notably, NSC-68 was a written acknowledgment of the budgetary neglect to the conventional forces and sought to reverse the trend. However, NSC-68 did settle some ongoing debates regarding how the United States would use atomic weapons. The memorandum rejected preventative war to stop the Soviets before they built up enough atomic weapons to threaten the United States. However, NSC-68 did advocate for preemptive strikes if America was under attack.¹⁴⁶

President Truman did not accept NSC-68 right away, but referred it to the NSC for consideration. He requested additional information on the programs discussed in the report and their cost. However, a surprise attack by North Korea on South Korea persuaded President Truman to take the conclusions of NSC-68 seriously.

¹⁴³ Ibid., 14-15.

¹⁴⁴ Williamson and Rearden, 137.

¹⁴⁵ Nitze, 12.

¹⁴⁶ Freedman, *The Evolution of Nuclear Strategy*, 66-67.

Korean War

On June 25, 1950, North Korean forces invaded South Korea. This began a war that would last just over three years pitting communist forces against democratic alliances. The struggle of ideologies became a military action. The Korean War came at a time when national strategic policy recognized no distinct difference between conventional and nuclear war. Established policy and doctrine presented nuclear war as a natural escalation of conventional war. However, it was only a matter of time before President Truman's willingness to wield the bomb politically came face to face with his disdain for use of nuclear weapons.¹⁴⁷

Three major outcomes of the Korean War influenced American nuclear policy. First, realization of the Soviet threat and adoption of NSC-68 drove significant increase to the defense budget. Following North Korea's invasion, Truman took heed of NSC-68's warning of Soviet aggression. He requested multiple increases to the FY50 defense budget from Congress. Changes in defense spending eventually increased the FY51 budget from \$13 billion to \$48 billion.¹⁴⁸ Second, NATO became formally militarized. Following the start of the war, NATO formed an army and named General Dwight D. Eisenhower as the Supreme Commander. In the years to come, NATO came to rely upon United States atomic weapons as a backbone of European stability.¹⁴⁹ Third, Korea proved it was possible for nuclear countries to engage in limited wars. In the early stages of the war, Truman thought use of atomic weapons might be necessary. In a news

¹⁴⁷ Freedman, *The Evolution of Nuclear Strategy*, 68.

¹⁴⁸ Williamson and Rearden, 139.

¹⁴⁹ Schwartz, 32.

conference on November 30, 1950, Truman commented that use of atomic weapons had been under consideration for some time. In addition, he noted in his December 9, 1950 diary entry that, “it looks like World War III is here.”¹⁵⁰ However, upon hearing this, British Prime Minister Clement Attlee flew to Washington to plea for restraint.¹⁵¹ Perhaps the most significant realization of the American military was the lack of operational usefulness of nuclear weapons in limited warfare.¹⁵²

While nuclear weapons were not proving useful in limited war, the JCS saw the need for nuclear war planning guidance in preparation for war with the other nuclear capable country, the Soviet Union. The JCS approved three objectives for war planning:

1. Bravo: The blunting of the Soviet capability to deliver an atomic offensive against the United States and its allies.
2. Romeo: The retardation of Soviet advances into Western Eurasia.
3. Delta: The disruption of the vital elements of the Soviet war-making capacity.¹⁵³

These categories framed future strategy discussions as well. For example, as the Soviet nuclear capability increased SAC focused more on the BRAVO category of targeting to blunt the Soviet capabilities.¹⁵⁴

¹⁵⁰ Ferrell, 204.

¹⁵¹ Williamson and Rearden, 143.

¹⁵² Ibid., 189.

¹⁵³ Sagan, *Moving Targets*, 20.

¹⁵⁴ Ibid.

Conclusion

In January 1953, Harry S. Truman left the White House. During the course of his administration, nuclear weapons transformed from a theoretical possibility to America's first line of defense.¹⁵⁵ However, our nation's reliance on nuclear weapons was not a preordained outcome from WWII or the Cold War. America's enduring dependence on nuclear weapons is the direct result of the decisions and policies made by the Truman administration.

President Truman famously took full responsibility for the decision to drop the atomic bombs on Hiroshima and Nagasaki thus ending the war with Japan. However, the decision was actually the inevitable result of his predecessor's policies and his advisor's manipulation of events. Franklin D. Roosevelt approved the Manhattan Project and invested over \$2 billion to develop the bomb. Secretary of War Stimson chaired the committee that provided a unanimous recommendation to use the bomb and General Leslie Groves led the selection of target cities. Only in a minor sense did Truman decide to drop the atomic bombs. By August of 1945, the decision had gained so much momentum it was virtually unstoppable.¹⁵⁶

No president relied more on the atomic bomb than Truman did. Many scholars debate whether dropping the atomic bombs on Hiroshima and Nagasaki was necessary considering the effect fire bombings were having at weakening the Japanese's will to continue the war and the Soviet Union's entrance to the war in the Pacific. Nevertheless,

¹⁵⁵ Williamson and Rearden, 189.

¹⁵⁶ Andrew J. Bacevich, *Washington Rules: America's Path to Permanent War* (New York: Metropolitan Books, 2010), 31.

Truman used the bomb repeatedly during his presidency to compensate for shortfalls in conventional forces' ability to coerce America's adversaries.

CHAPTER 3

THE EISENHOWER ADMINISTRATION'S INFLUENCE ON THE SIOP (1953-1960)

Introduction

On January 20, 1953, Dwight D. Eisenhower became the thirty-fourth president of the United States. President Eisenhower brought vast experience in leadership and administration as Chief of Staff of the Army (1945-1948), President of Columbia University (1948-1953), and Supreme Allied Commander of NATO forces (1951-1952). These experiences shaped his ability to lead the United States over the next eight years.

The year Eisenhower entered the presidency, the American nuclear arsenal grew by 50 percent to 1,169 warheads, while the Soviet arsenal increased by almost 150 percent to 120 warheads.¹⁵⁷ Eisenhower needed a nuclear strategy to match the growing arms race. As the former Supreme Allied Commander, Eisenhower understood military strategy. Throughout his presidency, Eisenhower relied on nuclear strategy and left an enduring standard of how to conduct operational nuclear war planning.

Eisenhower Takes Office

In 1952, Eisenhower's appeal as a presidential candidate was so universal both the Democratic and Republican parties tried to nominate him for president.¹⁵⁸ After nearly three years of fighting in Korea, the American people wanted a leader who could

¹⁵⁷ The Data Team, "Interactive Daily Chart: The World's Nuclear Weapons, The Nuclear Age," *The Economist*, March 11, 2015, accessed May 12, 2015, <http://www.economist.com/blogs/graphicdetail/2015/03/interactive-daily-chart>.

¹⁵⁸ Alonzo L. Hamby, "1948 Democratic National Convention," *Smithsonian Magazine*, August 2008, accessed May 17, 2015, <http://www.smithsonianmag.com/history/1948-democratic-convention-878284/>.

end the war. During the 1952 election, Eisenhower, widely seen by Americans as having defeated Adolf Hitler by orchestrating the massive D-Day invasion, openly criticized President Truman's foreign policy and inability to end the Korean War. In response, Truman challenged Eisenhower to come up with a solution to end the war. Eisenhower countered by announcing on October 25, 1952, "That job requires a personal trip to Korea. I shall make that trip. Only in that way could I learn how best to serve the American people in the cause of peace. I shall go to Korea."¹⁵⁹ The announcement boosted his standing in the election polls and Eisenhower defeated Adlai Stevenson by a margin of 442 to eighty-nine electoral votes. On November 29, 1952, less than one month after winning the election, Eisenhower traveled to Korea and made good on his campaign promise.

Korean War

Upon entering office, President Eisenhower focused immediately on ending the Korean War. The war, now at a stalemate after many hard fought back and forth victories, was sitting near the starting point of the thirty-eighth parallel. Early attempts to drive the communists out of Korea caused the allies to advance too far north and close to the Chinese-Korean border. The communist Chinese government regarded the UN presence as intervention in a civil war. The Sino-Soviet treaty further complicated the issue by risking Soviet intervention to support China. In developing his strategy,

¹⁵⁹ Dwight D. Eisenhower, "Speech, October 24, 1952," Papers of Dwight D. Eisenhower, Speech Series, Box 2, October 23, 1952 to November 3, 1952 and December 1952 (1); NAID #12012607, Dwight D. Eisenhower Presidential Library, accessed May 23, 2015, http://www.eisenhower.archives.gov/research/online_documents/korean_war.html.

Eisenhower announced to the NSC that the atomic bomb was, “simply another weapon in our arsenal.”¹⁶⁰ However, the president was not interested in escalating the Korean War into a general war with China or the Soviet Union.

In May 1953, Eisenhower threatened the Chinese with use of the atomic bomb if the stalled negotiations could not be resolved.¹⁶¹ Shortly after entering office, Eisenhower sent a private message to the Communist Chinese threatening nuclear strikes if negotiations to end the conflict in Korea did not reach an agreement soon. Joseph Stalin’s death in March 1953 also contributed to the Chinese desire to end the war.¹⁶² In July 1951, Stalin wrote to Mao, “The Korean War should not be sped up.”¹⁶³ According to Stalin the war provided an education for China and Korea (and perhaps most importantly, the USSR) regarding the American war methods and weaknesses. However, just weeks after Stalin’s death the Soviet Council of Ministers wrote to both the Chinese and Korean leaders that they were ready to make peace.¹⁶⁴

On July 27, 1953, the Korean War ended in an armistice agreement between North and South Korea. The settlement called for a cease-fire and established a

¹⁶⁰ Minutes of Meeting, 6 May 1953, Papers of Dwight D. Eisenhower as President, 1953-1961, Ann Whitman File, National Security Council, Box 4, 143rd Meeting, Dwight D. Eisenhower Presidential Library and Museum, Abilene, KS, 11.

¹⁶¹ Smoke, 72.

¹⁶² Robert A. Pape, *Bombing To Win: Air Power and Coercion in War* (Ithaca, NY: Cornell University Press, 1996), 167.

¹⁶³ Gaddis, *We Now Know*, 108.

¹⁶⁴ *Ibid.*, 108-109.

demilitarized zone near the thirty-eighth parallel, essentially restoring the divided peninsula back to its pre-war status.

The Korean War was the first American limited war following WWII. Without the threat of nuclear war, the Korean War would almost certainly have escalated to general war with the Soviet Union and China. Soviet Premier Nikita Khrushchev later spoke of Stalin, “He was afraid of war. He knew that we were weaker than the United States. We had only a handful of nuclear weapons, while America had a large arsenal of nuclear arms.”¹⁶⁵ Nevertheless, the threat of nuclear war kept both the United States and USSR from escalating the war fought for limited objectives. This proved that nuclear weapons could provide escalation control between the United States and the Soviet Union. Eisenhower would soon expand his national security strategy to include nuclear coercion.

NSC-162/2

NSC-162/2 was President Eisenhower’s basic nuclear strategy throughout his entire administration. The policy memorandum resulted from various studies and policy reviews, but most prominently from a series of war games led by Eisenhower called Project Solarium. Eisenhower planned Project Solarium during conversations with Secretary of State John Foster Dulles in the Solarium room of the White House. The newly formed National Defense University hosted the exercise under the title of American Foreign Policy 1953-1961. The exercise objective was to respond to a scenario

¹⁶⁵ Jerold L. Schecter and Vyatcheslav V. Luchkov, trans. and eds., *Khrushchev Remembers: The Glasnost Tapes* (Boston: Little, Brown, 1990), 100-101.

of Soviet aggression using one of three strategies. There were three teams each given a strategy to follow.

Team A–Strategy: Containment. This strategy used political and diplomatic means to contain sources of Soviet aggression.

Participants: George F. Kennan, Chairman; C. Tyler Wood, Rear Admiral H. P. Smith, Army Colonel G. A. Lincoln, Army Colonel C. H. Bonesteel III, Navy Captain H. E. Sears, and Central Intelligence Agency representative John M. Maury.

Team B–Strategy: Massive Retaliation. This strategy sought similar objectives as containment but using a hardline threat of nuclear retaliation to coerce the Soviets.

Participants: Army Major General James McCormack, John C. Campbell, Retired Army Major General John R. Deane, Calvin B. Hoover, Air Force Colonel Elvin S. Ligon, Philip E. Mosely, James K. Penfield.

Team C–Strategy: Rollback. This strategy mirrored the NSC-68 mandate to stop all Soviet sources of aggression.

Participants: Navy Admiral R.L. Connolly, Army Lieutenant General L.L. Lemnitzer, G. F. Reinhardt, Kilbourne Johnston, Army Colonel Andrew J. Goodpaster, Leslie S. Brady, and Army Colonel Harold K. Johnson.¹⁶⁶

The Project Solarium teams each submitted individual reports on their findings and after much analysis by the NSC, the Solarium report formed the basis for NSC-162/2. The report provided three requirements for national security. First, a strong military posture, with emphasis on the capability of inflicting massive retaliatory damage by offensive striking power. Second, U.S. and allied forces ready to move rapidly to counter aggression by Soviet bloc forces and to hold vital areas and lines of communication. Third, a mobilization base, and its protection against crippling damage, adequate to

¹⁶⁶ White House Office, National Security Council Staff: Papers 1948-1961, Executive Secretary's Subject File Series, Box no: 15, Folder-Project Solarium (4), Dwight D. Eisenhower Presidential Library and Museum, Abilene, KS.

insure victory in the event of general war.¹⁶⁷ In December 1953, as a response to these national security requirements, Eisenhower initiated a three-year defense program with the following priorities: offensive striking power, tactical nuclear weapons, and defense against nuclear attack.¹⁶⁸ NSC-162/2 directly influenced nuclear doctrine by identifying the overarching strategy for employment of nuclear weapons and outlining general requirements for national security. The strategy of NSC-162/2, known as Massive Retaliation, became the national security strategy for the remainder of Eisenhower's presidency. However, even with the threat of Massive Retaliation, Eisenhower was concerned about the Soviet threat and sought advice from scientists at RAND.

Killian Report

In March 1954, President Eisenhower was concerned about growing Soviet capabilities including the first Soviet test of a thermonuclear bomb on August 12, 1953.¹⁶⁹ The president asked the Science Advisory Committee to investigate the possibility of a Soviet thermonuclear surprise attack. The Office of Defense Mobilization tasked the Science Advisory Committee to form the committee requested by the president. Dr. James R. Killian Jr., the President of the Massachusetts Institute of Technology, led the Killian Committee, officially known as the Technological Capabilities Panel. Dr. Killian directed a forty-two member committee to study the United States' vulnerability to surprise nuclear attack. In February 1955, the committee

¹⁶⁷ Rosenberg, 138-139.

¹⁶⁸ Ibid., 138-141.

¹⁶⁹ Loeber, 114.

delivered a two-volume report called, “Meeting the Threat of Surprise Attack.” The report identified four periods of the evolving nuclear age:

Period I: the present (1955), in which “Because of our air-atomic power we have an offensive advantage but are vulnerable to surprise attack.”¹⁷⁰

Period II: (approximately 1956-1960), in which “We will have a very great offensive advantage relative to USSR and will be less vulnerable than previously to surprise attack.”¹⁷¹

Period III: Transition from Period II to Period IV.

Period IV: “Indefinite in length; possibly beginning within a decade. An attack by either side would result in mutual destruction.”¹⁷²

In 1955, the United States possessed over 2,400 nuclear weapons while the USSR stockpile was estimated at 200.¹⁷³ Nevertheless, the Killian Committee saw a looming threat. The report attempted to relay a “sense of urgency without despair,” but it outlined a timetable of events needing attention over the next decade as the Soviet Union developed the ability to deliver a thermonuclear capability.¹⁷⁴

¹⁷⁰ Capabilities Panel of the Science Advisory Committee, Office of Defense Mobilization, February 14, 1955, Technological Capabilities Panel of the S.A.C., Report to the President, February 14, 1955 Folder, Subject Series, Alphabetical Subseries, Box 11, WHO-SS, Dwight D. Eisenhower Presidential Library and Museum, Abilene, KS, vol. 1, 10-22, 31-46; vol. 2, 50, 71, 111.

¹⁷¹ Ibid.

¹⁷² Ibid.

¹⁷³ The Data Team, “Interactive Daily Chart: The World’s Nuclear Weapons, The Nuclear Age.”

¹⁷⁴ Capabilities Panel of the Science Advisory Committee, Office of Defense Mobilization, February 14, 1955, Technological Capabilities Panel of the S.A.C., Report

The Killian Report warned of the threat posed by Soviet nuclear parity and estimated 1960 as the year of danger.¹⁷⁵ The committee asserted that as early as 1958, both the United States and the Soviet Union would possess the ability to massively strike one another achieving mutual destruction. The committee saw this parity as creating a stalemate and removing the United States' nuclear advantage. The report stated, "We see no certainty, however, that the condition of a stalemate can be changed through science and technology;" however, "technological innovations could be powerful instruments for creating strength," and provide "a deterrent to war."¹⁷⁶ The committee recommended developing a strategic early warning radar, defending SAC bases, and stressed the need for strategic intelligence. In addition, the report advocated acceleration of intermediate range ballistic missiles (IRBM) and ICBM and the Navy Polaris SLBM program. This recommendation formed what would become the triad of nuclear forces.¹⁷⁷

The report stressed the survival relationship between offensive and defensive forces. "Our striking forces must blunt the attack at its source: defense must protect our retaliatory power as well as our people and our cities. Together they provide overall

to the President, Dwight D. Eisenhower Presidential Library and Museum, Abilene, KS, vol. 1, 10-22, 31-46; vol. 2, 50, 71, 111.

¹⁷⁵ Kaplan, 131.

¹⁷⁶ Capabilities Panel of the Science Advisory Committee, Office of Defense Mobilization, February 14, 1955, Technological Capabilities Panel of the S.A.C., Report to the President, Dwight D. Eisenhower Presidential Library and Museum, Abilene, KS, vol. 1, 10-22, 31-46; vol. 2, 50, 71, 111.

¹⁷⁷ Kaplan, 131.

strength and a substantial deterrent to war.”¹⁷⁸ While the report gave the highest priority to improving intelligence, tactical warning capabilities, and air defenses, it also urged the need for dissemination of nuclear weapons to locations of both offensive and defensive forces. The report urged the need to disperse SAC forces as an effort to decrease vulnerability from a surprise bombing attack that might destroy the aircraft before they get off the ground. It also noted the need to have nuclear weapons on board aircraft in order to be able to counter strike, therefore co-location of delivery bombers and weapons became important. In addition, the ability of nuclear tipped air defense missiles to immediately respond was equally important. The committee’s most controversial recommendation was that Eisenhower give “advance authority for the instant use of the atomic warheads wherever needed over the land areas of the United States and Canada.”¹⁷⁹

President Eisenhower received the report and expressed great confidence in the committee members and their findings.¹⁸⁰ He implemented most of the committee’s recommendations including, in April 1956, advanced authorization to Air Defense Command to use nuclear tipped Nike-Hercules surface to air missiles to defend the United States immediately in the event of surprise attack.¹⁸¹ However, Eisenhower also

¹⁷⁸ Capabilities Panel of the Science Advisory Committee, Office of Defense Mobilization, February 14, 1955, Technological Capabilities Panel of the S.A.C., Report to the President, February 14, 1955, vol. 1, 10-22, 31-46; vol. 2, 50, 71, 111.

¹⁷⁹ Ibid.

¹⁸⁰ Ball and Richelson, 46.

¹⁸¹ NSC-5602/1 quoted in Rosenberg; “AEC-Policy on Use of Atomic Weapons,” briefing Notes Subseries, NSC Series, Box 1, Dwight D. Eisenhower Presidential Library and Museum, Abilene, KS.

granted this advanced authorization to offensive units. In accordance with NSC-5402 granting the right of the president to authorize the use of nuclear weapons in advance of any conflict, President Eisenhower granted General LeMay authorization to conduct retaliatory strikes “if time or circumstances would not permit a decision by the president.”¹⁸² The military began to refer to this advanced authorization as predelegation.¹⁸³ At a time when the United States outnumbered the Soviet Union in nuclear weapons by twelve to one, fear of a looming parity seemed to drive national priorities. This fear was not lost on the politicians during the election of 1956.

In 1956, Eisenhower ran for re-election against Democrat Adlai Stevenson. This election was a rematch of the 1952 election. This time Eisenhower won by an even greater margin, 457 electoral votes to seventy-three, in spite of having suffered a heart attack the year prior. Having ended the Korean War, Eisenhower was a national hero and easily won re-election at a time when fears of a Soviet invasion were high, even if it was the fear of a phony threat.

The origins of the Soviet capability fears began in 1955, during a USSR aerial demonstration. Ten new Soviet long-range bombers known as the Mya-4 Bison flew overhead in formation. Once the ten were out of sight, they circled around, joining eight more Bison and overflowed the crowd a second time. This gave the appearance of twenty-eight aircraft. News of these twenty-eight, actually only eighteen, new long-range Soviet bombers spread to the United States. The lack of credible intelligence caused speculation

¹⁸² Sagan, *Moving Targets*, 142.

¹⁸³ Feaver, 51.

over the report of the Bison.¹⁸⁴ Therefore, based on an estimate of Soviet production capacity, United States Air Force analysts believed that Moscow would out-produce the United States in bombers because the analysts assumed Soviets would produce at their maximum possible capability. Fear of an imminent bomber gap began to circulate. A National Intelligence Estimate written in May 1955 erroneously estimated the Soviets capable of striking the United States with 1,300 medium and long-range bomber aircraft. Further, the November 1955 Soviet test of a 1.6 Megaton nuclear weapon confirmed their thermonuclear capability.¹⁸⁵ While there were many skeptics of the bomber gap theory, including Eisenhower himself, in May 1956, General Curtis LeMay testified before a Senate subcommittee that the Soviets were producing bombers faster than the United States.¹⁸⁶ In reality, there was never a bomber gap because the United States possessed superior aircraft in greater numbers than the Soviet Union.¹⁸⁷ However, the idea of a bomber gap made the USSR appear strong and drove the United States to increase production of the newest long-range bomber, the B-52 Stratofortress, capable of delivering six nuclear weapons. Even though estimates of a bomber gap proved false, Eisenhower continued to rely on the expert reports of civilian scientists.

¹⁸⁴ Timothy J. Botti, *Ace in the Hole: Why the United States Did Not Use Nuclear Weapons in the Cold War, 1945 to 1965* (Westport, CT: Greenwood Press, 1996), 82.

¹⁸⁵ Rosenberg, 149-150.

¹⁸⁶ Bacevich, 50.

¹⁸⁷ Botti, 88-89.

Gaither Report

In the summer of 1957, Nelson Rockefeller, chair of Eisenhower's Psychological Warfare Panel, urged the president to commission a study on active and passive measures for civil defense in the event a nuclear attack. Eisenhower asked H. Rowan Gaither, chair of the board at both RAND and the Ford Foundation to direct the study. Gaither agreed and formed a team of over seventy economists, scientists, weapon experts, and government officials. Among the team members were Dr. E. O. Lawrence of Lawrence Livermore National Laboratory, former Defense Secretary Robert Lovett, former Chief of Naval Operations Admiral Robert Carney, and General Jimmy Doolittle.¹⁸⁸ Officially, the committee was the Security Resources Panel to the Science Advisory Committee of the Office of Defense Mobilization, but it was commonly known as the Gaither Committee. Several of the members also served on the Killian Panel and the study soon expanded into a general study of United States' vulnerabilities during nuclear attack to include SAC forces.

The Gaither Report, titled "Deterrence and Survival in the Nuclear Age," validated the earlier Killian Report's prediction of the imminent increase in Soviet nuclear forces. The Gaither Report, however, moved the year of danger to the mid-1960s as a time of anticipated nuclear parity leaving both United States and USSR bomber bases vulnerable to attack. However, it also noted that early warning systems and anti-missile systems should be operational providing increased defenses.¹⁸⁹ Both reports focused on the advances in technology and recommended active and passive defensive

¹⁸⁸ Kaplan, 125-129.

¹⁸⁹ Freedman, *The Evolution of Nuclear Strategy*, 151.

measures. However, just one month prior to the Gaither Report briefing to the president, the Soviet Union launched the first satellite into space. *Sputnik*, sparked fear in the American people because it proved the Soviet capability to launch a payload over the North American continent. If the Soviets can launch a satellite over the United States, many feared; they could launch a nuclear bomb at the United States. However, Eisenhower played down the news of *Sputnik* calling it a “space stunt” because intelligence reports indicated months earlier that the Soviets had an ICBM capability.¹⁹⁰ On December 20, 1957, the *Washington Post* reported on the Gaither Report stating, “The still top secret report portrays a United States in the gravest danger in its history.”¹⁹¹ The American people now openly discussed the prospect of a missile gap. However, the Soviets did not have the advantage in missile capability and Eisenhower knew it.

The Air Force was also using advances in intelligence to build a growing target list. The increases in surveillance provided locations of targets for SAC to strike during nuclear war. This increasing target list meant SAC required more weapons to strike the targets. Hence, increasing numbers of weapons required more delivery aircraft. The other services began to call this process bootstrapping. However, specifics on SAC’s war plans proved difficult to verify.

In the early 1950s, SAC’s nuclear targeting team was a small group of officers at Omaha that existed in autonomy. General LeMay boasted that, while the CINCSAC, he never discussed what SAC would do with the nuclear forces it had with any topside brass,

¹⁹⁰ Sean N. Kalic, *US Presidents and the Militarization of Space, 1946-1967* (College Station: Texas A&M University Press, 2012), 35, 58.

¹⁹¹ David L. Snead, *The Gaither Committee, Eisenhower, and the Cold War* (Columbus: Ohio State University Press, 1999), 139.

military or civilian. In fact, from 1951-1955, LeMay did not submit his war plans to the JCS, as required.¹⁹² LeMay was building a reputation of autonomy for SAC. However, this reputation also caught the attention of the Gaither Committee.

During the Gaither Committee investigation, members of the committee, Robert Sprague, Bill Foster, Jerry Wiesner, and Bill Webster visited SAC headquarters to meet with General Curtis LeMay. On September 16, 1957, while visiting North American Aerospace Defense Command headquarters in Colorado Springs with General LeMay, the committee requested an alert exercise demonstration to see if the SAC airplanes could takeoff in the proper airborne alert window. Not a single aircraft was able to takeoff from the ground in the six hours of simulated strategic warning of an imminent Soviet attack.¹⁹³ General LeMay was not fazed by the results. LeMay maintained that SAC was “second to none.”¹⁹⁴ He declared, “If I see that the Russians are amassing their planes for an attack I’m going to knock the shit out of them before they take off the ground.”¹⁹⁵ Sprague interrupted, “But general, that’s not national policy.”¹⁹⁶ Lemay replied, “I don’t care, it’s my policy. That’s what I’m going to do.”¹⁹⁷ It appeared to the stunned Sprague that LeMay was prepared to send the bombers off on a pre-emptive strike against the

¹⁹² Desmond Ball, *Adelphi Paper #185: Targeting for Strategic Deterrence* (London: The International Institute for Strategic Studies, 1983), 39.

¹⁹³ Kaplan, 132.

¹⁹⁴ Ibid., 134.

¹⁹⁵ Ibid.

¹⁹⁶ Ibid.

¹⁹⁷ Ibid.

Soviet Union solely on his own authority.¹⁹⁸ LeMay apparently decided his predelegation for retaliatory strikes extended to pre-emptive strikes as well.

The Gaither Report drove many changes in nuclear doctrine and policy. First, the report recommended anti-ICBM missiles around SAC bases and hardened concrete shelters to protect aircraft from a nuclear strike. In response, the SecDef ordered deployment of Nike-Hercules nuclear surface-to-air missiles around SAC bases. The aircraft shelters, viewed as impractical and overly passive in nature, were rejected by the Air Force and not constructed. Second, the report recommended a decrease in the response time for SAC aircraft to become airborne following a tactical warning. LeMay pursued a massive undertaking to increase the number of aircrews, streamline maintenance schedules, and reconstruct taxiways to decrease takeoff intervals. In addition, LeMay instituted continuous airborne alert and “fifteen minute ground alert” for one third of SAC forces.¹⁹⁹ Third, the Gaither Report recommended an increase in production of offensive missile systems. In response, the DoD also doubled production of IRBMs (Thor and Jupiter missiles) and ICBMs (Atlas and Titan missiles) and tripled the production of SLBMs (Polaris missiles).

Flexibility, survivability, and responsiveness of strategic nuclear forces are an important legacy of the recommendations of the Gaither Report. This is an early call for what would later become the strategic nuclear triad—three legs of the nuclear force each having separate capabilities that complement the total force. The production of the delivery systems was already underway, but the Gaither Report provided the rhetoric to

¹⁹⁸ Feaver, 47.

¹⁹⁹ Rosenberg, 156.

solidify why the United States needed the following: a responsive strike capability (ICBM), a flexible offensive capability (bomber aircraft), and a survivable second-strike capability (SLBM).²⁰⁰ Traditionally, SAC forces consisted of long and medium-range bombers to drop nuclear bombs deep onto the Soviet land mass. Naval tactical aviation also delivered the atomic bombs but due to the short range of naval aircraft and the long range of SAC aircraft, target sites were relatively de-conflicted. However, with the new ballistic missile capabilities, both the Navy (Polaris SLBM) and Air Force (Atlas and Titan ICBM) could strike long-range targets. Incidents of redundant targeting began to emerge.

Hickey Report

In 1955, military commanders began meeting annually at the Pentagon to conduct Worldwide Coordination Conferences. During the conferences, commanders reviewed and coordinated nuclear target lists and war plans prior to submitting the plans to the JCS for approval.²⁰¹ Under the direction of the JCS, each unified and specified commander responsible for a geographic area containing nuclear targets developed a nuclear war plan. By 1958, war plans contained some 300 duplicate target strikes.²⁰² The JCS, concerned these duplicate strikes would lead to fratricide of friendly aircraft and weapons, decided to conduct a review of the separate targeting plans of the Navy and Air

²⁰⁰ Snead, 139

²⁰¹ Headquarters Strategic Air Command, 12.

²⁰² Rosenberg, 51.

Force.²⁰³ On December 1, 1958, President Eisenhower assigned Army Lieutenant General Thomas Hickey to conduct a targeting study for the Net Evaluation Sub Committee. The president commissioned the study, titled Net Evaluation Sub Committee study 2009, to assess “the relative merits, from the point of view of effective deterrence, of alternative retaliatory efforts directed toward (1) primarily a military target system, or (2) an optimum mix of a combined military-urban industrial target system.”²⁰⁴

The Hickey Committee submitted its report to the JCS in February 1960. The report identified 2,021 targets representing an optimum mix of military and industrial base targets as the proper targeting doctrine. The committee used target selection methods similar to the established SAC methods. It selected targets against Soviet nuclear delivery capability and war supporting infrastructure. Eisenhower directed the Hickey Report be the “point of departure” for all future JCS planning.²⁰⁵ This directive forced the services to work together and develop an integrated target list.

Eisenhower Orders SIOP

Due to the recent directive to coordinate and de-conflict the nuclear target lists, General Thomas S. Power, SAC commander in succession to LeMay, recommended control of all nuclear forces realign under SAC. The Navy disagreed.²⁰⁶ On June 14, 1960, SAC presented a proposal to Secretary Gates entitled “Unity in the Strategic

²⁰³ Rosenberg, 172.

²⁰⁴ Ball and Richelson, 61.

²⁰⁵ Rosenberg, 172.

²⁰⁶ Headquarters Strategic Air Command, 18-19.

Offensive.”²⁰⁷ This proposal argued for the development of a Joint Strategic Target Planning Agency to produce a National Strategic Target List (NSTL) and a SIOP.²⁰⁸ Secretary Gates was highly interested in the integration of military planning, but he had doubts about the ability of the military services to work together on a single plan.

Previously, in August 1959, General Nathan Twining, CJCS, posed eighteen questions regarding targeting to the JCS in an effort to clarify targeting policy. The questions included fundamental inquiries. Such as, what should our targeting policy be and, what categories of targets should it cover? However, by the time of the SAC proposal briefing, ten months after posing these questions, the Chiefs could not yet agree to any of the answers.²⁰⁹

On July 6, 1960, SecDef Gates met with President Eisenhower to relay the SAC proposal for creation of a JSTPS to maintain the NSTL and develop a SIOP. In addition, Secretary Gates proposed SAC headquarters at Offutt Air Force Base, NE as the SIOP Center.²¹⁰ The nature of target analysis, weapon application, timing de-confliction, and assessment of nuclear war planning were highly dependent upon data automation and SAC already possessed the computer capability needed.²¹¹ Eisenhower did not want to grant control of the task to just one service but agreed to the proposal stating, the

²⁰⁷ Kaplan, 264.

²⁰⁸ Headquarters Strategic Air Command, 28.

²⁰⁹ Kaplan, 264.

²¹⁰ Headquarters Strategic Air Command, 28.

²¹¹ Ibid.

“original mistake in this whole business, was our failure to create one single Service in 1947.”²¹²

On August 11, 1960, Secretary Gates met again with President Eisenhower and the JCS to discuss the formation of the JSTPS. The Navy did not want SAC to control the NSTL and SIOP due to the ongoing practice of bootstrapping that already led the Air Force to claim 47 percent of the defense budget. After much discussion and heated debate the president said, “This was not a good way to respond to serious military problems, nor did it speak too well of the ability of good men to get together and work out solutions in the nation’s interest.”²¹³ In light of the enormous nuclear arsenal, military predelegation, and the overarching strategy of Massive Retaliation, Eisenhower declared, “There must be agreement that rigid planning is needed.”²¹⁴

On August 16, 1960, SecDef Thomas S. Gates Jr. ordered creation of the JSTPS at SAC headquarters and development of a SIOP for nuclear war. However, he issued a deadline of mid-December 1960 to drive completion prior to the change in presidential administrations. The JSPTS formed and got right to work with SAC commander General Power as the Director, Strategic Target Planning.

²¹² A. J. Goodpaster, MCP, July 6, 1960, Staff Notes, July 1960 Folder, Dwight D. Eisenhower Diaries, Box 51, ACWF-EPP, Dwight D. Eisenhower Presidential Library and Museum, Abilene, KS.

²¹³ Rosenberg, 5.

²¹⁴ Ibid.

SIOP Development

The JSTPS relied on two documents to provide official policy guidance for preparation of the SIOP, the National Strategic Targeting and Attack Policy (NSTAP) and Guidance for the Preparation of the Single Integrated Operational Plan for Strategic Attack. The NSTAP directed that the NSTL “will consist of a minimum number of specific targets whose timely and assured destruction will accomplish the specific objective.”²¹⁵ In order to organize the staff and effectively coordinate the target list, SAC held a series of SIOP planning conferences at SAC headquarters in Omaha, NE. During the initial SIOP planning conference on August 24, 1960, debate ensued over how to interpret the NSTAP guidance. The naval planners interpreted this guidance to mean the NSTL will contain just enough targets on the list to “accomplish the specific objectives.”²¹⁶ However, General Bob Smith, SAC Intelligence chief, directed planners to interpret the NSTAP guidance to mean there was a minimum number of targets, below which the SIOP committee could not go, directing a lower limit but no upper limit on the number of targets on the NSTL. Some planners interpreted this guidance as directing the JSTPS to maintain the minimum number of targets on the NSTL to accomplish objectives. This minor difference in interpretation of JCS guidance soon became a significant one.

Over the previous two years, the nuclear stockpile tripled in size from approximately 6,000 warheads in 1958 to 18,000 in 1960, and the target list kept pace.²¹⁷

²¹⁵ Rosenberg, 5-6.

²¹⁶ Ibid.

²¹⁷ Loeber, 83.

The NSTAP required at least a 75 percent probability of destroying targets. General Power therefore set higher requirements to priority targets. The seven highest priority targets required 97 percent probability of destruction. This meant assigning additional weapons to the targets in order to reach the correct probability of destruction. SAC calculations, however, only accounted for the blast effect of nuclear detonations for the probability of destruction. Other effects such as heat, fire, and radiation were too difficult to model. Therefore, the average target received 2.2 nuclear weapons amounting to several megatons.²¹⁸ When Eisenhower received news of these exaggerated weapons requirements, he decided to send his science advisor to SAC in order to assess the planning.

George Kistiakowski was Chairman of Eisenhower's Science Advisory Committee. He previously worked on the Manhattan Project and understood atomic weapons. On November 3, 1960, Kistiakowski traveled to SAC headquarters to assess the planning progress. Having heard reports about SAC's hostility toward civilian oversight and the turning away of visitors on grounds of insufficient security clearance, President Eisenhower wrote a letter to SAC stating that Kistiakowski be granted about "as much authority as the Secretary of Defense."²¹⁹

Upon receiving the SIOP briefing, Kistiakowski found that SAC was manipulating the calculations on the probability of damage in order to argue for more forces.²²⁰ He reported that decisions made in planning were arbitrary and the highly

²¹⁸ Kaplan, 268.

²¹⁹ Feaver, 60.

²²⁰ Ball, 41.

technical computer procedures were “sheer bull” noting that the SIOP was “made up of a background of plenty”²²¹ in weapons and delivery systems. He assessed, “I believe that the alert force is probably all right, but not the follow-on forces which carry megatons to kill 4 and 5 times over somebody who is already dead.”²²² After hearing the briefing, President Eisenhower confided in his naval advisor, Captain E. P. (Pete) Aurand, that the plan “frightened the devil out of me.”²²³ He made it known, “We’ve got to get this thing right down to the deterrence.”²²⁴ Despite Kistiakowski’s findings, the president allowed the SIOP to proceed as planned.

On December 2, 1960, Secretary Gates, the JCS, and President Eisenhower approved the SIOP with an effective date of April 1, 1961. The plan, named for the upcoming FY1962, thus earning the plan designation as SIOP-62, called for launching the entire arsenal of 3,267 nuclear weapons against the Sino-Soviet bloc countries.²²⁵ During the approval briefing of the SIOP, Secretary Gates asked the JCS for their opinions of the plan. The Commandant of the Marine Corps, General David Shoup asked, “What would happen if China were not fighting in the war? Do we have any option that we don’t have to hit China?”²²⁶ General Power replied that it was possible but “would

²²¹ Rosenberg, 65-66.

²²² Ibid.

²²³ Ibid., 66.

²²⁴ Ibid., 55.

²²⁵ Sagan, “SIOP-62: The Nuclear War Plan Briefing to President Kennedy,” 22-51.

²²⁶ Kaplan, 268.

really screw up the plan.”²²⁷ General Shoup then stood before Secretary Gates and exclaimed, “Sir, any plan that kills millions of Chinese when it isn’t even their war is not a good plan. This is not the American way.”²²⁸ This criticism by General Shoup represented the amount of controversy SIOP-62 brought to the DoD. The SIOP briefing provided a forum for military and civilian leaders to discuss, debate, and disagree over the effectiveness of the nuclear war plan. Despite these criticisms, the JCS, SecDef Gates, and President Eisenhower approved the SIOP to go into effect on April 1, 1961.²²⁹

On January 20, 1961, John F. Kennedy became the thirty-fifth president of the United States having defeated Eisenhower’s Vice President, Richard Nixon. A key issue during the election was the fear of a missile gap perpetuated by reports such as the Gaither Report. Kennedy used the idea of a missile gap to claim that the Eisenhower administration and therefore his challenger were soft on defense. Similar to the bomber gap, it represented a growing Soviet advantage in the number of nuclear missiles deployed and able to strike the United States. Also like the bomber gap, it proved fictional. Nevertheless, Kennedy used the missile gap to argue that Eisenhower’s strategy of Massive Retaliation. When Kennedy won the election and his administration rejected Eisenhower’s Massive Retaliation strategy, SIOP-62 was effectively obsolete; however, Eisenhower’s planning process was far from obsolete.

²²⁷ Kaplan, 268.

²²⁸ Ibid.

²²⁹ Headquarters Strategic Air Command, 28.

Conclusion

While creation of SIOP-62 may have been the culmination the Eisenhower administration's nuclear war plans, the true legacy of President Eisenhower is a system that allows the periodic review, assessment, and revision of the nation's nuclear war plans. Eisenhower inherited a growing nuclear arsenal without a coherent employment strategy. During his tenure, Eisenhower made nuclear weapons more accessible to the military, than any other president before or since by increasing the stockpile, providing a strategy, and predelegating their use. As the nation's dependence on nuclear weapons grew, so did the need for a single integrated operational plan.

Eisenhower did not set out to create the perfect plan for nuclear war. However, he understood that the growing nuclear capability required rigid planning.²³⁰ During his administration, Eisenhower presided over a unique advancement in war planning, formation of the first SIOP.²³¹ More importantly, Eisenhower formed a joint staff organization to maintain a national target list and formed an integrated operational plan for nuclear war. This organization, the JSTPS, was not perfect, but it was a beginning, a foundation of future development.²³² Eisenhower's enduring legacy was the formation of unprecedented nuclear capability and a system to harness that capability to wage nuclear war.

²³⁰ Rosenberg, 5.

²³¹ Headquarters Strategic Air Command, 28.

²³² Ibid., 29.

CHAPTER 4

THE KENNEDY ADMINISTRATION'S ASSESSMENT OF THE SIOP (1961)

Introduction

The policies of the Kennedy administration represented a vast departure in nuclear strategy and international politics from the Eisenhower era. Upon entering office, Kennedy quickly replaced the strategy of Massive Retaliation with the strategy of Flexible Response, but the SIOP developed by the Eisenhower administration remained in effect for nearly two years.²³³ In the meantime, SIOP-62, the Eisenhower war plan, remained in effect until August 1, 1962, when SIOP-63 was effective. While Kennedy's policies did not affect formation of the SIOP, his style of leadership and decision-making shaped his understanding of the plan and his opinion of its effectiveness.

Following his election in 1960, Kennedy provided two main sources of influence on SIOP-62. First, his election provided the impetus for Eisenhower to direct completion of the SIOP prior to leaving office. While Eisenhower was clear in stating, "I do not want to leave this monstrosity [the collection of independent, uncoordinated nuclear plans] for my successor,"²³⁴ a sense of urgency ensued when he realized he would not be handing over the project to his own Vice President, Richard Nixon. Second, Kennedy's differing views of the utility of nuclear weapons from that of Eisenhower provided a critical assessment of the first SIOP and its usefulness to the president. In the first year of his

²³³ SIOP-63 more closely provided the flexible response capabilities directed by McNamara and Kennedy, but was not implemented until October 1962, just days before the Cuban missile crisis.

²³⁴ Rosenberg, 54.

presidency, Kennedy sought to reduce nuclear weapons and downplay their role as a tool of diplomacy, but ultimately he found it necessary to embrace the diplomatic power of a strong nuclear arsenal.

This chapter will chronicle the period from Kennedy's inauguration until he received the SIOP-62 briefing from General Lemnitzer. Kennedy rejected many of the policies and bureaucratic processes of the Eisenhower administration. To facilitate these changes, Kennedy brought a fresh team of industrial and academic professionals to the White House. Kennedy set out to revolutionize politics and decision making in Washington using his technique of close relationships and free-flowing brainstorming discussions.²³⁵ This system relied on advice from close advisors such as his National Security Advisor McGeorge Bundy and served to reduce the influence of the NSC and the military in decision-making. Kennedy understood military planning, but did not trust military advisors; however, not seeking the counsel of the JCS and SAC planners proved a costly decision with both Fidel Castro and Nikita Khrushchev. Kennedy's distrust of the military and comfort with academics and intellectuals was deeply rooted in his past.

Kennedy Takes Office

John F. Kennedy was born in Massachusetts in 1917. He graduated in 1940, with honors, from Harvard University and a year later joined the United States Navy. Kennedy served as a naval officer in the South Pacific during WWII and earned the Navy and Marine Corps Medal for "extremely heroic conduct" after saving the crew of his patrol

²³⁵ Richard Reeves, *President Kennedy: Profile of Power* (New York: Simon and Schuster, 1993), 52-53.

torpedo boat following an attack.²³⁶ In 1944, Kennedy returned to the United States and pursued a career in journalism. He reported on several noteworthy political events including the Potsdam Conference where Truman famously alluded to Stalin that the United States had the atomic bomb. In 1947, the state of Massachusetts elected him to the United States House of Representatives and, in 1953, to the United States Senate. While serving in the Senate he published a book called *Profiles in Courage*, a biography of courageous senators risking their political careers on behalf of their personal beliefs and in 1957, received the Pulitzer Prize. He remains the only United States president to receive a Pulitzer Prize. In 1960, Kennedy became the Democratic candidate for president.

On January 20, 1961, Kennedy became the thirty-fifth president of the United States. Kennedy's election marked not only the return of a Democrat to the presidency, but the emergence of a younger generation as well. President Kennedy, as the youngest and first president born in the twentieth century, replaced Eisenhower, the oldest and last president born in the nineteenth century. These changes in politics required changes in policy. In order to facilitate these changes, Kennedy needed a team willing to take on the strong military-industrial complex.

First Exposure to SIOP-62

Kennedy, as expected, replaced many of the Eisenhower administration personnel with members of his own party. Kennedy selected McGeorge Bundy, Harvard's Dean of Arts and Sciences and youngest dean ever at the school, as National Security Advisor. On

²³⁶ Reeves, 10.

January 30, 1961, after meeting with the JCS, Bundy wrote to Kennedy providing his assessment of SIOP-62. Bundy warned of the looming military dangers due to policies of the Eisenhower administration. According to Bundy, the SIOP was “a massive, total, comprehensive, obliterating strategic attack . . . on everything Red.”²³⁷ Bundy noted the tendency toward strategic forces rather than limited war forces, massive first strikes, and a July 14, 1960, memorandum pre-authorizing the military to launch nuclear weapons if a surprise Soviet strike killed the civilian leaders.²³⁸ Bundy wrote to Kennedy:

These three forces in combination have created a situation today in which a subordinate commander faced with a substantial Russian military action could start the thermonuclear holocaust on his own initiative if he could not reach you (by failure of communication on either end of the line).²³⁹

Bundy identified the issue as arising from too narrow and conventional thinking about military as opposed to political problems. This assessment provided the Kennedy administration with its first exposure to SIOP-62. While Bundy recommended that a review of the SIOP and this basic military policy was the most urgent item for Kennedy’s staff. He also noted that the SecDef wanted to handle it from within the DoD.²⁴⁰

In January 1961, Robert Strange McNamara became the SecDef for the Kennedy administration. McNamara was born in 1916 in San Francisco, CA. He attended the

²³⁷ Reeves, 229.

²³⁸ Botti, 140.

²³⁹ Memorandum to the President from McGeorge Bundy, January 30, 1961, Key National Security Problems: General, 1961: January-February, Papers of John F. Kennedy, Presidential Papers, National Security Files, Meetings and Memoranda, John F. Kennedy Presidential Library and Museum, accessed April 21, 2015, <http://www.jfklibrary.org/Asset-Viewer/Archives/JFKNSF-318-008.aspx>.

²⁴⁰ Ibid.

University of California, Berkley and earned a bachelor's degree in economics. He later attended Harvard Business School earning his masters of business administration in 1939. In 1943, he joined the Army Air Corps as a captain. He served as an analyst under Major General Curtis LeMay. One of his duties under LeMay was measuring efficiency and effectiveness of the B-29 bombing runs in China and India. He left the military in 1946 at the rank of lieutenant colonel earning the Legion of Merit, an award for meritorious conduct. Following his military service McNamara worked at Ford Motor Company. He quickly rose through the executive level positions and in 1960 was the first person outside the Ford family to become president of Ford.²⁴¹ McNamara knew how to run a business efficiently. Kennedy wanted him to apply this skill to the DoD. However, running a military proved different from running a business. Learning the difference tested even McNamara's highly refined managerial skills.

On February 3, 1961, after just two weeks on the job, Defense Secretary McNamara traveled to SAC headquarters in Omaha, Nebraska, with Roswell Gilpatric, Deputy SecDef; General Lyman Lemnitzer, Chairman of the JCS; and Herbert York, Director of Defense Research and Engineering.²⁴² While in Omaha, General Thomas Power, Commander of SAC, briefed the SIOP to the team. During the briefing, McNamara quickly noted the relationship between high damage expectancy requirements and a need for more weapons. This is where McNamara's experience calculating damage estimates for General LeMay served him well. As the briefing continued, McNamara

²⁴¹ H. R. McMaster, *Derelection of Duty: Lyndon Johnson, Robert McNamara, the Joint Chiefs of Staff, and the Lies that Led to Vietnam* (New York: HarperCollins Publishers, 1997), 2.

²⁴² Kaplan, 270.

pointed out several issues amounting to what he called excessively conservative casualty and damage estimates. McNamara asked the planners to identify, using their calculations, the number of weapons needed to ensure a similar level of damage as the 12.5-kiloton bomb dropped on Hiroshima. After some calculations, the planners indicated they would need three eighty-kiloton weapons. Herbert York pointed out to McNamara that three eighty-kiloton weapons together produced the explosive power of one 500-kiloton bomb.²⁴³ McNamara became appalled at the extremely high damage expectancy numbers required by the plan. However, the overkill programed into SIOP-62 did not bother McNamara as much as the indiscriminate targeting.

McNamara took issue with the basis for the plan that called for strikes against the Soviet Union, China, and Eastern European countries all simultaneously. The plan provided graduated options based solely upon SAC alert status. The basic option launched all the alert forces, while every hour, as additional forces reached alert status, a new option was ready to launch. These options assumed the need to strike all countries at once and did not withhold weapons against countries not involved in the war.²⁴⁴ One noteworthy example was the country of Albania. While Albania, an independent communist nation, was breaking diplomatic relations with the Soviet Union, it still contained a Soviet air-defense radar. The plan required destruction of the radar to ensure success in war with the Soviet Union. Unfortunately, due to the method of calculating

²⁴³ Botti, 139.

²⁴⁴ Sagan, "SIOP-62: The Nuclear War Plan Briefing to President Kennedy," 22-51.

expected damage, the strikes also obliterated the small country.²⁴⁵ McNamara decided the military needed to improve their statistical analysis.

McNamara Orders Changes

After six weeks on the job and several disappointing briefings highlighting what he considered to be the inefficient and overly rigid practices of the Pentagon, McNamara set out to increase the overall efficiency of the DoD. When McNamara left Ford to be the SecDef, he brought with him a team of young business minded whiz kids. Early in 1961, military staffers inside the Pentagon began to refer to McNamara and his entourage as “McNamara’s Band.”²⁴⁶ On March 1, 1961, he began his crusade for efficiency by issuing an extensive list of ninety-six projects with demanding deadlines. The military quickly dubbed it “The 96 Trombones.”²⁴⁷ McNamara issued the first task to General Lyman Lemnitzer, Chairman of the JCS and Paul Nitze, Assistant Secretary of Defense for International Security Affairs. The task was to draft a memorandum recommending revisions to the national security policy for nuclear weapons. Daniel Ellsberg, a RAND analyst, prepared the memorandum, which recommended SAC create of a variety of options for the president to use during nuclear war. The second task required the JCS to develop a nuclear doctrine permitting a controlled response and negotiating pauses during nuclear war. Lieutenant Colonel Robert P. Lukeman prepared the Joint Staff response

²⁴⁵ Kaplan, 271-272.

²⁴⁶ Ball, 10.

²⁴⁷ Ibid.

arguing for flexibility of options and a graduated response in the SIOP.²⁴⁸ Even though SIOP-62 would not be in effect until April 1, 1961, McNamara was ready with the Ellsberg and Lukeman papers to form the basis of its revision.²⁴⁹ These papers represented the Kennedy administration's efforts to align the declaratory policy of Flexible Response with a nuclear employment policy of increased options and negotiating pauses. However, McNamara needed to act fast to make changes before Kennedy found reason to employ the SIOP.

Bay of Pigs

On April 17, 1961, just two days after SIOP-62 was effective, President Kennedy authorized a team of 1,400 Cuban exiles, trained by the CIA, deployed to the Bay of Pigs off the Cuban coast. The force known as Brigade 2506, invaded Cuba to overthrow Fidel Castro's government in favor of western backed democratic leadership. The invasion failed due to Castro's intelligence network among the exiled Cubans in Miami.²⁵⁰ Castro's army killed or captured most of Brigade 2506 and held the survivors hostage. The world quickly learned of American involvement and President Kennedy found himself in an embarrassing diplomatic position with Cuba and their strongest ally the Soviet Union.

The Eisenhower administration had approved the Bay of Pigs operation to overthrow Castro and Kennedy inherited the plan complete with all of its flaws.

²⁴⁸ Ball, 10.

²³¹ Ibid.

²⁵⁰ Reeves, 83.

Following the failed invasion, Kennedy felt betrayed by the military, especially, General Lemnitzer, the CJCS.²⁵¹ In order to recover his relationship with the JCS, Kennedy recalled General Maxwell Taylor from retirement. On April 22, Kennedy appointed Maxwell Taylor as Military Advisor to the president, making his first responsibility to investigate the Bay of Pigs debacle. His report did not blame the JCS, but noted their failure to warn the president of the risks. The JCS, as the principal military advisors to the president, answered questions with competence, but refused to give advice to the president unless explicitly asked.²⁵² While Kennedy blamed the JCS for not voicing concerns over the invasion, while the JCS believed Kennedy waited too long to consult with them on the decision to proceed with a plan developed by the Central Intelligence Agency.²⁵³ This added to the sense of mutual distrust between the president and the JCS. In his report, Taylor declared the relationship between the JCS and the president at crisis levels.²⁵⁴ This poor relationship with military advisors greatly affected Kennedy's ability to understand the risks associated with plans inherited from Eisenhower's administration. Soon, Kennedy's frustration over the Cuban invasion plans would prove a prelude to SIOP-62, the nuclear plan inherited from Eisenhower.

Kennedy immediately sent a letter to Khrushchev letting him know "that the United States intended no military intervention in Cuba" but that it will "protect this

²⁵¹ Reeves, 103.

²⁵² McMaster, 6.

²⁵³ Ibid., 6-7.

²⁵⁴ Ibid., 16.

hemisphere against external aggression.”²⁵⁵ The Bay of Pigs incident caused significant political trouble for Kennedy, but he did not abandon his plans to remove Castro from power in Cuba. However, Kennedy was about to learn that the United States was not the only nuclear power trying to expand political influence.

Kennedy Meets with Khrushchev

On June 3, 1961, President Kennedy traveled to Vienna, Austria to meet with Soviet Premier Nikita Khrushchev. During the summit, Kennedy sought to build trust and ease tensions between the two nations. Most importantly, Kennedy set out to communicate America’s vital interests, especially in Berlin.²⁵⁶ However, Khrushchev took a hard position against American involvement in Berlin. Khrushchev declared his intention to restrict allied access to West Berlin. Khrushchev’s combative diplomacy caught Kennedy off guard.²⁵⁷ Kennedy left the summit feeling berated. “He treated me like a little boy,” Kennedy said of Khrushchev.²⁵⁸ Upon returning to the United States, Kennedy told the American people,

²⁵⁵ Letter from President Kennedy to Chairman Khrushchev, April 18, 1961, Countries, Cuba: General, April 1961, Papers of John F. Kennedy, Presidential Papers, President’s Office Files, John F. Kennedy Presidential Library and Museum, accessed April 15, 2015, <http://www.jfklibrary.org/Asset-Viewer/Archives/JFKPOF-114-024.aspx>, 6.

²⁵⁶ Reeves, 157.

²⁵⁷ Botti, 149.

²⁵⁸ Reeves, 166.

I made unmistakably clear to Mr. Khrushchev that the security of all Western Europe depended on our presence and our access rights in West Berlin . . . and that we were determined to maintain those rights at any risk.²⁵⁹

Two weeks after the Vienna Summit, Khrushchev announced a peace treaty with East Germany to eliminate any third party access to Berlin.

Following the Vienna summit, Kennedy ordered the DoD and the Atomic Energy Commission to prepare to resume nuclear testing. After allowing the process to begin, he withdrew the order. Kennedy knew that a nuclear test required six months of preparation before testing could begin. Starting the process would enable a faster response later. This manipulation gave Kennedy the ability to declare that he made the decision to resume testing much later than in actuality.²⁶⁰ Kennedy needed to prepare the nation for war.

On July 25, 1961, Kennedy delivered a speech announcing a defense budget increase of \$3.25 billion, including additional ICBM forces and five army divisions.²⁶¹ Kennedy was updating force acquisition policy by increasing the budget for specific military expenditures. The increases were a response to the Soviet threats to isolate West Berlin. Kennedy rallied the American people telling them,

So long as the communists insist that they are preparing to end by themselves unilaterally our rights in West Berlin and our commitments to its people, we must be prepared to defend those rights and those commitments. We will at times be ready to talk, if talk will help. But we must also be ready to resist with force, if

²⁵⁹ Radio and television report to the American people on returning from Europe, June 6, 1961, Papers of John F. Kennedy, Presidential Papers, President's Office Files, Speech Files, John F. Kennedy Presidential Library and Museum, accessed April 20, 2015, <http://www.jfklibrary.org/Asset-Viewer/Archives/JFKPOF-035-012.aspx>.

²⁶⁰ Reeves, 224.

²⁶¹ "The Cold War in Berlin," John F. Kennedy Presidential Library and Museum, accessed April 15, 2015, <http://www.jfklibrary.org/JFK/JFK-in-History/The-Cold-War-in-Berlin.aspx>.

force is used upon us. Either alone would fail. Together, they can serve the cause of freedom and peace.²⁶²

Kennedy was making it clear that an attack on West Berlin was as an attack on the United States. However, on August 13, 1961, just ten weeks after the meeting with Khrushchev in Vienna, the Soviet Union defied Kennedy's warning and began construction of a wall separating East and West Berlin. At the height of Cold War tensions, the Soviet Union isolated themselves from the West both figuratively and literally by building the Berlin Wall to prevent Capitalist influence in the communist territory.

Return to Nuclear Testing

On August 30, the Soviet Union broke the moratorium against nuclear testing and detonated three nuclear bombs within one week.²⁶³ The next day Kennedy wrote a letter to Secretary McNamara asking him for recommendations on expansion of military forces in light of these events.²⁶⁴ Khrushchev was sending a clear message to the world with his nuclear tests, but Kennedy knew he was bluffing regarding the size of his nuclear force. American intelligence sources including satellites over the Soviet Union had provided images disproving the existence of a missile gap.²⁶⁵ Kennedy did not want to resume

²⁶² "The Cold War in Berlin," John F. Kennedy Presidential Library and Museum.

²⁶³ Reeves, 219.

²⁶⁴ Staff Memoranda: Taylor, Maxwell, 1961: September-December, Papers of John F. Kennedy, Presidential Papers, National Security Files, Meetings and Memoranda, JFKNSF-327-012, John F. Kennedy Presidential Library and Museum, accessed April 20, 2015, <http://www.jfklibrary.org/Asset-Viewer/Archives/JFKNSF-327-012.aspx>.

²⁶⁵ Kalic, 50.

testing, but he needed to send a message back to Khrushchev.²⁶⁶ On September 5, Kennedy announced that the United States would resume nuclear testing.²⁶⁷

Kennedy's failed diplomatic efforts brought the United States and the Soviet Union to the brink of war over conflicting ideologies. Kennedy increased the defense budget, authorized additional troops for the Army, and resumed nuclear testing.²⁶⁸ Running out of options, Kennedy knew he needed to prepare for war and decided it was finally time to assess his nuclear strategy.

SIOP-62 Briefing to Kennedy

On September 13, 1961, General Lyman L. Lemnitzer, CJCS briefed President Kennedy the details of the United States' plan for nuclear war, SIOP-62.²⁶⁹ The briefing took place at the White House with Robert McNamara, SecDef; General Maxwell Taylor, Military Representative to the President; and Walt W. Rostow, Deputy Special Assistant to the President for National Security Affairs.²⁷⁰ After nearly eight months in office, President Kennedy finally asked to review the nuclear war plan. SIOP-62 was the president's most grave responsibility, but clearly not his first priority. He understood the basic outline of the plan as relayed by Bundy and McNamara, but over the next two hours, he was about to learn the hard truth about his plan for nuclear war.

²⁶⁶ Reeves, 227-228.

²⁶⁷ Ibid., 226.

²⁶⁸ Ibid., 224.

²⁶⁹ Sagan, "SIOP-62: The Nuclear War Plan Briefing to President Kennedy," 22.

²⁷⁰ Ibid., 22-51.

SIOP Background

As General Lemnitzer began the briefing, he reviewed the chronology of the SIOP and reminded President Kennedy of the following events. On February 12, 1960, President Eisenhower approved the recommendations of the Hickey Report, or Study No. 2009, and referred it to the JCS as a basis for planning.²⁷¹ In August 1960, from the findings of the Hickey Report, the JCS developed the NSTAP as guidance to SAC.

General Lemnitzer identified the specific objectives outlined in the NSTAP. They were:

To destroy or neutralize Sino-Soviet Bloc strategic nuclear delivery capability and primary military and government controls of major importance, and

To attack the major urban-industrial centers of the Sino-Soviet Bloc to achieve the general level of destruction as indicated in Study No. 2009.²⁷²

To achieve these objectives the NSTAP directed formation of a NSTL and a Single Integrated Operational Plan (SIOP).

The JCS appointed General Thomas Power, CINCSAC as Director, Strategic Target Planning and issued him the task to develop and maintain the NSTL and SIOP. On December 2, 1960, the JCS and SecDef approved the SIOP with an effective date of April 15, 1961. The NSTL began as a list of 80,000 potential targets from the bombing encyclopedia. The JSTPS narrowed the list to 2,729 installations. These installations consolidated into 1,067 designated ground zeros (DGZ). General Lemnitzer's briefing included extensive maps depicting the DGZs of target locations. The countries containing identified DGZs were the Soviet Union, the Peoples Republic of China, and their allies in

²⁷¹ Sagan, "SIOP-62: The Nuclear War Plan Briefing to President Kennedy," 43.

²⁷² Ibid., 44.

Eastern Europe.²⁷³ General Lemnitzer pointed out to Kennedy, “This map will give you a feel for the geographic distribution of DGZs within the Sino-Soviet Bloc. Each red circle represents one actual DGZ. No attempt has been made to differentiate as to size or importance.”²⁷⁴ Realizing he had come to receive a briefing about the war plans against the Soviet Union, Kennedy stopped the briefing to ask, “Why do we hit all those targets in China, General?” “It’s in the plan, Mr. President.” Lemnitzer replied.²⁷⁵ The president became notably upset at the general’s answer.

SIOP Strategy

General Lemnitzer noted that the SIOP represented the strategy of Massive Retaliation, as identified in NSC-162/2. According to the strategy of Massive Retaliation, posturing forces for a massive retaliatory strike is the primary method for deterring the enemy from launching a first strike. While a first strike was possible using this plan, the SIOP planners based their planning on three assumptions. First, the United States would not initiate a nuclear war. Second, the Soviet Union would see military weakness as an opportunity to seize the initiative and conduct a first strike to disable the United States’ ability to retaliate. Third, once nuclear war began all available weapons need to be launched in a “use them or lose them” scenario.²⁷⁶

²⁷³ Henry S. Rowen, “Formulating Strategic Doctrine,” *The Report of the Commission on the Organization of the Government for the Conduct of Foreign Policy* (Washington, DC: Government Printing Office, 1975), part 3, vol. 4, app. K, quoted in Sagan, “SIOP-62: The Nuclear War Plan Briefing to President Kennedy,” 44.

²⁷⁴ Sagan, “SIOP-62: The Nuclear War Plan Briefing to President Kennedy,” 44.

²⁷⁵ Reeves, 230.

²⁷⁶ Sagan, “SIOP-62: The Nuclear War Plan Briefing to President Kennedy,” 15.

The SIOP contained no tailored options, gradual escalatory strikes, or programed termination points. The plan included launching every available weapon in the nuclear arsenal at every enemy at once. Lemnitzer pointed out that, “According to the guidance in the NSTAP, the SIOP should only plan for the initial attack.” Therefore, the SIOP contained a single massive delivery of forces. The plan afforded no second strike opportunity, hence, no forces were withheld in reserve.

SIOP Forces

The weapons committed to SIOP-62 include 3,267 nuclear weapons from 112 bases worldwide. SAC, Pacific Command, Atlantic Command, and European Command all provided nuclear forces to the SIOP. The forces committed to the SIOP included 880 bomber aircraft, ninety-six Polaris SLBM and sixty-four Atlas and Titan ICBM.²⁷⁷ The SIOP committed every weapon available to the strike plan. Warhead strength varied from ten kilotons to twenty-three megatons. The massive target list drove use of all available forces. This focus on using all available weapons meant the SIOP was a capability-based plan. It did not account for scenarios with varying objectives based upon the threat or enemy actions.

SIOP Options

General Lemnitzer outlined the execution options contained in SIOP-62. He explained that the plan contained fourteen options, each based on preparation times of up to fourteen hours, as follows:

²⁷⁷ Botti, 132.

Option 1: Alert Option: 1,004 delivery systems available to immediate launch carrying 1,685 weapons.

Options 2-13: These options required set amount of time to prepare for launch. Each successive option requires an additional hour of warning in order to be available for launch.

Option 14: Strategic Warning Option: this option required fourteen hours to generate the entire 2,244 delivery systems and 3,267 weapons to alert in order to launch.²⁷⁸

In actuality, the SIOP contained only one option, a massive strike option. It was however, executed in fourteen graduated postures.

SIOP Flexibility

During the briefing, General Lemnitzer acknowledged that Secretary McNamara had already directed efforts to increase the flexibility of the SIOP. He devoted the final minutes of his time with President Kennedy to making the case that SIOP-62 was a sufficiently flexible plan. He outlined the following flexible features of the SIOP:

a. It may be executed as a total plan:

In retaliation to a Soviet nuclear strike of the US, or

As a preemptive measure. (The ballistic missiles covered by the plan are assigned alternate targets for the two conditions of retaliation and preemption.)

b. Strikes can be withheld against targets in any or all of the Satellites except for defensive target.²⁷⁹

²⁷⁸ Sagan, "SIOP-62: The Nuclear War Plan Briefing to President Kennedy," 48.

²⁷⁹ Ibid., 50.

While General Lemnitzer claimed, the plan was flexible enough to withhold weapons against certain targets; he revealed the reality in his statement regarding the risks.

Thus, withholding of a portion of the planned attack could degrade our plan and the forces committed to it to the point that the task essential to our national survival might not be fulfilled.²⁸⁰

Kennedy saw the lack of flexibility in the plan. Adding to Kennedy's discomfort with the SIOP was the fact pointed out by Lemnitzer, "there is no effective mechanism for rapid rework of the plan after order for its execution."²⁸¹ He went on to caution the president, "it must clearly be understood that any decision to execute only a portion of the entire plan would involve acceptance of certain grave risks."²⁸² The general made it clear that "the plan is designed for execution as a whole."²⁸³

In a letter to Kennedy just days later, military advisor Maxwell Taylor who had attended the SIOP-62 briefing, countered the argument by General Lemnitzer that the SIOP was flexible. Taylor argued that SIOP-62 was a "rigid, all-purpose plan, designed for execution in existing form, regardless of circumstances."²⁸⁴ He itemized that the rigidity stemmed from the following planning assumptions:

1. Military belief that USSR will strike cities, or urban-military targets; hence there is no need for selective U.S. targeting.

²⁸⁰ Sagan, "SIOP-62: The Nuclear War Plan Briefing to President Kennedy," 50.

²⁸¹ Ibid.

²⁸² Ibid.

²⁸³ Ibid.

²⁸⁴ Kunsman and Lawson, 45.

2. Military belief that, regardless of circumstances, USSR will be able to launch some weapons against U.S. Nowhere is real consideration given to possibility of interaction between ours and their targeting philosophy.

3. Belief that winning general war means coming out relatively better than USSR, regardless of magnitude of losses.

4. A fear that retaliation against cities after a surprise attack may be all we can do; with U.S. command-control knocked out, alternative plans might leave residual U.S. forces uncertain as to what to attack.²⁸⁵

Show of Force

On September 15, 1961, two days after Kennedy received the SIOP-62 briefing, the United States conducted a test of a 2.6-kiloton nuclear device, code-named Antler.²⁸⁶ It was the first nuclear test since the voluntary moratorium began three years earlier. It was a “proof test”—also called a “political test” by Glen Seaborg, the Chairman of the Atomic Energy Commission²⁸⁷—and did not contain instrumentation for data collection. It did serve a purpose, however, in that it communicated the resolve of Kennedy’s nuclear diplomacy to the world.

²⁸⁵ Kunsman and Lawson, 50.

²⁸⁶ Department of Energy, *United States Nuclear Tests: July 1945 through September 1992* (Las Vegas: Department of Energy, Nevada Operations Office, 2000), 17-18.

²⁸⁷ Reeves, 224.

Conclusion

When President Kennedy entered office, the United States nuclear forces were the most powerful and least synchronized force in the world. The JCS could not agree on policy issues due to inter-service rivalry. SAC was a self-feeding behemoth and the recently developed SIOP was not yet in effect. To solve these problems Kennedy hired Robert McNamara to transform the DoD. When the SIOP went into effect on April 15, 1961, McNamara was already working to implement Kennedy's new strategy of Flexible Response. However, McNamara would have no time to get the DoD organized before tensions with the Soviet Union threatened nuclear war.

In September 1961, Kennedy was convinced the United States and the Soviet Union were on the brink of war. Kennedy's failed foreign relations efforts included a botched coup d'état of Castro in communist Cuba and Khrushchev raising the Berlin wall. Meanwhile, Khrushchev began testing nuclear weapons as a show of force to the United States. In preparation for a possible nuclear exchange, Kennedy summoned the JCS to explain the nuclear options. The briefing revealed Kennedy's operational war plan had only one option, a single all-out strike against every imaginable adversary. Kennedy was furious. The United States' operational plans for nuclear war did not reflect Kennedy's national security strategy and was virtually unusable. As Kennedy left the briefing he turned to Secretary of State Dean Rusk and commented regarding the indiscriminant nature and massive overkill of the SIOP, "And we call ourselves the human race."²⁸⁸

²⁸⁸ Reeves, 230.

While President Kennedy did not directly influence the formation of SIOP-62, he did provide an assessment of the operational level planning conducted by SAC.

Unfortunately, in President Kennedy's opinion, SIOP-62 failed to provide adequate options for nuclear war. The Kennedy administration had four main critiques of SIOP-62.

1. Non-Discriminant Targeting. SIOP-62 did not discriminate among enemies. Kennedy clearly understood the moral and ethical dilemma of bombing countries without a declaration of war. SIOP-62 assumed that once nuclear war began all bombs must be launched in a use them or lose them effort. This prevented the United States from dividing the enemy and using diplomacy against China, who did not possess nuclear weapons, while fighting against the Soviet Union. Kennedy's military advisor, Maxwell Taylor, pointed out that "SIOP-62 is a blunt instrument."²⁸⁹

2. Lack of Flexibility. SIOP-62 did not allow for a limited attack or a response-in-kind to a limited attack. The only response to a limited nuclear attack from the Soviet Union was a full-scale counter-attack. General Lemnitzer noted that the SIOP was intended to be executed as a whole and executing only a portion of the SIOP would pose a significant risk.²⁹⁰

3. No Reserve Forces. SIOP-62 did not plan to hold forces in reserve for a follow-on attack. The full-scale single strike plan launched all nuclear forces. The SIOP planners assumed whether the plan was a pre-emptive first strike or retaliation strike, Soviet nuclear forces would strike any American forces remaining. Therefore, planning for a

²⁸⁹ Kunsman and Lawson, 45.

²⁹⁰ Sagan, "SIOP-62: The Nuclear War Plan Briefing to President Kennedy," 49.

second strike was not practical and all forces needed to launch in order to “use them or lose them.”²⁹¹

4. Excessive Force. SIOP-62 did not plan for the minimum force required to achieve objectives. The concept of economy of force is particularly important for nuclear war. Planners must consider the unavoidable impact to the population when evaluating if the plan achieved the political objectives. However, the JCS provided two objectives to the SIOP planners. First, “to destroy or neutralize the Sino-Soviet bloc strategic nuclear delivery capability and primary military and government controls,” and second, “to attack the major urban-industrial centers of the Sino-Soviet bloc.”²⁹² The nature of these objectives allows a broad range of military force and does not provide an easy means of assessment.

While SIOP-62, developed under Eisenhower, represented a significant advancement in war planning, Kennedy rejected the extremely rigid plan. Prior to SIOP development, nuclear targeting was coordinated after the fact, handicapping mutual support and economy of force.²⁹³ The SIOP coordinated the various service and command plans that previously existed and accounted for mutual support of forces. However, despite the SAC planners’ best efforts, SIOP-62’s primary flaw was that it failed to meet President Kennedy’s undeclared political objective of escalation control.

²⁹¹ Sagan, “SIOP-62: The Nuclear War Plan Briefing to President Kennedy,” 50.

²⁹² Ibid., 15.

²⁹³ Headquarters Strategic Air Command, 28.

CHAPTER 5

CONCLUSIONS

From 1945 until 1961, nuclear war plans consisted of a series of independent and overlapping theater-level nuclear plans. Various military commanders developed operational plans to employ United States nuclear forces. These leaders represent three categories of personnel that influenced the formation of the first SIOP. The categories include the NSC, the JCS, and the SAC nuclear planners. These leaders and staff officers all worked to create the SIOP and deliver strategic options to the president for use in nuclear war.

The SIOP for the first time provided the president an integrated operational plan supporting a single strategy. The credibility of this strategy was based on the clear explanation of intent (declaratory policy), the forces available to execute the intent (force acquisition policy), and the actual plans to carry out the intent (employment policy).²⁹⁴ These policies combined to create the regulations that governed United States nuclear forces.

Since 1945, America has relied on nuclear weapons as the last line of defense and primary deterrent preventing communist aggression.²⁹⁵ The SIOP, therefore, is the ultimate protection plan against total war. However, did SIOP-62 make the world a safer place or merely bring the world closer to Armageddon?

²⁹⁴ Ball, 37.

²⁹⁵ Freedman, 39.

President Truman

The Truman era, 1945-1952, was characterized by the rapid emergence of American nuclear capability. During the Truman administration, the United States nuclear capability grew largely in isolation. America had the luxury of being unconcerned about rival nuclear powers until the Soviet Union developed a nuclear capability in 1949. Truman did not see nuclear war planning as a priority and therefore provided very little guidance to the military regarding nuclear objectives.

Truman did, however, sign two key pieces legislation that formed the foundation of a system to provide and control America's nuclear arsenal. The first legislation was the AEA. The AEA established the AEC, a panel of five presidentially appointed civilians, to oversee research, development, and custody of atomic weapons. The AEA secured civilian custody of the entire nuclear arsenal from the Manhattan Engineering District, which in August 1946, when Truman signed the AEA, consisted of only nine fat-man type implosion weapons.²⁹⁶ It demonstrates therefore that Truman's immediate priority was to remove atomic weapons from the custody of the military. The AEA also gave the president authority to control the amount of weapons produced and direct their transfer to the military. This gave the president unusual powers normally held by Congress, which has the constitutional responsibility to "raise and support armies" and "provide and maintain a navy."²⁹⁷ While the AEA established unique presidential authorities, another act of legislation would provide far greater impact on the nuclear mission.

²⁹⁶ Loeber, 80-83.

²⁹⁷ Klotz, 48-49.

The most significant change enacted by the Truman administration was the NSA. The NSA established four key agencies that each influenced nuclear policy at various levels. First, the formation of the NSC established a presidential cabinet for national security and foreign affairs. The NSC, chaired by the president, provided a regular council for key advisors to provide input to the president. Members of the NSC included among others, the Secretaries of State, Defense, and Energy. The CJCS became the statutory member and chief military advisor to the council. The NSC became the most influential advisory body for national security and nuclear policy.

The second agency formed by the NSA, as amended in 1949, to oversee nuclear matters was the DoD. The DoD formalized the United States' mechanism for a large standing military force. The separate services were joined under the DoD and subordinated to the civilian SecDef. While each service retained their own service secretaries, the chief of the service no longer reported directly to the president in time of war. The SecDef became the primary civilian advisor to the president and held responsibility over dividing the defense budget among the services.²⁹⁸

Third, the NSA formalized the JCS. The JCS became the joint service administrative arm of the DoD that oversaw much of the war plan development including SIOP-62. The JSTPS, formed under the JCS, developed the first NSTL and SIOP.

The fourth agency created by the NSA that influenced nuclear doctrine and policy was the United States Air Force. The Air Force, formed as an independent and equal service, became the lead service for SIOP development. It is doubtful that without the 1947 NSA the strategy of strategic bombardment would have survived the ensuing

²⁹⁸ Smoke, 43-45.

budget battle over defense dollars allocated to FY50. The Air Force as an independent service formed SAC under dynamic leaders such as General Curtis Lemay to focus on Strategic Bombardment. SAC remained so devoted to the doctrine of Strategic Bombardment that its capability to target and plan air attacks made the strategy of Massive Retaliation possible. In addition, the NSA gave the Air Force an equal claim over defense budget dollars, a formal position on the JCS, and ultimately a seat on the NSC when Air Force General Nathan F. Twining became the third CJCS (August 15, 1957, through September 30, 1960). The NSC is responsible for creating strategic nuclear policies that directly shaped the SIOP.

The most significant nuclear policy created by the NSC during the Truman administration was NSC-30. This policy, written in 1948, established the requirement for the military to plan for nuclear war. While the JCS created several war plans such as Pincher, Boiler, and Halfmoon was the first nuclear war plan developed based upon presidential policy. NSC-30 provided the final piece of civilian control by declaring the president as the sole authority for use of atomic weapons. However, NSC-30 did not address what conditions might justify the use of nuclear weapons, what targets the weapons would be used against, or what objectives use of nuclear weapons would achieve. While NSC-30 was vague and ambiguous about when and how the president could authorize use of nuclear weapons, it remained the sole general NSC statement on policy for atomic war through 1959.²⁹⁹

On July 14, 1949, after unsuccessfully proposing international control of atomic weapons to the United Nations, Truman told the NSC, “Since we can’t obtain

²⁹⁹ Rosenberg, 13.

international control we must be strongest in atomic weapons.”³⁰⁰ Over the next few years, Truman directed the AEC to increase production of atomic weapons three times. The budget decisions of the next several years also reflected the build-up in atomic forces recommended in NSC-68. However, the Army and Navy did not receive budget or force increases and by 1952, Truman’s last year in office, the FY1954 budget allocated 40 percent of the funds to the Air Force.³⁰¹ These decisions reflect the love-hate relationship President Truman had with atomic weapons.

During the Truman administration, the United States’ atomic stockpile grew from zero to 1,169 weapons.³⁰² While Truman often expressed contradictory views of America’s reliance on atomic weapons, he effectively established civilian control over atomic weapons by signing the AEA. Furthermore, Truman created the agencies that controlled, planned, and executed atomic war plans by signing the NSA. Last, he also provided the budgetary increases to establish a dominant arsenal. Unfortunately, after establishing himself as the sole authority for use of the weapons, Truman did not provide guidance to planners on how to prepare the war plans. President Eisenhower would later fix this oversight.

³⁰⁰ Department of State, *Foreign Relations of the United States, 1949 vol. 1, National Security Affairs, Foreign Economic Policy* (Washington, DC: Government Printing Office, 1976), 481-482.

³⁰¹ Rosenberg, 22.

³⁰² Loeber, 83.

President Eisenhower

The Eisenhower era, 1953-1960, was characterized by development of American nuclear war making capability. President Eisenhower understood the need for detailed war plans and saw nuclear weapons as the means to achieve a political objective.

Upon entering office, Eisenhower immediately set out to develop a national security strategy. On October 30, 1953, Eisenhower signed NSC-162/2 adopting the document as his basic national strategy. This document identified the strategy of Massive Retaliation and subsequently became the most important declaratory nuclear policy of the Eisenhower administration. While Eisenhower did not change the agencies or structure of the nuclear forces, he did provide the military with a strategy that enabled operational war planning. However, the Eisenhower administration provided one troubling policy to the nuclear forces, predelegation.

On March 15, 1956, the NSC proposed a revision of the basic national security policy. NSC-5602/1 recommended flexibility and containment of smaller conflicts to control escalation. Most noteworthy was the recommendation for pre-authorization for the use of nuclear weapons. However, NSC 5602/1 reaffirmed presidential prerogative in these matters stating, “Such authorization as may be given in advance will be determined by the President.”³⁰³ This policy is predelegation. President Eisenhower pre-delegated authority to certain military commanders, including CINCSAC, to use nuclear weapons

³⁰³ NSC 5602/1, Basic National Security Policy, March 15, 1956, NSC 5602/1, Basic National Security Policy Folder, NSC Series, Policy Papers Subseries, Box 17, WHO-SANSA, Dwight D. Eisenhower Presidential Library and Museum, Abilene, KS, 1-11.

in the event of an attack against the United States by the Soviet Union.³⁰⁴ Predelegation combined with an increasing weapon stockpile caused JCS to seek additional guidance.

In August 1959, advances in intelligence capability enabled increased identification of nuclear targets. Growing target lists required additional weapons to strike targets. Therefore, the growth of the stockpile was linked to increasing target estimates while the growth of SAC was linked to the increasing stockpile.³⁰⁵ During the Eisenhower administration the weapons stockpile grew from 1,169 to over 18,000.³⁰⁶ The Air Force used the increase in weapons to justify defense appropriations for delivery aircraft. This system created a cycle of growth for the Air Force and served to reinforce the notion that increases in budget dollars, aircraft, or force strength simply required increasing the target list. The other services began to call this cycle “bootstrapping.”³⁰⁷ However, this largely unrestricted growth in capability posed a command and control problem.

The nuclear mission was suffering effects from two inadequate policies established in the Truman era, NCS-30 and the AEA. NSC-30 required every war plan to contain a nuclear annex, but provided no guidance or strategy on how to arrange or synchronize the nuclear forces. Additionally, the AEA gave the president sole authority to alter the production of nuclear weapons and the stockpile levels without approval from Congress. These policies led the military to develop a series of overlapping target lists

³⁰⁴ Sagan, *Moving Targets*, 142.

³⁰⁵ Rosenberg, 22.

³⁰⁶ Loeber, 83.

³⁰⁷ Rosenberg, 23.

and multiple uncoordinated nuclear war plans based on an ever-increasing weapons stockpile. Therefore, when General Nathan Twining, CJCS, proposed development of a NSTPL and SIOP, Eisenhower agreed that the nuclear forces needed “rigid planning” to gain control over the enormous capabilities.³⁰⁸

President Eisenhower was at the end of his second term and wanted the war plans complete so he would not “leave his successor with this monstrosity.”³⁰⁹ Therefore, Eisenhower authorized SAC to develop the NSTL and SIOP. President Eisenhower understood his position in establishing strategy and guiding the strategic level of nuclear war based upon his constitutional role as commander in chief.³¹⁰ Additionally, NSC-30 established the president as the sole authority for use of nuclear weapons at the tactical level of war. However, issuing a strategy then showing up and expecting to dictate tactics ignores the importance of the operational level of war. Eisenhower’s experience as a military commander gave him the unique understanding that nuclear forces needed effective operational planning to organize forces in time, space, and purpose to achieve common objectives. The creation of SIOP-62 therefore represented a major advancement in the operational art of nuclear war planning.³¹¹

Eisenhower more than any other president before or since understood that the military is a bureaucracy and in order to operate effectively the military needed rigid bureaucratic processes. Eisenhower, a consummate military staff officer and operational

³⁰⁸ Rosenberg, 5.

³⁰⁹ Ibid.

³¹⁰ Klotz, 48-49.

³¹¹ Headquarters Strategic Air Command, 28.

planner, did not set out to create the perfect plan; instead, he created a planning process that enabled continued refinement. When SecDef McNamara and President Kennedy summarily dismissed SIOP-62 and its strategy of Massive Retaliation, they relied on the process developed by President Eisenhower to refine the strategy and assess progress of the SIOP.

Conclusion

Did SIOP-62 make the world a safer place? Yes. While SIOP-62 had many flaws, it represented a major advancement in the Operational Art for nuclear forces. Prior to 1961, nuclear operations contained uncoordinated nuclear strikes, unintegrated plans, and there was no common vision for conducting a nuclear operation. President Eisenhower declared that SIOP-62 “frightened the devil out of me.”³¹² Following President Kennedy’s SIOP-62 briefing, he expressed disbelief asking, “And we call ourselves the human race?”³¹³ However, creation of a SIOP for nuclear war made the world safer. It brought nuclear war out of the hands of individual military commanders and formed a single coordinated plan. The SIOP also enabled military leaders to inform the president on the war plan for the entire nuclear forces. Prior to formation of the SIOP, nuclear war plans in the United States were largely unsynchronized and unregulated.

The communication and coordination between policy makers and planners has historically been neglected. In the 1950s, when General Curtis LeMay was CINCSAC, he claimed to have never discussed with the president or Air Force Chief of Staff what SAC

³¹² Sagan, *Moving Targets*, 25.

³¹³ Reeves, 230.

would or should do with the strategic nuclear force.³¹⁴ In fact, LeMay refused to submit SAC's basic war plans to the JCS from 1951-1955. In 1955, when formally requested by General Nathan Twining, Chief of Staff of the Air Force, Lemay finally provided a summary overview.³¹⁵ LeMay made it clear target selection and war planning was SAC's domain. Eventually SAC proved that even written communication does not guarantee proper coordination.

On August 19, 1960, the JCS issued NSTAP containing the criteria and guidance for developing the NSTL and SIOP. The NSTAP directed that the NSTL "will consist of a minimum number of specific targets whose timely and assured destruction will accomplish the specific objectives."³¹⁶ On August 24, 1960, during a SIOP planning conference at SAC headquarters, the naval planners interpreted this guidance to mean the NSTL will contain just enough targets on the list to "accomplish the specific objectives."³¹⁷ However, SAC Intelligence Chief, General Bob Smith, directed planners to interpret the NSTAP guidance to mean there was a minimum number below which the SIOP committee could not go, directing a lower limit but no upper limit on the number of targets on the NSTL. This minor difference in interpretation of JCS guidance altered the NSTL, SIOP, and ultimately, future nuclear force levels due to the Air Force's use of "bootstrapping" the target list to drive stockpile requirements.

³¹⁴ Ball, 39.

³¹⁵ Ibid.

³¹⁶ Rosenberg, 117.

³¹⁷ Ibid., 5-6.

Recommendation

To prevent miscommunication and manipulation of policy, the president must assert himself at every level of nuclear operations. SIOP-62 provided the president a means to guide development and assess progress of operational plans for nuclear war. David Allen Rosenberg wrote in his 1983 article titled, “The Origins of Overkill, Nuclear Strategy and American Strategy, 1945-1960,” “This paper describes the events and decisions within the United States government which led from the advent of the atomic bomb in 1945 through the first SIOP. It is essentially a study in the failure of regulation.”³¹⁸ This thesis challenges that notion by stating SIOP-62 was a great bureaucratic achievement. There were many inadequate policies and personnel that received insufficient oversight, but President Eisenhower created a process to develop an operational plan that allowed the president to provide guidance, monitor progress, and assess the outcome. On January 20, 1961, as SecDef Thomas Gates was leaving office, he cautioned the JCS against allowing the SIOP to stagnate. He wrote, “further actions should be initiated leading to continued refinement of strategic planning for the initial retaliatory strike under various conditions of warning.”³¹⁹ Therefore, the success of SIOP-62 was not in its tactical ability to keep America safe or the strategy that it supported. The success of the SIOP was creation of living documents that codify a process to link strategy with tactics and organize forces in time, space, and purpose. Much of the process used to develop SIOP-62 is still in use today by strategic planners at

³¹⁸ Rosenberg, 8.

³¹⁹ Headquarters Strategic Air Command, 3.

United States Strategic Command. Effectively, by codifying the operational art for nuclear forces, President Eisenhower tamed the Wild West.

In 1945, America entered a frontier of international diplomacy that was as uncharted as the American Western frontier. Much as the six-shooter became the weapon of choice for frontier adventurers, American presidents wielded nuclear weapons as a means of protection and coercion. Presidents relied on declaratory and force acquisition policies to regulate the untamed frontier of nuclear warfare. This is the story of how political and military leaders attempted to tame the Western frontier of nuclear warfare. SIOP-62 and its formation are the taming of the Wild West and provide an excellent historical case study in how practitioners of the operational art must adapt to a military revolution such as the emergence of nuclear weapons.

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